

University of Colorado **Denver**

2011-12 Catalog

Prepared by the
Office of Communications

Published April 2011

Catalog Home



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Mailing Address
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The 2011-2012 CU Denver catalog is considered the source for academic and programmatic requirements for students entering programs during the summer 2011, fall 2011 and spring 2012 semesters. Although this catalog was prepared using the best information available at the time, all information is subject to change without notice or obligation. The university claims no responsibility for errors that may have occurred during the typesetting or production of this catalog. For current calendars, tuition rates, requirements, deadlines, etc., students should refer to the bursar's office and registrar's office websites, www.ucdenver.edu/bursar and www.ucdenver.edu/registrar, for the semester in which they intend to enroll.

The courses listed in this catalog are intended as a general indication of the University of Colorado Denver curricula on the Denver campus. Courses and programs are subject to modification at any time. Not all courses are offered every semester, and faculty teaching particular courses or programs may vary from time to time. The content of a course or program may be altered to meet particular class needs.

Previous editions of this catalog are available online.

The University of Colorado Denver is an affirmative action/equal opportunity employer and educator committed to excellence through inclusiveness.

Welcome



Welcome to a university for the 21st century.

The University of Colorado Denver plays a critical role in the development and well-being of the state and its citizens, with a dedication to advancing and inspiring learning and teaching; community and culture; discovery and innovation; and health and wellness; we are the region's premier urban university.

By combining the excellence of our academic programs at CU Denver with the extensive research and teaching of the CU Anschutz Medical Campus in Aurora, we provide a unique option in the University of Colorado system. Here you will benefit from:

Academic choices—more than 130 degree programs in 13 schools and colleges

A spirit of collaboration—the synergy of combining disciplines to create courses of study like public health administration, bioengineering or health and behavioral sciences

Outstanding location—access to a vibrant, safe urban lifestyle, alongside opportunities to gain experience in projects and internships at businesses and corporations throughout the Denver metropolitan area

We are a leading economic driver and job creator for the state of Colorado—a valued partner in our community and a place of academic excellence for you, the students who have turned to us to pursue your educational dreams.

Here you'll have access to the opportunities you need to achieve your educational goals. You will meet faculty dedicated to excellence in the classroom and in research laboratories and fellow students who are diverse, goal-oriented and energetic. Whether you engage in undergraduate or graduate studies, the University of Colorado Denver degree has global respect and you can rest assured that you will have been well-prepared for the next stage of your work or academic life.

It’s a privilege to have you join us.

Jerry Wartgow

Chancellor
University of Colorado Denver

CU Denver Executive Team

Jerry Wartgow
Chancellor
PhD, University of Denver
Master's of Education, University of Hawaii
BS, University of Wisconsin

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Vice President for Health Affairs and
Executive Vice Chancellor for Anschutz Medical Campus
BS, University of Colorado Boulder

Jeff Parker
Interim Vice Chancellor for Administration and Finance
BS, Western State College

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BS, MPM, Western Carolina University

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AB, Princeton University
MD, New York University

Roderick Nairn
Vice Chancellor for Academic and Student Affairs and Provost
BSc, University of Strathclyde (Scotland)
PhD, University of London (England)

Richard Traystman
Vice Chancellor for Research
MS, Long Island University
PhD, The Johns Hopkins University

The University

The University of Colorado Denver was formed July 1, 2004 by the consolidation of two established universities in the University of Colorado System. The university joins the strengths of a comprehensive campus in downtown Denver with the research and advanced health care programs on the Anschutz Medical Campus in Aurora. Educating more than 14,000 students on our Denver Campus plus more than 3,000 students in health sciences programs from 50 states and 128 nations, the consolidated university is one of the nation's top public urban research universities.

The University of Colorado Denver offers a unique experience for students. Its Denver Campus is in the heart of the city—the business, cultural and political capital of the West. Its Anschutz Medical Campus in nearby Aurora is the nation's newest health sciences campus, where discoveries in the lab and in the clinic transform medical treatments into cures.

More and more undergraduates are discovering the value of classes in the city taught by professors who are connected with top companies—often advising the same CEOs who are hiring our graduates. New housing adjacent to campus, easy commuting by light rail and discounts to cultural and sporting events give students many options for immersion

in vibrant city life. In addition, affiliations with research labs and hospitals at Anschutz Medical Campus make CU Denver an excellent place to start a health care career.

The University of Colorado Denver awards more graduate degrees than any other university in Colorado. It is known for its programs in urban sustainability, criminal justice, business, education, applied science and engineering, film and music industry as well as a full array of health professional programs at the Anschutz Medical Campus. The graduate student population is a diverse mix of ages and ethnicities, creating a rich environment for learning and networking.

Other reasons why students choose the University of Colorado Denver:

- **Small class sizes:** average undergraduate student-to-teacher ratio is 15:1.
- **The Denver vibe:** Colorado has always attracted the adventurous. It is one of the healthiest in the country, with an extensive network of bike trails and quick access to mountain sports. The Denver Campus is adjacent to a thriving arts district.
- **Collaborative culture:** Cross-disciplinary learning and research is a core value—programs blend technology with health care, business with public policy, behavioral health with architecture and public health with health providers.
- **Choices:** With 13 schools and colleges offering more than 130 degree programs, the University of Colorado Denver is a major university for the coming century.

Denver Campus

With a solid academic reputation and award-winning faculty, the Denver Campus offers bachelor's, master's and doctoral programs through seven distinct academic units:

College of Architecture and Planning
College of Arts & Media
Business School
School of Education & Human Development
College of Engineering and Applied Science
College of Liberal Arts and Sciences
School of Public Affairs

Anschutz Medical Campus—Aurora

In achieving its mission of education, research, patient care and community service, the Anschutz Medical Campus offers degree programs through six schools and colleges:

School of Dental Medicine
Graduate School
School of Medicine
College of Nursing
School of Pharmacy
Colorado School of Public Health

An overview of programs offered on the Anschutz Medical Campus is located in the Health Professions chapter of this catalog. Contact the individual school or program coordinator for details.

Mission, Vision and Values

In 2007-2008, the University of Colorado Denver completed a strategic planning process which resulted in the following guiding statements:

Mission

The University of Colorado Denver is a diverse teaching and learning community that creates, discovers and applies knowledge to improve the health and well-being of Colorado and the world.

Vision

By 2020, The University of Colorado Denver will be a leading public university with a global reputation for excellence in learning, research and creativity, community engagement and clinical care.

Values

To be a university greater than the sum of its parts, the University of Colorado Denver embraces excellence in:

Learning and Scholarship
The University of Colorado Denver respects academic freedom and the rigorous quest for knowledge and understanding. We share knowledge and foster student success through a continuous process of inquiry, critical thinking, reflection, collaboration and application.

Discovery and Innovation
The University of Colorado Denver fosters an energetic, collaborative and creative environment where we develop and employ new ideas and technologies. Our entrepreneurial culture enables us to expand the frontiers of knowledge and human experience.

Health and Care of Mind, Body and Community
The University of Colorado Denver enriches the well-being and sustainability of communities and our cultural, living and natural environments. We promote healthy lifestyles, prevent, diagnose and treat disease and deliver high-quality and compassionate health care.

Diversity, Respect and Inclusiveness
UC Denver seeks the richness that an increasing diversity of our communities brings to our learning, research and service endeavors. Our common humanity leads us to create an inclusive and respectful ethos characterized by caring, empathy, compassion, nurturing, collegiality and mentoring.

Citizenship and Leadership
The University of Colorado Denver serves Colorado and the world as a recognized source of talent, knowledge, informed judgment, exemplary health care and professional practice. We are responsible stewards of the resources entrusted to us and utilize them with integrity for the betterment of our community.

Details about the mission, vision, values and strategic plan for the university are available online.

University of Colorado System

The University of Colorado is a system of three universities with campuses located in Boulder, Colorado Springs and Denver/Aurora. With combined total enrollments of more than 52,000 students, the University of Colorado system consistently ranks in the top 15 among public universities and colleges in overall research expenditures and seventh among public universities in federally funded research. Awards for research within the system total more than $660 million, with funding provided by federal agencies, appropriations from the state of Colorado and private foundations and donors.

Board of Regents

Tilman “Tillie” Bishop
District 3
term expires 2013

Steve Bosley
At Large
term expires 2017

Michael Carrigan
District 1
term expires 2017

James Geddes
District 6
term expires 2015

Kyle Hybl, Chair
District 5
term expires 2013

Stephen Ludwig, Vice Chair
At Large
term expires 2013

Monisha Merchant
District 7
term expires 2015

Joseph Neguse
District 2
term expires 2015

Sue Sharkey
District 4
term expires 2017

History and Evolution of the University of Colorado Denver

1876 Legislature founds the University of Colorado

1883 Medical department opens with two students

1898 CU establishes School of Nursing

1912 CU organizes the Department of Correspondence and Extension in Denver

1913 CU establishes School of Pharmacy

1925 CU dedicates 9th and Colorado Blvd. medical center

1956 Regents purchase Tramway Building for Extension Division

1965 Regents change extension name to University of Colorado-Denver Center

1972 CU-Denver Center changes name to University of Colorado at Denver

1973 School of Dentistry enrolls its first class; state begins building Auraria Campus

1974 CU reorganizes as a four-campus system

1988 CU-Denver moves into the 257,000 square-foot North Classroom Building on the Auraria Campus

1992	School of Pharmacy moves from Boulder to Health Sciences Center
1995	Government conveys 217 acres at Fitzsimons to CU for modern health sciences facility
2000	First new and remodeled facilities open at Fitzsimons
2004	Regents consolidate CU Denver and Health Sciences Center to form the University of Colorado at Denver and Health Sciences Center
2006	Fitzsimons campus renamed Anschutz Medical Campus
2007	Regents approve shortened version of the name: University of Colorado Denver
2008	Medical, dental, pharmacy and nursing students start classes, Colorado School of Public Health enrolls first students on the Anschutz Medical Campus

Accreditation

The Denver Campus of the University of Colorado Denver is institutionally accredited by the Higher Learning Commission of North Central Association of Colleges and Schools.

The commission can be contacted at:

30 N. LaSalle Street, Suite 2400
Chicago, IL 60602-2504
Telephone: 1-800-621-7440
Website: www.ncacihe.org

Many professional organizations have also granted accreditation to programs, colleges and schools at the Denver Campus, including:

- Accreditation Board for Engineering and Technology
- Association for the Advancement of Collegiate Schools of Business—International
- American Chemical Society
- Colorado State Board of Education
- Commission on Accreditation of Healthcare Management Education
- Council for Accreditation of Counseling and Related Educational Programs
- Landscape Architecture Accreditation Board
- National Architectural Accrediting Board
- National Association of Schools of Music
- National Association of School Psychologists
- National Association of Schools of Public Affairs and Administration
- National Council for the Accreditation of Teacher Education
- Planning Accreditation Board

Academic Programs

CU Denver is devoted to the needs of the residents of the city and the region. A solid foundation of academic and general education is assured through a comprehensive core curriculum. Students may pursue graduate education through all of the campus' colleges and schools. Pre-professional training in the fields of education, law, journalism and health careers is also available. Complete listings of areas of study available on the Denver Campus are available in the Programs section of the catalog.

The colleges and schools sections of this catalog provide information on bachelor's, master's and doctoral degree programs, policies on requirements for graduation, course requirements, course-load policies, course descriptions and similar information.

Continuing and Professional Education

The Division of Continuing and Professional Education at the Denver Campus offers complete degree programs, certificate/certification courses, professional development programs, precollegiate outreach programs and personal enrichment courses across the state of Colorado. Courses are offered in a variety of formats, including traditional on-campus, off-campus, online, hybrid, weekend, evening, short and condensed courses and many others.

Registration and tuition varies by school or college. Contact the specific school or college to learn about current program and course offerings, or contact the Academic Technology and Extended Learning office at 303-556-2040 or visit our website at www.ucdenver.edu/academics/continuing-education/Pages/index.aspx.

About Our Students

The diversity of our student body is a source of deep pride. Ethnic minority students make up 23 percent of the student population. Classes include traditional students who have elected to pursue college degrees immediately after high school, transfer students, students who have delayed college entry and professionals who seek to strengthen their base of skills or broaden their appreciation of the world.

With students' ages ranging between 16 and 74, the average undergraduate student age at CU Denver is 24, while our graduate students average 33. They represent a distinctive mix of ages and backgrounds. Around 80 percent of our students are employed, and 44 percent attend part time. 38 percent are enrolled in graduate-level courses. All take advantage of the convenience of course offerings at times that meet their schedules, enjoying an enviable student-to-faculty ratio of 15:1.

Related Organizations

Alumni Association

Mailing Address: Campus Box 189, P.O. Box 173364, Denver, CO 80217
Telephone: 303-315-2333
Fax: 303-315-2332
E-mail: ucdalumni@ucdenver.edu
Website: www.ucdenver.edu/alumni

The University of Colorado Denver Alumni Association provides programs and services of mutual benefit to graduates and the university. Founded in 1976, the Denver Campus association is governed by a board of alumni representing all schools and colleges. Students automatically become Alumni Association members upon graduation and receive the *CU on the Horizon* newsletter, published twice a year. Alumni are invited to volunteer on committees, which include recognizing 4.0 students through the Academic Athlete program, providing financial assistance to students through a scholarship fund and bestowing Alumni Association awards to worthy graduates and community leaders. The association also invites alumni to attend periodic seminars and events.

University of Colorado Foundation

Mailing Address: 1380 Lawrence Street, Suite 1325, Denver, CO 80204
Telephone: 303-315-3601
Fax: 303-315-2063
Website: www.cufund.org

Established in 1967, the University of Colorado Foundation is a privately governed nonprofit corporation whose mission is to support the University of Colorado. The Denver office of the CU Foundation was established to advance the campus goal to become one of the nation's premier urban research institutions.

The CU Foundation raises and manages private funds that endow scholarships and professorships, further research, enrich academic programs, upgrade and construct facilities and support projects that benefit students, faculty and the community.

The university's academic leadership establishes priorities for private support, and gifts are directed to the specific schools, program or purpose that the donor designates. Professional fundraisers identify and/or generate interest in the university, assist donors in gift planning and solicit gifts in collaboration with academic partners and leaders.

University Quick Facts

Locations	**Denver Campus**	**Anschutz Medical Campus**
	Attributes	**Attributes**

Denver Campus (Auraria)

Anschutz Medical Campus (Aurora)

Total Enrollment

18,140 students enrolled in fall 2010*
56% undergraduate
35% graduate
9% first professional
74% full time
7% out-of-state residents
5% international students

Degrees

Bachelor's, master's, doctoral, first-professional

Programs

132 degree programs

Schools and Colleges

Denver Campus

College of Architecture and Planning
College of Arts & Media
Business School
School of Education & Human Development
College of Engineering and Applied Science
College of Liberal Arts and Sciences
School of Public Affairs

Anschutz Medical Campus

Enrollment

14,769*

9,705 Undergraduate* (48% male, 52% female)

5,064 Graduate* (44% male, 56% female)

Student-Faculty Ratio

15:1‡

Incoming

Freshmen: 1086

Transfers: 1348

Graduate Students: 1057

Diverse Population

25% ethnic minority

Undergraduate: 31%

Graduate: 13%

Average age: 26

Undergraduate: 24

Graduate: 32

Student Body

From 50 states and 78 countries‡

Bragging Rights

U.S.News & World Report America's Best Graduate Schools, 2009

Enrollment

3,371*

Undergraduate: 410* (13% male, 87% female)

Graduate: 1,343* (24% male, 76% female)

First Professional: 1,618 (46% male, 54% female)

Diverse Population

19% ethnic minority

Average Age

Undergraduate: 31
Graduate: 32
First Professional: 27

Bragging Rights

U.S. News & World Report, America's Best Graduate Schools, 2010 (If otherwise noted, it is the most recent year ranked)

Health Disciplines

Nursing, MS (2007)—15

Clinical nurse specialist, adult/medical-surgical—6

Nurse practitioner:

adult—8

family—5

pediatric—3

Pharmacy, PharmD (2008)—23

School of Dental Medicine
School of Medicine
College of Nursing
School of Pharmacy
Colorado School of Public Health
Graduate School

Research Funding

More than $421.4 million in sponsored research

Alumni

103,032 (66% live in Colorado)

School of Public Affairs, Top Schools #32

The Princeton Review, 2008 America's Best Value Colleges

Best Western Colleges, Best in the West

Modern Healthcare, 2007

Top Business Graduate Schools for Physician-Executives #5

Additional bragging rights for schools and colleges on this campus are available in their sections of this catalog.

Physician Assistant, MS, PhD (2007)—8

Schools of Medicine

Primary care—5
Research—27
Specialties:

Family medicine—9
Pediatrics—9
AIDS—18

The Sciences

Biological sciences: Graduate School, Anschutz Campus (2007)—68

Additional bragging rights for schools and colleges on this campus are available in the Health Professions section.

*Fall 2010 end-of-term ‡Fiscal Year 2009-2010 data

Information for Undergraduate Students

At CU Denver, five undergraduate schools and colleges (College of Arts & Media, Business School, College of Engineering and Applied Science, College of Liberal Arts and Sciences and School of Public Affairs) provide a diverse array of baccalaureate

majors, minors, certificates and teacher licensure to meet the ever-challenging demands of a global society. Your undergraduate education consists of a core curriculum (general education), a major and elective courses (most areas of study). The campuswide core curriculum develops proficiency in writing and mathematics, cultivates a breadth of knowledge, promotes critical thinking, allows you the flexibility to meet your career goals and helps you develop sensitivity to cultural diversity and international perspectives.

A list of all our undergraduate programs, including minors and online programs, is available in the academics section of the CU Denver website.

Undergraduate Admissions

Assistant Vice Chancellor for Enrollment Management: Barbara Edwards
Office: 1250 West 14th Street—Annex
Telephone: 303-556-2704
Fax: 303-556-4838
E-mail: admissions@ucdenver.edu
Website: www.ucdenver.edu/admissions

CU Denver seeks to identify applicants who are likely to be successful in a rigorous academic program of study. Admission decisions are based on many factors, the most important being:

- level of previous academic performance
- evidence of academic ability and accomplishment as indicated by scores on national aptitude tests
- evidence of maturity, motivation and potential for academic success

CU Denver may deny admission to new applicants or readmission to former students whose credentials indicate an inability to assume obligations of performance and behavior deemed essential by the university.

After completing the application process, official notification of one's admission status as an undergraduate, graduate or nondegree student is provided by the Office of Admissions. Letters from various schools and colleges indicating acceptance into a particular program are pending, subject to official notification of admission to the institution by the admissions office.

Students who are admitted pending receipt of additional documents or with unofficial documents will be permitted one term to submit the documents. If temporarily waived official documents are not received by the end of the initial term of attendance, registration for subsequent terms will be denied. If at any time additional credentials are received that affect the student's qualifications, the university reserves the right to change the admission decision.

Applicants who have not decided upon a major field of study will be considered for admission to the College of Liberal Arts and Sciences as undetermined majors. Students

admitted as undetermined majors should declare a major as quickly as possible and no later than the end of their sophomore year.

All questions about admission to CU Denver and requests for application forms should be directed to 303-556-2704 or admissions@ucdenver.edu. Send correspondence to:

Office of Admissions
University of Colorado Denver
Campus Box 167, P.O. Box 173364
Denver, CO 80217-3364

Application Deadlines

The university may change document/credential deadlines in accordance with enrollment demands. For the best scholarship and registration time considerations, applicants should apply and be admitted as early as possible. Admission to the university does not assure availability of specific courses. For an applicant to be considered for a specific term, all documents required for admission must be received in the Office of Admissions by the deadline for that term. Applicants who are unable to meet the deadline may elect to be considered for a later term. Transfer students are reminded that they should allow sufficient time to have transcripts sent from institutions they have previously attended.

Advanced planning and early application are necessary for the timely admission of international students. International students are advised that it usually takes 60 days for credentials to reach admissions in the Office of International Affairs from international locations. See the Information for International Students section for more information.

Application Deadline for Priority Consideration (excluding BA/BS-MD and music applicants)

Fall: July 22
Spring: December 1
Summer: May 3

Early application is strongly encouraged. Admission to the university does not assure specific course availability.

Minimum Academic Preparation Standards (MAPS)

Students entering the University of Colorado who graduated from high school in 1988 or later are required to meet the following minimum academic preparation standards:

COLLEGE OF ARTS & MEDIA	*Years*

English (literature, composition, grammar), one year of speech/debate strongly recommended	4
Mathematics (excluding business and consumer mathematics)	3
Natural science	3
Social science	2
Foreign language (all units must be in a single language)	2
Academic elective or arts course	1
Total	15

BUSINESS SCHOOL

English (one year of speech/debate and two years of composition are strongly recommended)	4
Mathematics (including at least two years of algebra and one year of geometry)	4
Natural science (including two years of laboratory science)	3
Social science (including history)	2
Foreign language (all units must be in a single language)	2
Academic electives (additional courses in English, foreign language, mathematics, natural or social science, not to include business courses)	1
Total	16

COLLEGE OF ENGINEERING AND APPLIED SCIENCE

English (literature, composition, grammar), one year of speech/debate strongly recommended	4
Mathematics distributed as follows:	
Algebra	2

Geometry	1
Trigonometry and analytical geometry	1
Natural sciences (to include one unit physics and one unit chemistry; also to include two units of laboratory science)	3
Foreign language	2
Social science	2
Electives	1
Total	16

COLLEGE OF LIBERAL ARTS AND SCIENCES

English (literature, composition, grammar) one year of speech/debate strongly recommended	4
Mathematics (excluding business and consumer mathematics)	3
Natural science	3
Social science	2
Foreign language (all units must be in a single language)	2
Academic elective	1
Total	15

SCHOOL OF PUBLIC AFFAIRS

English (literature, composition, grammar) one year of speech/debate strongly recommended	4
Mathematics (excluding business and consumer mathematics)	3
Natural science	3

Social science	2
Foreign language (all units must be in a single language)	2
Academic elective	1
Total	15

Students with MAPS deficiencies may be admitted to the university provided they meet the other admission standards (e.g., test scores, rank in high school class, GPA) and provided they make up any deficiencies prior to graduation from the university. Students may make up MAPS deficiencies by successful completion of:

1. courses taken at CU
2. courses taken at other institutions of higher education
3. additional high school credits
4. credit-by-examination programs
5. other requirements as approved by each school or college on the Denver Campus

Admission Requirements for Freshman Students

Freshman admission standards define the level of success and achievement necessary to be admitted to CU Denver and include factors that predict academic success such as scores on the ACT or SAT, high school course work and GPA. Both the subjects the student has studied and how the student has performed will be factors that determine admission to the university.

New freshmen may apply for admission to the Colleges of Arts & Media, Engineering and Applied Science, Liberal Arts and Sciences, the School of Public Affairs and the Business School.

Applicants must be high school graduates or have been awarded a High School Equivalency Certificate by completing the General Education Development (GED) test.

Freshman applicants who graduated from high school in spring of 2008 or later must meet the state of Colorado Higher Education Admission Requirements (HEAR).

For students who graduated in 2008 or 2009, the following minimum high school courses (units) are required:

English	4 years (units)
Mathematics	3 years (units)
Natural Science	3 years (units), 2 of which must be lab-based

Social Studies	3 years (units), 1 of which must be United States or world history
Academic Electives	2 years (units)

For students who graduated in 2010 or later, the following minimum high school courses (units) are required:

English	4 years (units)
Mathematics	4 years (units)
Natural Science	3 years (units), 2 of which must be lab-based
Social Studies	3 years (units), 1 of which must be United States or world history
Foreign Language	1 year (unit), must be in a single language
Academic Electives	2 years (units)

Admission Consideration

Priority consideration for general admission is given to applicants who have fulfilled all HEAR requirements if applicable, rank in the top 30 percent of their high school graduating class and present a composite score of 21 or higher on the ACT or a combined score of 950 or higher on the SAT. Applicants must have an admission index score of at least 93.

Bachelor of Arts or Science to Medical Doctor (BA/BS-MD) applicants must apply for freshman admission as outlined below AND complete a supplemental application form and submit all required fees, documents and credentials by the published deadline date. Applicants must be classified as Colorado residents for tuition purposes. Intended for highly qualified students from diverse backgrounds, the BA/BS-MD program offers a limited number of "reserved" positions at the University of Colorado School of Medicine. For additional information, visit http://babsmd.ucdenver.edu.

Business applicants will receive priority consideration if they graduated in the top 25 percent of their high school class and achieved a composite score of at least 26 on the ACT or 1100 on the SAT. Applicants who do not meet the admission requirements for direct admission to the Business School will be automatically considered for admission as prebusiness majors in the College of Liberal Arts and Sciences. For business admission, applicants must have an admission index score of 103.

Engineering applicants will receive priority consideration if they graduated in the top 25 percent of their high school class and achieved a composite score of at least 26 on the ACT with 28 on the mathematics section, or 1100 total on the SAT with 600 on the mathematics section. Applicants who do not meet the admissions requirements for direct

admission to the College of Engineering will be automatically considered for admission as preengineering majors in the College of Liberal Arts and Sciences. For engineering admission, applicants must have an admission index score of 103.

Music applicants in the College of Arts & Media (except music industry studies) are expected to have had previous experience in an applied music area. An audition is required, but can be deferred for students in the MIS track. In addition, students may apply only for fall semester and other application requirements as outlined on the music department website should be completed as quickly as possible and no later than the published deadline date. Admission to the music major is selective, and qualified applicants are pooled and reviewed by an admissions committee. Interested students should contact the Department of Music at 303-556-2279 for audition and other application information.

Applicants for all departments who do not satisfy the requirements for priority consideration are reviewed on an individual basis.

How to Apply

1. Students are encouraged to apply online at www.ucdenver.edu/admissions or obtain an application for undergraduate admission from a Colorado high school counselor, from CU Denver Office of Admissions in-person or by calling 303-556-2704, or at www.ucdenver.edu/admissions.
2. The application must be completed and sent to the Office of Admissions with a $50 (subject to change) nonrefundable fee. For online applications, the fee may be paid with a credit card, check, e-check, or money order; for paper applications; a check or money order is required for fee payment. For applicants who are granted admission but are unable to enroll for that term, the $50 application fee will remain valid for 12 months, provided the Office of Admissions is informed of the intent to enroll for a later term and the student does not enroll at another college or university.
3. Students are required to have their high school send an official transcript of their high school grades, including class rank if available, to the Office of Admissions. Official transcripts are those sent by the issuing institution directly to: Office of Admissions, University of Colorado Denver, Campus Box 167, P.O. Box 173364, Denver, CO 80217-3364. *Hand-carried or faxed copies are not official.*
4. Students who did not graduate from high school are required to have a copy of their GED test scores and GED certificate sent directly from the certifying agency to the CU Denver Office of Admissions. Official high school transcripts must also be submitted but are not the basis of an admission decision.
5. Students are required to take either the ACT (essay portion is optional) or the SAT and request that test scores be sent to CU Denver (ACT code 0533, SAT code 4875). High school students may obtain ACT and SAT test dates and locations from their counselors. Students who took one of these tests while in

high school may use the test scores reported on their official high school transcripts as an official test score report. Applicants who took one of these tests and did not designate CU Denver as the recipient of the scores must notify the testing agency to send scores to CU Denver. A request for additional score reports may be requested from any of the offices listed below.

American College Testing Program (ACT)
P.O. Box 168
Iowa City, Iowa 52243
319-337-1313
www.ACT.org school code: 0533

The College Board (SAT)
P.O. Box 025505
Miami, FL 33102
866-756-7346
www.collegeboard.com school code: 4875

6. Students who completed college course work while in high school must submit an official transcript from each college or university attended.
7. International students must submit an international student application for admission, $75.00 application fee, and provide additional documentation (see the Information for International Students section of this catalog for more information).

Freshman Housing Requirement

First-time freshmen under age 20 not living at home with parents or otherwise receiving a housing exemption are required to live in Campus Village Apartments. See Student Housing in the Campus Life section of this catalog for additional information.

After Admission - Advising and Enrollment

Several months before the start of each semester, freshmen accepted for admission to the university will receive information about activating their official University of Colorado Denver UCDAccess portal and email accounts, receiving required academic advising, attending freshmen orientation and timelines and procedures for course registration. For best course availability, students should attend orientation/and or advising sessions to receive required advisor approval and register for courses as early as possible.

Applicants Not Granted Admission

An applicant who is not granted admission as an entering freshman may wish to consider transferring to the university after successful study elsewhere. To be

considered for transfer student admission, such students must complete from one full semester (13 minimum semester hours) to one year (30 minimum semester hours) of college-level course work at another college or university. Students should select courses that will provide sound academic preparation for future transfer.

Freshman students who are not admissible will be encouraged to participate in a partners program that CU Denver has established with Colorado community colleges.

All credentials presented for admission become the property of the University of Colorado and must remain on file.

Students who knowingly falsify transcripts or test scores or who fail to indicate all previously attended institutions will be denied admission to, or will be disenrolled from, the university.

Admission Requirements for Transfer Students

Applicants are considered as transfer students for admission purposes if they have completed any number of college courses since graduating from high school or earning a GED. Applicants with any number of college courses taken only prior to high school graduation are considered as freshmen for admission purposes and should consult the Admission Requirements for Freshmen section. College courses taken before high school graduation can be considered for transfer to CU Denver.

Students with 12 or fewer semester hours of completed college-level course work* at the time of application are considered for admission based on high school GPA, high school courses/units completed, rank in class, ACT or SAT scores and college or university GPA.

Students with 13 to 29 semester hours of completed college-level course work* at the time of application are considered for admission based primarily upon performance in college courses, but high school transcripts are still required. ACT or SAT scores are desirable, but not required. Students who graduated from high school in 2008 are later are subject to HEAR requirements as outlined in the Admission Requirements for Freshmen section. HEAR unit deficiencies may be made up with certain college courses.

Students with 30 or more semester hours of completed college-level course work* at the time of application are considered for admission based upon college course work alone and are not subject to HEAR requirements. High school records and ACT or SAT scores are not required.

**Includes only semester credit hours completed* after *graduation from high school or completion of a GED*.

Admission Criteria by Academic Program

College of Arts & Media, College of Liberal Arts and Sciences and School of Public Affairs (Criminal Justice). A minimum 2.4 cumulative GPA is required, but anyone with at least a 2.0 cumulative GPA may be considered. Music majors are considered for fall semester only, have a required audition (applicants for music industry studies may request a deferment), and additional application requirements which must be completed by the Department of Music deadline. (Visit http://cam.ucdenver.edu/meis.) Admission to the music major is selective and qualified applicants are pooled and reviewed by an admissions committee.

Business School. Students must have a 3.0 cumulative GPA on at least 24 semester hours that apply to the business degree program, or a 3.0 in the 24 most recent semester hours that apply to the business degree program. Students with at least a 2.6 cumulative GPA are considered on an individual basis. Students with fewer than 80 college credits who are not offered admission to the Business School will be automatically considered for prebusiness admission in the College of Liberal Arts and Sciences. Students who have earned a previous undergraduate degree in business may not apply for a second undergraduate degree in business.

College of Engineering and Applied Sciences. A full year of college calculus and calculus-based physics or calculus-based physics I and general college chemistry I must be completed with B or better grades. Grades of B are required in all other math and science courses and the cumulative GPA must be at least 2.75. Students meeting most, but not all of these standards are fully considered. Students with fewer than 80 college credits who are not offered admission to the College of Engineering and Applied Science will be automatically considered for preengineering admission in the College of Liberal Arts and Sciences.

All Students. The cumulative GPA is calculated as or converted to a 4.0 scale and will include all college or university course work attempted at any regionally accredited institution of higher education or comparable foreign institution.

How to Apply

1. Submit the online application for undergraduate admission, available at www.ucdenver.edu/admissions (preferred), or obtain a paper application for admission form from the Office of Admissions at 303-556-2704 or admissions@ucdenver.edu.
2. Complete and return the application along with the required nonrefundable $50 application fee. If applying online, you may pay the application fee with a credit card, e-check, check or money order. If applying using a paper application, you may pay only with a check or money order sent directly to the Office of Admissions.
3. Request that one official transcript be sent directly from each college or university attended, including foreign institutions, directly to the CU Denver Office of Admissions. Transcripts are considered official only if received in this manner. If

not in English, a certified English translation must accompany each official transcript. Official transcripts should be sent to:

Office of Admissions
University of Colorado Denver
Campus Box 167
P.O. Box 173364
Denver, CO 80217-3364

4. If you have completed fewer than 13 college-level semester hours at the time of application, also submit official high school transcripts, GED scores if applicable and ACT or SAT scores. ACT or SAT scores recorded on the high school transcript are considered official.
5. If you have completed between 13 and 29 college-level semester hours at the time of application, also submit official high school transcripts and GED scores if applicable.

If you apply for admission while enrolled in your first semester of college or university courses, a current semester progress report form will be sent to you and required as part of the application process. A final official college or university transcript is also required and should be sent to the Office of Admissions at the end of the semester or term.

If you are a continuing college or university student at the time you apply for admission, official transcripts showing course work completed to date should be sent as indicated above. You must also request that a final official transcript be sent to the Office of Admissions when grades are recorded at the end of your final semester or term.

All credentials presented for admission consideration become the property of the University of Colorado and will not be copied for or returned to the student.

The University of Colorado Denver reserves the right to deny admission to transfer students not deemed to have completed college-level course work at the sending institution and/or those who are not eligible to return to their previous college or university campuses.

Students who knowingly falsify transcripts or test scores or who fail to indicate all previously attended institutions will be denied admission to, or will be disenrolled from, the university.

After Admission - Advising and Enrollment

Accepted transfer students who have submitted official transcripts will receive a credit evaluation which will include advising office contact information. Students should schedule an advising appointment or contact their advisor for assistance with applying transfer credits to degree requirements. Advisor approval is required for new students prior to registering for CU Denver courses.

Several months before classes begin, additional information about activating your official UCDAccess portal and e-mail accounts and course regisration timelines and processes will be provided. For best course availability, students are encouraged to receive advisor approval and register for courses as early as possible. If admitted for fall or spring semester, students will receive an invitation for the new student welcome program from the orientation office.

Transfer of College-Level Credit

Courses are considered for transfer on the basis of having similar content to those offered by CU Denver. State of Colorado guaranteed transfer courses (gtPATHWAYS) are always accepted and apply to requirements. Developmental, remedial, vocational, technical, religious doctrinal, orientation, independent study, special topics and cooperative education courses are not accepted. Only courses in which a grade of C- or better (1.7) was earned are considered for transfer. Courses in which a grade of Pass (P) was earned are considered for transfer only if a grade of Pass at the sending institution is defined as a C- or better. Students wishing to appeal transfer credit decisions should contact their academic department.

After all official transcripts have been received and the student is admitted as a degree-seeking student, the Office of Admissions will prepare a transfer credit report indicating which courses have been accepted in transfer by CU Denver. When this report has been completed, the student is notified and directed to contact his/her academic department to meet with an advisor who will determine how transferred credit applies to specific degree requirements. Transfer credit evaluations are valid only for programs offered entirely at the Denver Campus.

The Office of Admissions considers course work for transfer regardless of the age of the academic credit. State guaranteed general education courses will be accepted in transfer and applied to graduation requirements for a period of at least 10 years after course completion. Individual departments, however, may have specific guidelines and policies about age of credit for courses not listed as “state guaranteed” and make the final decision about application of credit toward a degree program. Students are expected to have current working knowledge of prerequisite courses, regardless of when prerequisite courses were taken.

The Business School generally limits its transfer of business course credits to those that are offered as lower-division courses at CU Denver. Students who have taken upper-division business courses from an American Assembly of Collegiate Schools of Business accredited business program may request review of these courses for possible transfer by contacting the Business School advising office. All courses taken in the business area of emphasis must be completed at CU Denver.

The College of Engineering and Applied Science, in general, requires that engineering course transfer credit must come from an Accreditation Board for Engineering and

Technology accredited engineering program to be acceptable for degree purposes. Engineering technology courses are not considered equivalent to engineering courses.

A maximum of 60 semester hours is acceptable in transfer from community or junior colleges. A maximum of 90 semester hours is acceptable from four-year institutions or a combination of two- and four-year institutions.

Colorado Community College Transfer

Guaranteed Admission

Colorado community college students are guaranteed admission to the College of Liberal Arts and Sciences, the College of Arts and Sciences at CU Boulder and the College of Letters Arts and Sciences at CU Colorado Springs

- have a high school diploma or GED
- have at least 30 semester credits of transferable Colorado community college course work with a 2.7 or higher GPA
- have a cumulative (overall) GPA of at least 2.7 for all college or university course work, with consistent or improving grades
- have completed all Minimum Academic Preparation Standards (MAPS)
- complete the admission application and submit all required fees and documents by published deadlines.

Guaranteed Transfer

In compliance with Colorado's Statewide Transfer Policy, students may transfer credit from a Colorado community college on a course-by-course basis or by completing an associate of arts (AA) or associate of science (AS) degree. Students who complete an AA/AS degree may be guaranteed full transfer of the associate degree (60 credits maximum).

The guaranteed transfer program applies only to students who began Colorado community college studies in fall 2003 or later and who meet the following requirements:

- complete an AA/AS degree, which includes 31 credits of state-guaranteed general education courses
- earn credit only at Colorado community colleges within the last 10 years
- earn a grade of C- or better in each course

Statewide articulation agreements are in place governing transfer of students from Colorado community colleges into programs in the Business School, the College of Engineering and Applied Science and the elementary education teacher licensure program.

Transfer advising plans for Colorado Community College students are available from the Office of Admissions and at www.ucdenver.edu/admissions. In addition, an admissions representative can assist students with planning a transfer program of study. Representatives regularly visit Colorado community colleges. Call the Office of

Admissions at 303-556-2704 or e-mail admissions@ucdenver.edu for additional information.

Advanced Placement Program

The Advanced Placement Program of the College Entrance Examination Board (CEEB) allows students to take advanced work while in high school and then be examined for credit at the college level. Students who take advanced placement courses and subsequently receive scores of 4 or 5 on the CEEB Advanced Placement Examination are generally given college credit for lower-level courses in which they have demonstrated proficiency. Credit is also granted for scores of 3 plus a course grade of A or A- in the corresponding subject. For more information, contact your academic advisor and click on the following chart. Original, official score reports are required for credit award consideration.

Advanced Placement Program Requirements (AP) chart

College-Level Examination Program

Incoming students may earn university credit by examination in some subject areas in which they have demonstrated college-level proficiency. Interested students may take approved examinations through the College-Level Examination Program (CLEP) of the College Entrance Examination Board (CEEB) testing service.

Acceptable CLEP examinations and credit awards are outlined in the following chart. Original, official CLEP score reports are required for credit award consideration.

College Level Examination Program (CLEP) chart

International Baccalaureate Diploma Program

The International Baccalaureate Diploma Program (IB), available at select high schools, is a rigorous, pre-university course of study emphasizing liberal arts from an international perspective.

In accordance with HB 03-1108, the University of Colorado Denver will grant at minimum 24 semester hours of credit for any student who has graduated from high school having successfully completed an International Baccalaureate diploma program with a minimum score of 4 on each exam. Credit may be granted for most individual IB courses where examinations are completed with at least a score of 4 for students who do not complete an IB diploma program. For additional information, students should contact their academic advisors and refer to the following chart. Original, official IB transcripts with exam scores are required for credit award consideration.

International Baccalaureate (IB) chart

Military Service and Schooling

To have credit for educational experience evaluated, applicants with military experience should submit the Smart Transcript. Credit will be awarded as recommended by the Commission on the Accreditation of Service Experiences of the American Council on Education, to the extent that the credit is applicable to the degree the student is seeking at CU Denver.

Credit for courses completed through the U.S. Armed Forces Institute will be evaluated on the same basis as transfer credit from collegiate institutions.

Reserve Officers' Training Corps (ROTC)

Students enrolled in Army, Air Force or Navy ROTC programs should consult with their college or school regarding the application of ROTC course credit toward graduation requirements. For information about ROTC programs, click on the links below.

Aerospace Studies - Air Force ROTC
Military Science - Army ROTC
Naval Studies – Naval ROTC (U.S. Navy and Marine Corps)

Intra-University Transfer

Students on the Denver Campus may change colleges or schools within the university provided they are accepted by the college or school to which they wish to transfer. Intra-university transfer forms may be obtained from the student's school or college or from the Office of the Registrar. Decisions on intra-university transfers are made by the college or school to which the student wishes to transfer.

Students in continuing and professional studies programs wishing to enroll in regular courses or degree programs on the Denver Campus should apply for admission to CU Denver. Visit www.ucdenver.edu/admissions or contact the Office of Admissions at 303-556-2704 or admissions@ucdenver.edu for assistance with application processes and options.

Readmission Requirements for Former Students

CU Denver students who have not registered and attended classes on the Denver Campus for one year or longer and who have not attended another institution since the University of Colorado are considered returning students and must formally apply for readmission. An additional application fee is only required if changing from undergraduate to graduate or nondegree to degree status, or if a degree was earned and the student is applying for a second degree. Students applying for readmission may complete an online application (preferred) or dowload an application form at www.ucdenver.edu/admissions. If applying online, students should indicate "pay by check" when prompted for application fee payment. The fee requirement is removed during application processing. A paper application may also be requested by calling 303-556-2704 or by e-mail at admissions@ucdenver.edu.

Students who have attended another college or university since last attending the University of Colorado must apply as transfer students and meet the admission criteria and transfer student deadlines for receipt of documents. This requires payment of the $50 (subject to change) nonrefundable application fee and submission of one official transcript from each college or university attended since last enrollment at CU Denver. Transcripts must be sent *directly* from the issuing institution to:

Office of Admissions
University of Colorado Denver
Campus Box 167
P. O. Box 173364
Denver, CO 80217-3364

Students who last attended another University of Colorado campus as a degree seeking student must formally apply for admission and meet the admission criteria of CU Denver. An application fee is not required unless going from undergraduate to graduate status, from nondegree to degree status or if a degree was earned. Students may apply online (preferred) or download a paper application at www.ucdenver.edu/admissions. If applying online, students should indicate "pay by check" when prompted for application fee payment. The fee requirement is removed during application processing. A paper application may also be requested by calling 303-556-2704 or by e-mail at admissions@ucdenver.edu. University of Colorado transcripts are not required, but official transcripts from each college or university attended prior to enrollment at the University of Colorado must be submitted.

Admission of Nondegree Students

Students who are at least 20 years of age and wish to take university courses, but do not plan to work toward a University of Colorado degree, may be admitted as nondegree students provided they have at least a 2.0 cumulative collegiate gpa and are eligible to return to all collegiate institutions previously attended. Questions regarding admission as a nondegree student should be directed to the Office of Admissions. Each school/college limits the number of semester hours taken as a nondegree student that may be transferred to a degree program.

Students considering changing from nondegree to degree status will need to apply as an undergraduate or graduate degree seeking student and meet the admission requirements of the intended program of study. Students under age 22 will be required to submit high school transcripts and ACT/SAT scores in addition to official college transcripts from each institution attended, regardless of the number of credit hours completed.

Note: International students are not admitted as nondegree students.

Financial Implications for Nondegree students

Students with a baccalaureate degree who are admitted as nondegree students will be classified as nondegree graduate students and assessed graduate tuition regardless of the level of courses taken. If enrolling only in undergraduate courses, an adjustment may be requested through the Office of the Registrar to pay the undergraduate tuition rate. However, the Colorado Opportunity Fund (COF) is not available to in-state nondegree graduate students. To utilize COF and pay the lowest tuition rate, students must apply as undergraduate degree-seeking students, even if a degree is not desired.
Note: Students who have completed an undergraduate degree in business will not be accepted for second undergraduate degree-seeking status in the Business School.

Nondegree students are not eligible to receive federal or state financial aid, student loans and most CU Denver scholarships.

How to Apply

To apply for admission as a nondegree student, visit www.ucdenver.edu/admissions and submit your application online (preferred) or download a paper application. You may also obtain a paper application by calling 303-556-2704 or by email at admissions@ucdenver.edu. Submit the completed application by the deadline for the term desired. A $50 (subject to change) nonrefundable application fee is required. No additional credentials are required. *Nondegree students admitted prior to "open registration" for a given semester are advised that registration for courses is done by time assignment, and nondegree students have the latest registration time assignments regardless of the number of credits completed. Admission as a nondegree student does not assure availability of specific courses.*

Continuation as a nondegree student with no prior undergraduate degree is contingent upon maintaining an overall GPA of 2.0 upon completion of 12 or more semester hours.

Admission of Students Seeking a Second Undergraduate Degree

Students who already hold a bachelor's degree in any major other than business may apply for admission to any undergraduate program and work toward completion of a second undergraduate degree. Applicants with an undergraduate degree in business may apply for undergraduate programs in the College of Arts & Media, College of Engineering and Applied Science, College of Liberal Arts and Sciences or the School of Public Affairs or for graduate programs in the Business School. Applicants for a second undergraduate degree must meet CU Denver admissions standards.

How to Apply

1. Apply online or request an application for undergraduate admission from the Office of Admissions at www.ucdenver.edu/admissions.

2. Complete the application and send it to the Office of Admissions with a $50 (subject to change) nonrefundable application fee.
3. Have one official transcript sent to the Office of Admissions from each collegiate institution attended. Official transcripts for enrollment at any campus of the University of Colorado are not required. Official transcripts are those sent by the issuing institution *directly* to:
   Office of Admissions
   University of Colorado Denver
   Campus Box 167
   P.O. Box 173364
   Denver, CO 80217-3364
   Hand-carried or faxed copies are not official.

Transcripts from the institution where the first undergraduate degree was earned must have final grades posted for the semester that the student graduated and have the official notation of the degree awarded.

All credentials presented for admission become the property of the University of Colorado and must remain on file. Students who do not declare all previously attended institutions are subject to disciplinary action and/or dismissal.

Students who knowingly falsify transcripts or test scores will be denied admission to, or will be disenrolled from, the university.

High School Postsecondary and Concurrent Enrollment

High school juniors and seniors with demonstrated academic abilities may be admitted to CU Denver with special approval for one term only. This approval may be renewed. Credit for courses taken may subsequently be applied toward a university degree program. For more information and application instructions, contact the Office of Admissions, 303-556-6745 or admissions@ucdenver.edu.

Admission Requirements for International Students

The University of Colorado Denver is proud to have a diverse population of international students coming from more than 100 countries. Instructions for international student admissions are available in the Information for International Students section of this catalog. International application forms are accessible on the international admissions website at www.internationaladmissions.ucdenver.edu.

New Student Orientation

A welcome and general information program open to all new students is held at the beginning of the fall and spring semesters. The program provides an introduction to the campus, information about student services and student activities available through CU Denver and services provided to all students on the Auraria Campus, including information on getting an ID and parking.

New freshmen will also receive information regarding academic advising and specific orientation sessions for students and parents, which are held at various times during the year. Transfer and graduate students should contact their schools and colleges for additional information on academic advising, as well as special orientation sessions that may be held for a particular program.

Orientation information is sent to admitted students from the orientation office. For more information, call 303-352-3520 or visit North Classroom, 2024.

Four-Year Graduation Guarantee

The University of Colorado Denver has adopted a set of guidelines to define the conditions under which an undergraduate student will be guaranteed to graduate in four years. More information is available through the undergraduate advising offices for each college and the major program offices. The Denver Campus has five undergraduate colleges in which this guarantee applies: College of Arts & Media, Business School, College of Engineering and Applied Science, College of Liberal Arts and Sciences and School of Public Affairs.

CU Denver guarantees that if a student begins studies in a fall semester and lack of scheduling of essential courses is found to have prevented a student from completing all course work necessary for a BA, BFA or BS degree from the university by the end of the student's eighth consecutive fall and spring semester, the college/school shall provide tuition plus any course fees for all courses required for completion of the degree requirements. This applies *only* when needed courses are *not offered* by the college/school and does not apply to scheduling conflicts for individual students. *Students must satisfy all the requirements described below to be eligible for this guarantee.*

This guarantee applies to all students who enroll beginning in a fall term as first-semester, full-time freshmen without admission deficiencies, who do not need remedial course work and who satisfy all the requirements described below. This guarantee does not include completion of all options within the major, a second major, a double degree, a minor or a certificate program. The four-year graduation guarantee does not apply to programs in which the degree has been discontinued or is in the process of being phased out. In these cases, every effort will be made to allow students to fulfill requirements by taking courses at other universities and colleges to facilitate timely completion of the degree.

Some study abroad programs may not provide a sufficient range of courses to allow students to meet the requirements, thus, students who participate in study abroad programs during the fall or spring semesters may not be eligible for this guarantee. A student may be able to participate in a study abroad program during the summer semester and still meet all the requirements of this guarantee. It is essential that a student work closely with an advisor to determine if the student can participate in a study abroad program and still meet all the requirements of this guarantee.

Requirements

Students must satisfy all of the following requirements to be eligible for this guarantee.

1. Students must begin studies in a fall semester and enroll in CU Denver course work as specified on the student plan of study for eight consecutive fall and spring semesters.
2. Students must complete all required course work by the end of the eighth semester.
3. No fewer than 60 semester hours of applicable course work must be completed successfully by the end of the second year (24 calendar months); 90 semester hours by the end of the third year (36 calendar months); and 120 semester hours by the end of the fourth year (48 calendar months). Students must successfully complete an average of 15 semester hours each semester.
4. Students must meet with their college advisor and their major advisor for academic advising during the first, third, fifth and seventh semesters of study.
5. The major must be declared no later than the end of the first semester of study and students must not change their major or any options within the major.
6. A required plan of study toward the major must be agreed upon and signed by the student and advisor at the end of the first semester. Thereafter students must make satisfactory progress toward completing the major, as defined by each major, and the general education requirements. Courses with certain grades may not meet the satisfactory progress requirement of this guarantee. A statement of what constitutes satisfactory progress and what grades are acceptable is available from the major or departmental office at the time the major is declared.
7. A minimum of 30 semester hours of college general education courses should be completed by the end of the second year, including core curriculum courses that also meet major requirements and foreign language proficiency.
8. All lower-division graduation requirements must be successfully completed by the 90-semester-hour mark.
9. Students must remain in good academic standing according to their school/college academic policies.
10. Grades of *C*-, *C* or *C*+, as defined by the college/school, must be earned in all course work required for the major, and students must have a cumulative GPA of 2.0 in all major course work attempted.
11. Students must register each semester within one week of the student's specified eligibility to register.
12. Students must take courses that are specified in the student plan of study approved by their advisor.
13. Elective courses must be avoided if they conflict with required major or general education courses. Elective courses must not be given a higher priority than required courses.
14. Students must meet all departmental, school or college and university policies regarding graduation requirements.

15. The college/school must be notified in writing of the student's intent to graduate no later than the beginning of the seventh semester of study. A graduation application must be filed no later than the deadline for the appropriate graduation date. The student must complete a graduation checkout/senior audit with their advisor.
16. The student is responsible for and must keep documentation proving that these requirements were satisfied (e.g., records of advising meetings attended, advising records and instructions, etc.).

Undergraduate Experiences

Assistant Vice Chancellor for Undergraduate Experiences: John Lanning, john.lanning@ucdenver.edu
Assistant to the AVC for Undergraduate Experiences: Nadine Montoya-Donoho, nadine.montoya@ucdenver.edu
Office: Lawrence Street Center, Suite 300
Telephone: 303-315-2133
Fax: 303-315-5829
Website: www.ucdenver.edu/ue

The Office of Undergraduate Experiences coordinates and implements undergraduate education programs designed to promote access for all undergraduate students to high-quality and innovative CU Denver programs, improve the recruitment and retention of undergraduate students and coordinate programs between academic and student affairs to better serve and engage undergraduate students.

This includes coordination of programs that aim to improve the quality of undergraduate experiences.

- The core curriculum is an academic program of required general education courses that gives CU Denver students a quality educational foundation for a lifetime of success.
    - CU Denver Undergraduate Core and gtPATHWAYS Curriculum
- The Colorado Commission on Higher Education initiated the gtPATHWAYS program to ensure that students could transfer credit for general education courses to any other higher education institution in the state.
- The University Honors and Leadership program combines leadership and scholar components to prepare students for the new challenges of the 21st century.
- The Experiential Learning Center coordinates internships and supports undergraduate research, interdisciplinary learning, civic engagement, etc. at CU Denver.
- Early Alert assists students early in the semester who are having trouble adjusting personally or academically to their new environment.
- First-year seminars teach academic and study skills and ease the transition both socially and academically for incoming students.

Other responsibilities of this office include ensuring the quality of new undergraduate degree programs, promoting cross-college academic programs, training faculty and working in many other capacities to ensure that students have a positive and productive academic career at CU Denver.

University Honors and Leadership Program (UHL)

Director: Steven G. Medema
Assistant to the Director: Phyllis Chaney
Office: 1047 Ninth Street Park
Telephone: 303-556-5297
Fax: 303-556-6744
E-mail: UHL@ucdenver.edu
Website: www.ucdenver.edu/uhl

University Honors and Leadership (UHL) is a program of excellence designed for outstanding students who have demonstrated superior achievement in academic performance and/or outstanding leadership qualities. The program is founded on the premise that the integration of rigorous programs of academic excellence and leadership education provides the ideal environment in which to develop the gifts of the next generation of leaders in academia, business, policymaking and service to communities local, national and global.

The UHL program is unique in integrating academic honors and leadership education within a highly selective learning community of outstanding students and faculty. The UHL program allows students to complement their major field of study with a traditional honors experience in the academic honors track or program of leadership education in the leadership studies track. Students move through the UHL program in cohorts that simultaneously promote community, teamwork and individual initiative. All of the UHL courses are multidisciplinary, reflecting our view that the ability to effectively analyze the challenges faced in all sectors of society can be enhanced by the integration of appropriate pieces drawn from a broad base of perspectives and problem-solving skills. The UHL program complements this with an emphasis on the development of exceptional oral and written communication skills, projects that steep the students in sophisticated research methods and the opportunity to work in teams to solve practical problems in the community.

The Academic Program

UHL is a multidisciplinary cohort program consisting of 27 semester hours of course work to be completed over four years. The UHL courses will substitute for most of the CU Denver general core curriculum requirements.

UHL students are given the opportunity to pursue a traditional honors experience through the academic honors track of the UHL program or to focus on leadership education through the UHL leadership studies track. UHL students have a common first-year experience, taking a core of course work common to both tracks. The second and third years of the UHL program offer programs designed specifically for the academic honors and leadership studies tracks. The UHL students come together for a two-semester capstone research seminar in the fourth year.

Students who successfully complete the academic honors track will receive a university honors designation on their diploma and on their university transcript. Students who successfully complete the leadership studies track will graduate with a minor in leadership studies.

First-Year Seminars

Assistant Vice Chancellor for Undergraduate Experiences: John Lanning, john.lanning@ucdenver.edu
Assistant to the AVC for Undergraduate Experiences: Nadine Montoya-Donoho, nadine.montoya@ucdenver.edu
Office: Lawrence Street Center, Suite 300
Telephone: 303-315-2133
Fax: 303-315-5829
Website: www.ucdenver.edu/fye

CU Denver offers an optional program of First-Year Seminars (FYS) designed to assist students to successfully make the transition from high school to college, improve student retention and boost new student confidence. The FYS courses integrate rigorous academic content with academic skills such as library usage, campus resources, information literacy, time management, communication skills and career counseling. Class size is capped at 24 students to facilitate interaction between student and instructor and to allow the instructor to serve as a mentor in the student's first semester of college.

An important objective of the FYS program is to both challenge and support students so each can excel academically and socially at CU Denver. FYS classes engage students in active learning beyond the traditional classroom, laboratory or studio classes. In the FYS courses, students learn about themselves and their abilities. The experiences obtained from the FYS program aim to promote academic exploration and interdisciplinary learning, civic engagement, cultural awareness, leadership, problem solving and other professional skills.

The strong academic component of the CU Denver FYS courses allows the course to count toward graduation requirements in the CU Denver core curriculum, or general

education program, required of all undergraduate students. Students are encouraged to use the FYS program to explore areas either within or outside their major. Students should work with their academic advisor during orientation to select an appropriate FYS course.

Why should entering high school students participate in a First-Year Seminar course?

- higher first semester grades
- higher student satisfaction facilitated by small class size and a faculty mentor
- better utilization of campus resources paid for through student fees
- early exploration of career paths and a suitable major
- core curriculum credit

Experiential Learning Center

Director: Tony Smith
Location: Tivoli Student Union, Suite 260
Telephone: 303-556-6656
Website: www.ucdenver.edu/elc

Live your learning at CU Denver! Experiential Learning is 'hands-on' learning and engages students in active learning beyond traditional classroom, laboratory, or studio pedagogy. Well-planned, supervised and evaluated learning experiences can stimulate academic inquiry while promoting interdisciplinary learning, civic engagement, career development, cultural awareness, leadership, problem solving and other professional and intellectual skills.

Students have many opportunities to explore academic fields through direct experience including internships, service in the community, undergraduate research and international experiences. Link your studies to the real world and put your knowledge into practice. You will develop new skills, grow personally and professionally and enrich your academic experience.

INTERNSHIPS

Every year, hundreds of CU Denver students engage in academic and not-for-credit internship experiences with corporations, government and nonprofit agencies in the Denver-metro area and around the world. Students can earn academic credit, pay or both while gaining relevant experience related to their career interests. The Experiential Learning Center also supports students in not-for-credit internship experiences. The Experiential Learning Center staff can advise and support students in tailoring their experiences to their educational and career goals.

SERVICE LEARNING

Students gain a better understanding of community issues, develop practical skills and make a difference in the world around them when they engage in service activities. From the first-year experience course to senior capstone classes, faculty weave service projects into their courses, giving students a wider view of the world. Many volunteer opportunities are also available through the center. Students can also earn AmeriCorps/UCAN Serve education awards for service. The ELC's Community Partner Program allows for students, faculty and staff to interact with different community partners in the Experiential Learning Center every day. These as well as a multitude of other resources are available to support the success of CU Denver students.

UNDERGRADUATE RESEARCH

Whether assisting faculty with research or pursuing their own research under faculty supervision, CU Denver students can experience what it means to be involved in the creation of knowledge. Students may apply for research grants through the Undergraduate Research Opportunities Program (UROP) and showcase their research projects at the annual Research and Creative Activities Symposium. Undergraduate Research can assist many students and is especially effective for students planning to continue on to graduate and post-baccalaureate professional education opportunities. The ELC can assist students in seeking out and succeeding in the Undergraduate Research realm.

Early Alert Program

CU Denver participates in a campuswide Early Alert program to identify undergraduate students needing assistance from academic and student service offices. Providing assistance early in the semester is very important to student success in their baccalaureate program.

The Early Alert program is designed for faculty to identify students in the fifth and sixth weeks of the semester who need assistance because of academic performance, class participation and/or behavior issues. Students who are identified by faculty for an alert are contacted by the advising office in the student's home college, and it is important for students to respond to Early Alert communication with their advisors. Assistance is then provided to students through academic advising and through referrals to appropriate CU Denver student service offices.

Goals of the early alert program are to:

- increase student academic success
- improve student persistence and graduation rates
- increase communication between students and faculty
- increase communication between students and academic advisors
- increase student utilization of student service offices

Further information about the CU Denver Early Alert program is available from the Office of Undergraduate Experiences, 303-315-2133, www.ucdenver.edu/earlyalert.

CU Denver Undergraduate Core and gtPATHWAYS Curriculum

Core Curriculum

All undergraduate students at CU Denver must complete a 34-to-38-semester-hour core curriculum of general education course work. The CU Denver core curriculum is specifically designed as the foundation for academic success for the baccalaureate degree as well as for a lifetime of success.

The undergraduate core curriculum is based on a philosophy of a liberal arts education. The phrase “liberal arts” originates from Latin roots *liber*, “to be free,” and *ars*, “skill or ability to do something.” Thus, a liberal arts education develops a set of skills to set one free. Course work in a traditional liberal arts education is designed to provide an understanding of ourselves, ours and other cultures and our environment.[1]

The undergraduate core curriculum emphasizes intellectual competencies and provides optional choices to develop a skill base in the broad knowledge areas that make up the undergraduate curriculum. A detailed chart of faculty-approved core courses and college core requirements is available at the following link: CU Denver Undergraduate Core Curriculum, gtPATHWAYS.

The Core Curriculum Oversight Committee, composed of faculty in each undergraduate school and college, monitors the curriculum.

[1.] H. Thorne Compton, “The Liberal Arts and Critical Thinking: Building Blocks of the Educated Person,” in *A Student Guide to Higher Education*, John N. Gardner and A. Jerome Jewler, Editors, Wadsworth Publishing Company, Belmont, CA, Chapter 1988.

Intellectual Competencies

English Composition (two courses)

- English composition courses develop critical thinking, reading, writing, information literacy and research-based writing skills.

Mathematics (one course)

- Mathematics courses develop critical thinking, logic, quantitative reasoning and numerical relationships/patterns in behavioral/social and physical phenomena.

Knowledge Areas

Arts and Humanities (two courses)

- Arts courses develop creativity, self-expression, aesthetics and stimulation of thought. Topic areas include arts, fine arts, music, professional music and theatre.
- Humanities courses develop ethics and priorities, human experience and development, contemporary life issues and responsibilities and impacts of social actions. Topic areas include English literature, modern languages, history, philosophy and religious studies.

Behavioral and Social Sciences (two courses)

- Behavioral science courses develop an understanding of human behavior, communication and an analysis of human experience and development. Topic areas include anthropology, communication and psychology.
- Social science courses develop an understanding of human society and the interrelationship of social phenomena. Topic areas include economics, geography, political science, sociology and ethnic studies.

Biological and Physical Sciences, Mathematics (two courses)

- Biological and physical science courses develop knowledge through the scientific method, scientific reasoning and solutions to complex phenomena in nature. Topic areas include biology, chemistry, geology, physics and environmental science.
- Mathematics courses are typically not classified as a science but provide the tools and models to investigate science and to formulate hypotheses and laws.

International Perspectives (One Course)

- International perspectives courses develop insight into globalization impacts and the influence of an expanding multicultural society.

Cultural Diversity (One Course)

- Cultural diversity courses provide insight and analysis of race and gender issues within the United States.

The value of a liberal arts-oriented core curriculum greatly exceeds its basic economic value, providing personal life and workforce skills necessary for a dynamic 21st century.

Students should work closely with academic advisors to choose courses from the core curriculum that compliment their majors and future careers.

Guaranteed Transfer: gtPATHWAYS Program

The Colorado Commission on Higher Education (CCHE) has charged each Colorado public institution of higher education with providing undergraduate students a set of general education courses guaranteed to transfer as core credit to any other Colorado public institution. This program is called gtPATHWAYS, with “gt” referring to guaranteed transfer.

Transferring students are able to apply up to 31 semester hours of gtPATHWAYS approved courses with grades of C- (1.7) or higher toward their general education program at the receiving institution. Students may also apply gtPathways-approved courses to courses in their major, depending on policies at CU Denver.

Students transferring to CU Denver with an associate’s degree from a Colorado community/junior college in the gtPATHWAYS program are guaranteed fulfillment of all lower-division core curriculum requirements. Students planning to transfer in/out of CU Denver under the gtPATHWAYS program should work with their academic advisor to obtain details of transfer credit.

General education courses approved for the gtPATHWAYS program are identified in the CU Denver Undergraduate Core Curriculum, gtPATHWAYS. gtPATHWAYS-approved courses are also identified in the Courses chapter of this catalog. For example, the suffix GT-SC1 in “BIOL 1550-4. Basic Biology: Ecology and the Diversity of Life: GT-SC1” identifies the course as a gtPATHWAYS approved science course with a laboratory.

Further information about the statewide transfer program, including the list of approved courses and distribution requirements, is available at http://highered.colorado.gov/Academics/Transfers/gtPathways/default.html.

Information for Graduate Students

Welcome to the Graduate School on the Denver Campus. Almost half of our students on the Denver Campus are enrolled in graduate programs. We have a higher ratio of graduate to undergraduate students than most other universities in the country. This special emphasis on graduate education provides a strong culture of graduate studies on the campus and has engendered a number of innovative programs and teaching methods, such as dual master’s degrees or classes that are entirely online. Graduate programs on the Denver Campus also benefit from CU Denver’s immediate proximity to the city, which provides rich opportunities for internships and employment, collaborations between the university and the city and a wealth of real world problems that can test and elaborate ideas gained in the classroom.

A list of all graduate programs is available in the Academic Programs section of the CU Denver website.

The Denver Campus Graduate School offers 51 master's programs and 10 PhD programs. In addition, schools and colleges offer other master's programs that are independently accredited and are not housed in the Graduate School. For students in those programs, most of your needs will be met by the department in which your program resides. Information about these graduate programs is available under the specific school or college in this catalog. However some programs, those having a diamond designation, are programs within the Graduate School and follow the rules outlined in this section.

The colleges and schools offering graduate opportunities on the Denver Campus include:

College of Architecture and Planning
College of Arts & Media
Business School
School of Education & Human Development
College of Engineering and Applied Science
College of Liberal Arts and Sciences
School of Public Affairs

Individual graduate programs are described within the school/college sections of the catalog.

Graduate School

Dean: Barry D. Shur, PhD
Administrative Assistant: Carie Carroll
Online Applications Manager: Krystal Allen
Office: 1380 Lawrence Street, Suite 300
Telephone: 303-315-5826
Fax: 303-315-5829
Website: www.ucdenver.edu/academics/colleges/Graduate-School/Pages/default.aspx

Mailing Address: P.O. Box 173364, Campus Box 163, Denver, CO 80217

Graduate education is a critical component of the mission of the University of Colorado Denver. The Graduate School is one of several schools within the university and its mission is to facilitate and enhance the educational experiences and opportunities for all graduate students and to encourage excellence in research, creative and scholarly work.

In accordance with its mission, the Graduate School leadership and the graduate faculty, plan, develop, approve, evaluate and administer graduate programs (PhD and master's degree programs). The Graduate School also ensures that graduate programs comply

with the standards of excellence and sound academic administration established by the rules and policies of the Graduate School and adopted by the University Board of Regents and the Colorado Commission on Higher Education. In particular, the Graduate School is charged with maintaining high standards and quality of both the graduate programs and the faculty of the Graduate School. Other functions of the Graduate School include:

a) Fostering multidisciplinary, interdisciplinary and innovative programs and promoting collaboration that creates unique opportunities for student learning, research and discovery;
b) Formulating and maintaining uniform standards for academic excellence in graduate-level courses and research experiences offered for credit;
c) Promoting a supportive environment for the graduate student community;
d) Providing a voice for graduate education in the planning processes of the university; and
e) Publishing a current Graduate School Student Handbook on the Graduate School website.

Graduate School Rules 11-12

Requirements for Admission

Note that the following are minimum requirements. College and school regulations, if more stringent, take precedence over the minimum guidelines as set forth by the Graduate School.

Regular Degree Students

Students are admitted by the Graduate School as regular degree students provided they meet the following criteria:

- Hold a baccalaureate or master's degree from an accredited college or university or demonstrate completion of work equivalent to the baccalaureate or master's degree given at CU Denver. Applicants whose credentials include studies or course work at an institution outside the U.S. must include a validated English translation and an evaluation of the transcript by a professional accrediting service (such as World Education Services).
- Usually have an undergraduate grade point average of 3.00 or better ("A" is equal to 4.0) and/or a 3.00 or better GPA in a completed or partially completed (at least 1/3) master's degree program. Applications from individuals who attended a college or university that does not issue grades or a GPA will be evaluated by the Graduate School on a case-by-case basis.
- Have adequate preparation to enter graduate study in the chosen program as demonstrated by their performance in the GRE or an appropriate substitute, or

an earned MS/MA or PhD from a school in the U.S.A., or completion of at least 12 credit hours of transferable graduate-level course work. Although the Graduate School recommends that applicants take the GRE or other standardized test, it is not a requirement for admission as a regular degree student if one of the other two indicators of preparedness is present. Some graduate programs, however, may require that all applicants take the GRE or an equivalent.

- Meet any additional requirements (such as particular undergraduate course work) for admission as established by the program.

International students must meet ALL of these requirements and also must provide:

- Documentation in English (or a certified English translation) of the completion of a bachelor's degree, master's degree or the equivalent at the time of matriculation as evaluated by the International Admissions Office.
- Applicants whose native language is not English must take either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) exam and must score above 525 (paper) or 192 (computer) or 71 (Internet based) on the TOEFL or 6.0 on the IETLS. Schools or colleges or individual graduate programs may require higher standards on these tests.
- Applicants whose native language is not English are not required to take the TOEFL test if they have completed a baccalaureate or graduate-level degree program at an English-speaking college or university or have completed at least two semesters at a college or university in the United States as a full-time student and obtained a "B" average (3.0 GPA) or higher.
- Financial and other documents required by the International Scholars and Students Office to process immigration documents.
- A certified English translation of all records and references not in English.

Additional requirements and documentation may also be required.

Provisional Degree Students

A graduate program that wishes to admit an applicant who does not meet the criteria for admission as a regular degree student can petition the Graduate School to admit the applicant as either a regular or provisional degree student. The petition must include a letter from the graduate program director to the dean that outlines the rationale to support such an admission. If the student is to be admitted as a provisional student, then the petition must include a description of the conditions that the student must meet in order to become a regular degree student. The admission of the applicant as a provisional degree student requires the approval of the dean.

Based on the requirements of the graduate program and the recommendations of the graduate program director, the dean will determine and advise the program director and the student of the conditions that the student must satisfy to be transferred from

provisional to regular status. The dean, in consultation with the program director, will also determine the time period (one or two semesters for full-time students and a maximum of four semesters for part time students) in which these conditions be met.

Provisional students are subject to the same standards of performance required of regular degree students, plus any other requirements imposed by program faculty as conditions of admission. At the end of the specified probationary period, the dean, in consultation with the program director will review the performance of the provisional student. The student must either have satisfied the requirements for conversion and be admitted to regular degree status or be dismissed from the graduate program to which they were provisionally admitted. The Graduate School will notify both the program director and the student whether the provisional student has satisfied the requirements and that their status has been transferred to that of a regular student, or has failed to meet the requirements and has been dismissed.

Application Procedures

Applicants seeking admission to CU Denver's graduate programs should apply directly to the appropriate department rather than the Graduate School or the Office of Admissions. See specific departments/programs for more information. Read all application instructions carefully before completing the online application. Online applications are submitted electronically to the department. Supplementary application materials (if applicable) should be mailed to the department to which you are applying. Make sure to clearly mark the materials indicating your full name, social security number, the department in which you are applying and contents of the supplementary material. In addition, sufficient postage must be included if the materials are to be returned to the applicant. If applying to more than one department, you must submit a complete application and separate fee to each department. Students will receive offers of admission or rejection from the graduate department.

An applicant for admission must present:

- Parts I and II of the Denver Campus Graduate School application form, including the tuition classification form, which may be obtained from the departmental program coordinator.
- Two official transcripts for all academic work in colleges and universities completed to date.
- Three letters of reference. Have the nominators include the applicant’s name and social security number in their letters of reference.
- A nonrefundable application fee (check or money order) of $50 for domestic students or $75 for international students. *No application will be processed until this fee is paid.*
- Any other material required specifically by the program faculty. This may include scores from the GRE or other examination. Check with program coordinators in the departments for additional information that may be required.

Again, the student must check with the program to determine the deadline for submitting the application and application fee to the program of interest.

When a prospective degree student applies for admission, the chairperson or a student admissions committee of the department will decide whether the applicant shall be admitted and make that decision known to the Office of Admissions.

Students who wish to apply for a graduate student award (e.g., fellowship, scholarship, assistantship) should contact their department before the application deadline for information, since deadlines are usually earlier for aid requests than for admission.

Readmission/Changing Programs

Former and current students who wish to be re-admitted or change from one degree program to another must meet the requirements of the new degree program and provide all items required of students applying to the Graduate School on the Downtown Campus for the first time. These applicants, however, may petition the program to which they were initially admitted to secure a release of transcripts and letters of recommendation supplied at the time of their initial application.

Transferring

Students transferring from another University of Colorado campus to the Denver Campus must apply and be accepted by the program on this campus.

A student who has completed a master's program at CU Denver must resubmit parts I and II of the graduate application for acceptance into the doctoral program.

Nondegree Students

A student who wishes to take graduate courses, but is not interested in earning a specific advanced degree, may apply as a nondegree student. Contact the Office of Admissions at 303-556-2704 for further information. Nondegree students will be allowed to register only on the campus to which they have been admitted.

Nondegree students who later desire to pursue a graduate degree program at this university are encouraged to submit the complete graduate application and supporting credentials to their department as soon as possible. Note that the GPA for courses taken as a nondegree student is calculated separately and is not incorporated in the official graduate GPA.

A department *may* recommend the transfer of as many as 9 semester hours toward the requirements of a master's degree for courses taken either as a student at another accredited graduate school, as a nondegree student at the University of Colorado or a combination.

A grade of B- or better must be earned. A 10-year time limit is in effect.

New Student Orientation

An orientation program for new students is held at the beginning of the fall and spring semesters, during the week prior to the first day of classes. The orientation program provides information to new students about activities and services available on the Denver Campus. Information on the expectations, opportunities, registration process, parking and securing ID cards is also provided. Academic advising sessions are held before registration for the term. Students should contact their schools and colleges for additional information on advising, as well as special orientation sessions that may be scheduled for their programs.

Registration

On the regular registration days of each semester, students who have been admitted to a graduate program are required to follow appropriate registration procedures.

Students should register for classes the semester they are accepted as graduate students. If unable to attend that semester, they must notify the Office of Admissions in addition to the department that has accepted them.

Withdrawal

A graduate student who desires to withdraw from the university must apply to the dean of his/her school or college for permission to withdraw in good standing. *A student who discontinues attendance in a course without official withdrawal will be marked as having failed the course. After the 10th week of the class, the student must have the associate dean's signature to drop a course.*

Assistantships and Fellowships

Graduate Student Teaching Appointments

Many departments employ graduate students as part-time instructors or teaching assistants. The instructorship is reserved for those advanced graduate students already possessing appropriate degrees who may be independently responsible for the conduct of a section or course. Contact the department for further information.

Research Assistantships

Research activities provide opportunities for graduate students to obtain part-time work as research assistants in many departments. Such funds are from external grants obtained by faculty members. Contact the department for further information.

Additional information about registration and financial aid are available in separate sections of this catalog. For information about tuition and fees, please visit the Bursar's office website.

Requirements for Advanced Degrees

Graduate Student Handbooks

Each graduate program is expected to provide students with a handbook—electronic, paper or both—indicating in some detail the curricular requirements, the expectations for satisfactory progress toward the degree completion, a timeline for the steps needed to meet these expectations and other features unique to each program, such as the composition and formation of student committees to guide and review the student's progress.

GPA Requirements and Quality of Graduate Work

A student is expected to maintain at least an overall 3.0 GPA in all work attempted while enrolled in a graduate program and to make satisfactory progress toward a degree in other respects as determined by his or her department.

For all graduate degrees, a grade below C is unsatisfactory and will not be counted toward the minimum requirements for these degrees.

Credit by Transfer

A limited amount of high-quality resident graduate work done in a recognized graduate school elsewhere within the time allowed may be accepted, provided it is recommended by the department concerned and approved by the school or college dean. The maximum amount of work that may be transferred to this university is 12 semester hours or 40 percent of the number of credits required for the master's degree, whichever is higher, and 30 hours for PhD degrees.

The school or college shall determine if graduate classes taken by an undergraduate can be transferred to a graduate program. They shall also determine if courses taken in the University of Colorado System are considered resident or transfer courses.

Courses taken as pass/fail or satisfactory/unsatisfactory will not be transferred. In addition, a grade of B- or above must be earned for a course to be transferred. Courses taken some time ago will need to be validated by the program director.

Use of English

A student who is noticeably deficient in the use of standard English in all oral and written work may not obtain an advanced degree from the University of Colorado. Ability to use the language with precision and distinction should be cultivated as an attainment of major importance.

The university reserves the right to test English proficiency for nonnative speakers of English to confirm and validate sufficiency for credit-bearing course work and degree programs.

Each department will judge the qualifications of its advanced students in the use of English. Reports, examinations and speech will be considered in estimating the candidate's proficiency.

Graduate Appeals

Details may be found in the Graduate School Rules, which can also be accessed online.

Master's Degree

A student regularly admitted to a graduate program and later accepted as a candidate for the master of arts, master of science or other master's degrees will be recommended for the degree only after certain requirements have been met.

The requirements stated below are minimum requirements; additional conditions may be set by the individual programs.

Students planning to graduate should ascertain current deadlines with their graduate programs. It is the graduate student's and the department's responsibility to see that all requirements and deadlines are met (e.g., changing of *IW* grades, notification of final examinations, etc.).

Departments or program committees may have deadlines that must be met by the graduate students in that department or program. It is the student's responsibility to ascertain and meet these requirements.

Minimum Requirements

The minimum requirement is 30 (semester) credits. While it is expected that most of this course work will be at the graduate (5000 and above) level, some graduate programs may allow particular undergraduate courses that are outside the discipline of their program to count toward the graduate degree. The proportion of undergraduate credit hours cannot exceed 20% of the course requirement of the graduate program and must be approved by the program director on a case-by-case basis. Undergraduate courses

within the same discipline as the graduate program cannot be credited toward a graduate degree. If the program has a thesis option, the thesis must count for 3-6 credits. Independent study course work cannot exceed 25 percent (7.5 credits) of the 30 credits of course work required for the master's degree.

Admission to Candidacy

Details may be found in the Graduate School Rules, which can also be accessed online.

Master's Thesis Credit

Details may be found in the Graduate School Rules, which can also be accessed online.

Thesis Requirements

Details may be found in the Graduate School Rules, which can also be accessed online.

Time Limit

Master's degree students have five years from the date of the start of course work to complete all degree requirements.

Doctor of Philosophy

The doctor of philosophy (PhD) degree is the highest academic degree conferred by the university. To state the requirements for the degree in terms of semester hours would be misleading, because the degree is not conferred merely upon the satisfactory completion of a course of study, however faithfully pursued.

Students who receive this degree must demonstrate that they are proficient in some broad subject of learning and that they can critically evaluate work in this field. Furthermore, they must have shown the ability to work independently in their chosen field and must have made an original contribution of significance to the advancement of knowledge. The technical requirements stated below are minimal requirements for all candidates for the degree; additional conditions set by the departments or schools will be found in the announcements. Any department may make additional regulations consistent with these general rules.

Studies leading to the PhD degree must be chosen so as to contribute to special competence and a high order of scholarship in a broad field of knowledge. A field of study chosen by the student may be in one department or it may include two or more closely related departments. The criterion as to what constitutes an acceptable field of study shall be that the student's work must contribute to an organized program of study

and research without regard to the organization of academic departments within the university.

Minimum Course Dissertation Requirements

Details may be found in the Graduate School Rules (PDF).

Examinations

Each PhD program will require at least comprehensive and final examinations. Notice of all examinations must be filed with the dean of the Graduate School at least two weeks prior to administration.

Comprehensive Examination

Details may be found in the Graduate School Rules (PDF).

Continuous Registration Requirements for Doctoral Candidates

Details may be found in the Graduate School Rules (PDF).

Dissertation Requirements

Details may be found in the Graduate School Rules (PDF).

Final Examination/Defense

Details may be found in the Graduate School Rules (PDF).

Time Limit

Doctoral degree students have eight years from the date of start of the doctoral program.

Graduate Faculty

The graduate programs at the Denver Campus Graduate School are delivered by faculty who are especially qualified by education and experience for graduate teaching and scholarship.

The university and college/school qualifications are published in the “Graduate Faculty” section of the Graduate School Rules. These rules distinguish between regular faculty,

who are typically full-time members of the CU Denver faculty, and special faculty who may not be full-time, but who have special skills that enhance a college/school's graduate course offerings. Faculty who meet these qualifications are admitted to membership in the graduate faculty of CU Denver. These are the only faculty members permitted to teach graduate courses or to serve on thesis, dissertation or graduate student committees at either campus of CU Denver.

Research Opportunities

CU Denver is strongly committed to discovering new knowledge and novel creative expressions through the research and creative efforts of its faculty. Such activities not only advance knowledge and enhance the quality of life, but strengthen teaching by grounding instruction in scholarship and professional practice. These activities constitute an important component of CU Denver's service to the community at large. Externally funded projects are a major priority at the Denver Campus.

Research projects, training and public service programs encompass both traditional and nontraditional fields of study, focusing on issues important at all levels—city, state, national and international. The benefits to campus are substantial. Externally funded activities

- assist in sustaining scholarly discourse and creative work
- enable faculty members to engage in the advancement of knowledge,
- provide the foundation for solving pressing practical problems of vital concern to society
- enhance the educational opportunities of students both at undergraduate and graduate levels

In addition, a great deal of research at the university is conducted without substantial external support. This research also yields important insights that are conveyed to a national audience through faculty publications, presentations, exhibits, performances and professional activities. Many members of the faculty are leaders within the national scholarly community. All these pursuits bring recognition to the university, establish the credibility of its faculty and enhance the value of the degree it confers.

The active engagement of graduate students in these scholarly and creative activities is the center piece of a vibrant program in graduate education. The mentorship of graduate students by the graduate faculty is a major objective of the educational process. In addition, the consolidation of the Denver Campus with the Anschutz Medical Campus is opening new opportunities for collaborative, interdisciplinary work.

Information for International Students

The University of Colorado Denver provides a variety of international programs and educational opportunities and services for international and domestic students, scholars,

faculty, staff and the greater Denver community. The goals of the Office of International Affairs are to raise international awareness on the campus, to provide opportunities for students to gain global competency needed in today's interdependent world and to create a campus community that is welcoming to international students and scholars.

International Admissions

Director: Derrick Alex
Telephone: +1-303-315-2230
Fax: +1-303-315-2246
Website: international.ucdenver.edu/admissions

The Department of International Admissions at the University of Colorado Denver assists all international students with the international application process from first contact through issuance of initial immigration documents. The conversion of foreign grades into the United States system is done in-house. At the request of academic departments, International Admissions also evaluates course work completed at foreign institutions by domestic applicants.

International Admissions representatives travel overseas to recruit qualified international students. The department also advises staff and faculty traveling overseas on possible networking with prospective international students, visiting Fulbright offices and foreign universities with CU Denver brochures and information.

International Admissions Application Deadlines

Undergraduate

Term	*Preferred Deadline*	*Final Deadline*
Summer	January 15	May 3
Fall	March 15	July 22
Spring	October 1	December 1

Graduate

Term	*Preferred Deadline*
Summer	January 15
Fall	February 15*, March 15

Spring	October 1

Final deadlines vary by department and by programs. Please contact the academic department for final deadline.

* *College of Architecture & Planning*

English Language Requirement

Both Test of English as a Foreign Language (TOEFL) scores and the International English Language Testing System (IELTS) scores are accepted at CU Denver as proof of English language proficiency.

The CU Denver institutional code for TOEFL is 4875. Test information and registration materials for TOEFL may be obtained from the Ministry of Education, American Culture Center or educational institutions in the applicant's country. Information may also be obtained directly from:

Educational Testing Services, CN6151
Princeton, NJ 08541-6151 USA
606-921-9000
Website: www.toefl.org
E-mail: toefl@ets.org

To receive test information and registration materials for IELTS please visit www.ielts.org or send an e-mail to ielts@ieltsintl.org. For graduate applicants, the English language requirement **may** be waived if the applicant has attended a college or university in the United States as a full time student and completed two major terms of academic work with a "B" average or better. Undergraduate applicants **may** be able to waive tthe English language requirment if they have completed six hours of college level English composition with an average grade of "B" or better from an accredited institution in the United States.

Live-In Residence Requirement

The CU Denver requires that all first-time international undergraduate students live in the Campus Village at Auraria apartments. Additional information about the facilities, policies and programming at Campus Village are available in the Campus Life section of this catalog.

Exemptions to the campus residency policy will be evaluated and made on a case-by-case basis. Exemption forms are available through the Office of Student Life, Tivoli room 303, or online. It is not mandatory for international graduate students to live on campus. For further information, please contact the Office of Student Life at 303-556-3399 or at housing@ucdenver.edu.

Minimum Requirements for International Applicants

Undergraduate Freshman (First-Year) Students

College	TOEFL* IELTS		or	ACT/SAT
	Internet Based	Paper Based		
Arts & Media**	71	525	6.0	Not required
Business	71	525	6.0	Not required
Criminal Justice	71	525	6.0	Not required
Engineering	71	525	6.0	25/1150
Liberal Arts and Sciences	71	525	6.0	Not required

** The English language requirement can be satisfied with one of the three TOEFL exams or the IELTS exam.*
*** Some programs in Arts & Media require an audition.*

Undergraduate Transfer Students

College	TOEFL*		or IELTS	GPA
	Internet Based	Paper Based		
Arts & Media**	71	525	6.0	2.4
Business †	71	525	6.0	3.0
Criminal Justice	71	525	6.0	2.4
Engineering‡	71	525	6.0	2.75
Liberal Arts and Sciences	71	525	6.0	2.4

** The English language requirement can be satisfied with one of the three TOEFL exams or the IELTS exam.*

*** Some programs in Arts & Media require an audition.*

† Must meet the same GPA requirements as domestic students.

‡ A minimum of one year's course work in calculus and calculus-based physics is required for engineering.

Graduate Students

College	TOEFL		IELTS
	IBT Based	Paper Based	
Architecture & Planning	71	525	6.0
PhD Design & Planning	90	575	6.5
Business	71	525	6.0
Education & Human Development			
Master's	71	525	6.0
PhD	79	550	6.5
Engineering	71	525	6.0
Public Affairs	79	550	6.5
Criminal Justice	71	525	6.0
Most other programs	71	525	6.0

Minimum TOEFL and IELTS scores vary by academic department.
English language requirement may be waived for admission in some programs for international students that have graduated with a bachelor's degree from foreign institutions where the language of instruction was English. Please contact International Admissions for more information.

On-Campus Employment

F-1 and J-1 students who maintain a minimum GPA, are enrolled full-time, and are otherwise in legal immigration status may work on-campus up to 20 hours per week

during normal enrollment periods and more than 20 hours per week during official school breaks (provided the are eligible and intend to enroll the following semester). F-1 studetns do not require any special authorization prior to commencing employment. J-1 students, however, must receive written authorization from a responsible officer/alternate responsible officer in International Student and Scholar Services prior to commencing on-campus employment.

Student Life

Office: Tivoli Student Union, 303
Telephone: 303-556-3399
Web site: www.ucdenver.edu/life/services/studentlife/Pages/home.aspx

It is the mission of the Office of Student Life to complement the academic program of studies at CU Denver and enhance the overall educational experience of students through the development of, exposure to and participation in social, cultural, intellectual, recreational, leadership and governance programs. The Office of Student Life is the advising, coordinating, resource and general information center for student organizations, student government, student programs and the academic honor societies. The office is responsible for the administration of the student fee budget and monitors all student fee expenditures to assure compliance with CUDenver and state of Colorado regulations and procedures. The director of student life represents the assistant vice chancellor for university life on selected CU Denver, tri-institutional and Auraria committees and maintains effective lines of communication with Metropolitan State College of Denver, Community College of Denver and Auraria Higher Education Center.

Health Insurance

Office: Tivoli Student Union, 303
Telephone: 303-556-6273

All F-1 and J-1 students enrolled at the Denver Campus are required to have health insurance. Students are automatically enrolled in the policy when they register for classes. J-2 dependents are encouraged to enroll in the policy but are eligible to submit comparable insurance coverage with another company in order to meet the Department of State insurance requirement. The insurance office welcomes F-2 dependents as well as other international students in other visa categories to enroll in the policy because the cost of health care in the USA is expensive. For further information about the mandatory policy or information about the waiver process, please contact the Student Health Insurance Office at 303-556-6273.

Applying to Undergraduate Programs

1. Submit a complete international application form along with a $75 nonrefundable application fee, **payable to the University of Colorado Denver.** DO NOT SEND CASH. The application fee must be in U.S. funds only. (Use an international money order or your personal check payable in U.S. currency). Please send it to the following address:

   By Air Mail:
   University of Colorado Denver
   International Admissions
   P.O. Box 173364, Campus Box 185
   Denver, CO 80217-3364
   USA

   By Courier (FedEx, DHL, UPS, etc.):
   University of Colorado Denver
   International Admissions
   1380 Lawrence Street, 9th Floor, Suite 932
   Denver, CO 80204-2029
   USA
   Telephone: 303-315-2230

2. Applicants must submit complete and “official” academic records of all course work from secondary schools and any universities attended. Official academic records are records that are directly sent by the issuing institution to the university or are issued to the student in a sealed envelope to be delivered by the student to the university. If the documents are not written in English, they must be translated by a certified translator. The translation must be literal and no conversion of grades should be attempted by the translator. Undergraduate applicants who have more than one year full-time course work in a post secondary institution are not required to submit high school transcripts.

3. Both Test of English as a Foreign Language (TOEFL) scores and the International English Language Testing System (IELTS) scores are accepted at CU Denver as proof of English language proficiency. Applicants must submit an official TOEFL or IELTS score report that is no more than two years old. The CU Denver institutional code for TOEFL is 4875. The English language requirement may be waived if the applicant has completed six hours of college-level English composition with a B average (3.0 GPA or higher) from an accredited U.S. institution.

4. A financial statement and a bank statement from the sponsor showing the amount of funds available for support must be submitted to the university. If the student has been awarded a scholarship from a private source or government agency, enclose the award letter. All financial support documents and

documentation from banks must be original and should not be more than six months old.

5. The Scholastic Aptitude Test (SAT) or American College Test (ACT) score is required for undergraduate freshman engineering applicants. **Please be advised that all documents submitted along with the application become the property of the university and will NOT be returned to the applicant.**

The student's file will not be considered complete, nor will it be submitted to the admissions committee, until all requested materials are received. To expedite processing, all the information should be sent at least five months before the semester in which you wish to enroll.

Applying to Graduate Programs

1. Submit a complete international application form along with a $75 nonrefundable application fee, **payable to the University of Colorado Denver**. DO NOT SEND CASH. The application fee must be in U.S. funds only. (Use an international money order or your personal check payable in U.S. currency.) Please send it to the address on the application form.

2. Certified copies of "official" academic records from each college or university, and/or professional schools attended, should be submitted to the university. These official academic records should include courses completed, grades or marks obtained and certificates or degrees awarded. Official academic records are records which are directly sent by the issuing institution to the university or are issued to the student in a sealed envelope to be delivered by the student to the university. If documents are not in English, they must be translated by a certified translator. The translation must be literal and no conversion of grades should be attempted by the translator.

3. Both Test of English as a Foreign Language (TOEFL) scores and the International English Language Testing System (IELTS) scores are accepted at CU Denver as proof of English language proficiency. (Applicants must submit an official TOEFL or IELTS score report which is no more than two years old.) The CU Denver institutional code for TOEFL is 4875. The English language requirement may be waived if the applicant has attended a college or university in the United States as a full-time student and has completed two semesters of academic work with a B average (3.0 GPA or higher). Some departments may also waive the English language requirement if the language of instruction for the students bachelor degree was English. An official letter from the academic institution may be requested to grant this waiver.

4. A financial statement and a bank statement from the sponsor showing the amount of funds available for support must be submitted to the university. If you

have been awarded a scholarship from a private source or government agency, enclose the award letter. All financial support documents and documentation from banks must be original and should not be more than six months old.

5. Three letters of recommendation* (two letters for the Business School) from college or university professors must accompany the international application form. If you have been out of school for several years, we will also accept recommendations from your employer or supervisor. The admissions committee prefers academic recommendations over employer/supervisor recommendations. *The Department of Electrical Engineering requires that at least two of the letters be from university faculty.

6. The Graduate Management Admission Test (GMAT) is required if you are applying to the Business School. For more information, please visit www.mba.com. The GMAT institutional codes for Business School programs are:

Program	Code
MBA	MPB-0G-78
11-Month MBA	MPB-0G-65
MS Programs	MPB-0G-75
PhD Program	MPB-0G-29

The Graduate Record Examination (GRE) is a requirement for admission consideration in many graduate departments and considered valuable for other programs. For more information, visit www.gre.org. You can also e-mail gre-info@ets.org or call +1.609.771.7670. The CU Denver institutional code for the GRE is 4875.

If you are applying for a master's degree in public administration or the criminal justice program, you must take the GMAT or GRE.

Departmental Requirements

Graduate applications are reviewed by a faculty committee in the department in which the student wishes to enroll. Only those students who have completed an undergraduate program that is equal to a U.S. bachelor's degree are considered for admission. Please check with academic departments for specific program requirements.

To access department websites, go to www.ucdenver.edu and click on Schools and Colleges.

Please be advised that all the documents submitted along with the application become the property of the university and will NOT be returned to the applicant.

The student's file will not be considered complete, nor will it be submitted to the admissions committee, until all requested materials are received. All students applying to any graduate program should contact their academic department for specific departmental requirements.

Department of Biology

Please visit the department website for admissions information.

Business School

The Business School also requires that you answer the following essay questions as part of your application. The essays should be limited to 200 words per question and included on a separate sheet of paper. Sign and date the pages and include them with your application:

1. How will the MBA/MS degree enhance your career plans? Project the kinds of positions you anticipate having five years after earning the degree. What experiences have you had that form the foundation of your goals?
2. Give a candid appraisal of yourself. Include some discussion of your strengths and weaknesses.
3. Discuss three of your achievements or accomplishments.
4. Describe your level of commitment to education and the ways in which you might make a special contribution to the learning experience of others.

School of Education & Human Development

Please visit the school website for additional application requirements.

Department of Electrical Engineering

Students applying for the MS in electrical engineering are required to chose an area of specialization from the following:

- Systems and Controls
- Signal Processing
- Communication Systems
- Microelectronic and VLSI

- Computer Engineering
- Photonics
- Power Systems

Expenses

The estimated tuition, living expenses which include room, board, books and insurance, for the fall 2009, spring 2010 and summer 2010 (9 months) semesters for international students are listed below. Expenses are subject to change without notice. Personal expenses and travel costs are not included. The tuition costs may change yearly, and fees, books and supplies vary according to program. Taking more credits may also increase the cost of the program. If summer is your first term on the Denver Campus, you are required to be registered as a full-time student to maintain immigration status.

Estimated Undergraduate Costs* (12 credits)

Tuition and Fees	$20,743
Room and Board	$9,790
Books and Insurance	$2,163
Total Shown on Immigration Document	$32,696
For each dependent, estimate an additional	$4,500

Estimated Graduate Costs* (6 credits)

Tuition and Fees	$14,590
Room and Board	$9,790
Books and Insurance	$2,163
Total Shown on Immigration Document	$26,543
For each dependent, estimate an additional	$4,500

*Estimated costs are for fall 2010 and spring and summer 2011. These figures are for budgeting purposes only. Expenses are subject to change at any time without notice. Personal expenses and travel costs are not included.

Health Professions

Undergraduate Health Careers Advisors		**Graduate Advisors**
(Denver Campus) Charles Ferguson 303-556-4350 or Kent Nofsinger 303-556-6218	Not sure what health specialty to enter? Visit the Health Careers website for information: clas.ucdenver.edu/healthcareers/	See contact information under each school or college in this chapter.
Denise Leberer, CLAS Advising 303-556-2868	Pre-nursing, pre-pharmacy and dental hygiene advising	

Unlike most chapters in this catalog that focus on all programs for a particular school, this chapter provides information about programs within the schools and colleges that prepare students for a career in the health professions. On the Denver Campus, two colleges offer health-related undergraduate programs. Students who complete their prerequisites or undergraduate degrees on this campus may choose to apply to graduate and health professional programs on the Anschutz Medical Campus. Three schools on the Denver Campus offer health-related graduate programs. Denver Campus students may choose to stay and complete a master's or PhD degree on this campus or apply to programs on the Anschutz Medical Campus. The new state-of-the-art clinical and research facilities on the Anschutz Medical Campus offer students unparalleled training in the health professions. Admission to these programs is very selective, and admission to the Denver Campus does not assure admission to Anschutz Medical Campus programs. All programs on the Anschutz Medical Campus require incoming students to have either a bachelor's degree or minimum of 60 semester hours of undergraduate work completed before applying.

Undergraduate Programs on the Denver Campus

Two colleges on the Denver Campus offer health-related programs for undergraduate students seeking careers in the health sciences. *Admission to the Denver Campus, however, does not assure admission to any professional health career program.* Admission to those programs is a separate, competitive process open to qualified applicants from any accredited college or university.

College of Liberal Arts and Sciences

Department of Biology

Contact: Kimberly F. Regier
Telephone: 303-556-8309
E-mail: Kimberly.Regier@ucdenver.edu
Website: clas.ucdenver.edu/biology/

To serve the needs of students who wish to obtain recognition for the acquisition of specialized skills in biology and to better prepare students for graduate school, health careers and jobs in industry, the Department of Biology offers a certificate program in biotechnology.

Health Careers

Advisor: Charles Ferguson
Telephone: 303-556-4350
Advisor: Denise Leberer
Telephone: 303-556-2868
Advisor: Kent Nofsinger
Telephone: 303-556-6218
Website: clas.ucdenver.edu/healthcareers/

Health career advisors on the Denver Campus assist in planning a course of study designed to improve your chances of success in the health career of your choice, including: dentistry and dental hygiene, medicine, medical technology, nursing, optometry, osteopathy, pharmacy, physical therapy, physician assistant, podiatry or veterinary medicine. A comprehensive list of health career options and additional information to help you mold your academic experience to your specific goals is available on the health careers website.

BA/BS-MD Program

The BA/BS-MD degree program is a partnership between University of Colorado Denver's College of Liberal Arts and Sciences and the University of Colorado School of Medicine. The purpose of the program is to assemble 8-10 outstanding students from

broadly diverse backgrounds who are committed to serving the health care needs of Colorado. Acceptance into the program and successful completion of all requirements gives students a reserved seat in a top-ranked medical school and the freedom to explore other interests during their exciting college years at CU Denver. For more information, visit http://babsmd.ucdenver.edu or contact one of the health career advisors listed above.

Health and Behavioral Sciences

Contact for minor: Sharry Erzinger
Telephone: 303-556-6793
Website: clas.ucdenver.edu/hbsc/

The health and behavioral sciences department offers a minor in community health science that is designed to provide undergraduates with the basic intellectual and methodological tools needed for public health. The minor in community health science supplements graduate degrees in a broad range of fields, including the biomedical sciences, social and behavioral sciences, public health, law, medicine, dentistry, pharmacy, business administration and health services research. The program is especially appropriate for students intending to pursue careers in public health, as well as the primary care specialties in medicine, nursing or health policy and administration.

While a major is not currently available, students may develop an individually structured major (ISM) that combines course work in community health sciences with that of related fields such as anthropology, biology and psychology. For details see the Individually Structured Major BA section in the College of Liberal Arts and Sciences chapter of the catalog.

College of Engineering and Applied Science

Contact: Engineering Student Services (advising)
Telephone: 303-556-4768
Website: ucdenver.edu/engineering

The desirability of obtaining an engineering education prior to undertaking a study of medicine is increasing continually as medicine itself is evolving. A great deal of new equipment, most of it electronic, is being developed to assist the medical practitioner in treatment of patients. Bioengineering, engineering systems analysis, probability and communication theory are highly applicable to medical problems. The College of Engineering and Applied Science offers students a pre-medicine option.

Graduate Programs on the Denver Campus

Business School

Director: Errol L. Biggs
Telephone: 303-556-5845
E-mail: Errol.Biggs@ucdenver.edu
Website: ucdenver.edu/ACADEMICS/COLLEGES/BUSINESS/DEGREES/

The Business School offers three degree options for those interested in health administration—MBA, MS and an executive MBA. These three degree options are outlined in the Business School chapter of this catalog.

College of Engineering and Applied Science

Contact: Lynn E. Johnson
Telephone: 303-556-2372
E-mail: MEngGIS@ucdenver.edu
Website: http://www.ucdenver.edu/academics/colleges/Engineering/Programs/Civil-Engineering/DegreePrograms/SpecialtyAreas/Pages/GeographicInformationSystems.aspx

There are numerous ways in which geographic information systems (GIS) are used throughout health care and public health, including environmental health and epidemiology, disease surveillance and health services research. The College of Engineering and Applied Science offers a master of engineering degree with a GIS option, which emphasizes quantitative methods in the development and application of GIS technologies to a spectrum of discipline-specific settings having significant spatial dimensions.

College of Liberal Arts and Sciences

Department of Anthropology

Graduate Director: Christopher Beekman
Telephone: 303-556-6040
Fax: 303-556-8501
E-mail: Christopher.Beekman@ucdenver.edu
Website: clas.ucdenver.edu/anthropology/

Students may earn an MA with a research concentration in medical anthropology or pursue an integrated MA/PhD in health and behavioral sciences. Details of these programs are included in the Department of Anthropology section in the College of Liberal Arts and Sciences chapter of this catalog.

Health and Behavioral Sciences

Program Director: Richard Miech
Telephone: 303-556-8422
E-mail: Richard.Miech@ucdenver.edu
Website: clas.ucdenver.edu/hbsc/

The interdisciplinary PhD program in health and behavioral sciences provides an overarching framework integrating social and behavioral science perspectives on health and health care, while allowing the student to select and fully develop a particular research interest and professional career. This program has become a leader regionally in the application of GIS to health-related research.

Depending upon a student's chosen area of concentration, the successful graduate will gain expert knowledge of:

- research design and methods
- the determinants of health and disease
- the structure and organization of health care systems
- behavioral choices and how to use them to enhance wellness
- the contribution of individual, social and cultural factors to health behavior
- how guided change in health care systems may enhance quality, efficacy and access

The significance of these skills in addressing our current health care crisis will insure that graduates will be in demand in a number of employment sectors, ranging from community and public health organizations to nonprofit research organizations and private health care settings.

Programs on the Anschutz Medical Campus

Information about Anschutz Medical Campus programs are in this chapter is for reference only. Contact individual schools and program directors for details.

Health Sciences Programs

Graduate School

Contact: Office of the Dean
Telephone: 303-724-2915
Website: www.ucdenver.edu/graduateschool
Degree Programs: Master of science programs in: biostatistics; clinical science; genetic counseling; and nursing—nurse midwifery, nurse practitioner (adult, family, family psychiatric/mental health, pediatric, women's health care), adult clinical nurse specialist, health care informatics, pediatric special needs.

Doctor of philosophy in: biochemistry and molecular genetics; biomedical sciences program; biostatistics; cancer biology; cell biology, stem cells and development; clinical

science; computational bioscience; epidemiology; health services research; human medical genetics; immunology; microbiology; molecular biology; neuroscience; nursing; pharmacology; pharmaceutical sciences; physiology and biophysics; reproductive sciences; structural biology and biophysics; and toxicology.

At the University of Colorado Anschutz Medical Campus, Graduate School students learn to push the frontiers of human health and disease in more than a dozen basic science, clinical and nursing disciplines. In conjunction with the CU School of Medicine, the Graduate School offers a joint MD/PhD in the medical scientist training program which develops investigators with a broadly-based knowledge of both basic and clinical biomedical sciences. The school's personal mentor-student emphasis provides a distinctive learning experience.

Health Sciences Programs Health Sciences Programs

School of Dental Medicine

Contact: Office of Admissions and Student Affairs
Telephone: 303-724-7120
Website: www.ucdenver.edu/sdm
Degree Programs: doctor of dental surgery, international student program, orthodontics, periodontics and general practice residency programs

The University of Colorado School of Dental Medicine currently enrolls 52 dental students annually. As a graduation requirement, the 202 dental students also provide dental clinical care to underserved populations throughout the state of Colorado. In addition to our nationally recognized DDS program, our post-doctoral in orthodontics, periodontics, general practice residency programs are thriving. Consistent with our mission to increase access to education and care, the International Dental Student Program began in January 2005, which offers qualified graduates of foreign dental programs the opportunity to earn a doctor of dental surgery degree. The School of Dental Medicine is the only regional university-based dental implant center. In addition, the school pioneers research in oral cancer, salivary gland disease, neurobiology and pain control.

School of Medicine

Contact: Office of Admissions
Telephone: 303-724-8025
Website: http://medschool.ucdenver.edu
Degree Program: Doctor of medicine

The University of Colorado School of Medicine is nationally and internationally respected for its education, research, patient care and community service programs. Faculty members teach and care for patients at University of Colorado Hospital, The Children's

Hospital, Denver Health, National Jewish Health and the Denver V.A. Medical Center, working side by side with nearly 1,000 graduate doctors training in medical specialties and generalist care at the university. In addition to providing exceptional patient care and education, the medical school's greatest achievement has been the ability to attract gifted faculty and students. The school's physicians and research scientists have pioneered medical breakthroughs that have become national and world models.

Child Health Associate/Physician Assistant

Contact: Office of Admissions
Telephone: 303-724-7963
E-mail: chapa-info@ucdenver.edu
Website:
www.ucdenver.edu/academics/colleges/medicalschool/education/degree_programs/PAProgram/Pages/Home.aspx
Degree Program: Master of physician assistant studies (MPAS)

Ranked eighth in the nation, the child health associate/physician assistant (CHA/PA) is a primary care PA with training in the care of adult patients as well as specialized training in the care of infants, children and adolescents. Program graduates are prepared to provide comprehensive medical care to patients of all ages and practice under state and national guidelines established for all PAs. Graduates are employed in many settings including managed care organizations, community health centers, physician's offices, public health agencies, hospitals, school-based adolescent clinics, emergency departments and rural and inner city health care delivery sites.

Physical Therapy

Contact: Physical Therapy Program
Telephone: 303-724-9144
E-Mail: kyla.caffarel@ucdenver.edu
Website:
www.ucdenver.edu/academics/colleges/medicalschool/education/degree_programs/pt/Pages/PT.aspx
Degree Program: Doctor of physical therapy (DPT)

The University of Colorado physical therapy program offers a three-year, post-baccalaureate professional education program of didactic learning and extensive clinical experiences culminating in a doctor of physical therapy degree. Graduates are prepared to excel in the physical therapy profession and adapt to the ever-evolving health care environment. As part of the School of Medicine, our entry-level program has been continuously accredited for more than 60 years. Foundational elements of our curriculum include movement science, evidence-based practice, patient-centered care and the delivery of interprofessional health care services as doctors of physical therapy.

Graduate Medical Education (Residency and Fellowship Programs)

Telephone: 303-724-6031
Website: www.ucdenver.edu/ACADEMICS/COLLEGES/MEDICALSCHOOL/EDUCATION/GRADUATEMEDICALEDUCATION/Pages/graduatemedicaleducation.aspx

The University of Colorado School of Medicine and affiliated hospitals provide graduate medical education (training of residents and fellows) in more than 60 specialties and subspecialties. The Graduate Medical Education Manual provides details about these opportunities on the Anschutz Medical Campus.

Continuing Medical Education

Telephone: 303-724-3552
Website:
ucdenver.edu/academics/colleges/medicalschool/education/continuingmedicaleducation

The School of Medicine provides continuing education opportunities for physicians and other health care professionals worldwide. The mission is to enhance the knowledge, skills and performance of physicians and other health care professionals and, in the process, to improve the health care of the populations they serve.

College of Nursing

Contact: Office of Student Affairs and Diversity
Telephone: 303-724-1812
Website: www.nursing.ucdenver.edu
Degree Programs: BS in nursing, MS in nursing, doctor of nursing practice (DNP), PhD in nursing

The College of Nursing has made major contributions to nursing education, practice and research in Colorado for more than 110 years. The college offers four degrees: BS, MS, DNP and PhD, and is one of 15 selected U.S. nursing schools piloting a program advancing quality and safety education in nursing (QSEN). The college's BS graduates consistently place well above the state and national average on the nursing licensure examination. The college annually ranks in the top 15 schools of nursing in the country for the quality of its MS program. The College of Nursing is a leading educator of doctorally prepared nurses, internationally recognized for the quality of its graduates as nurse scientists, educators and clinical leaders.

School of Pharmacy

Contact: Office of Student Services
Director: Beverly Brunson
PharmD Telephone: 303-724-2882
PhD Telephone: 303-724-7263
Fax: 303-724-7330
Website: www.ucdenver.edu/pharmacy
Degree Programs: Doctor of pharmacy (PharmD), PhD in toxicology, PhD in pharmaceutical sciences

As drug products become more potent, more complex and more numerous, the need for pharmacists to assume a more active role in consultation and patient counseling has increased remarkably. The University of Colorado School of Pharmacy is one of the nation's top-ranked pharmacy schools and is committed to pharmaceutical education, research and patient care. The school's more than 500 professional and graduate students learn about the chemical and physical properties of medicinal agents, the biology of disease and the actions of drugs on the human body, while pursuing either a doctor of pharmacy or PhD degree. The school also provides continuing education programs to pharmacists and other health practitioners throughout the state.

Colorado School of Public Health

Contact: Colorado School of Public Health
Telephone: 303-724-4613
Website: http://publichealth.ucdenver.edu
Degree Programs: Master of public health (MPH) professional degree; master of science (MS) in biostatistics or epidemiology; doctor of philosophy (PhD) in analytical health sciences—biostatistics, epidemiology, health services research; doctor of public health (DrPH) professional degree

The Colorado School of Public Health is the first and only school of public health in the Rocky Mountain region. Collaboratively formed by University of Colorado, Colorado State University and University of Northern Colorado, the school supports students, practitioners and communities, with access to educational programs, innovative research and community services.

The school offers professional, graduate, residency and certificate programs. Each program provides the training that students need to succeed in general and specialized public health careers. Programs of study focus on a variety of professional interests including animals, people and the environment; biostatistics and informatics; community and behavioral health; community health education; environmental and occupational health; epidemiology; global health and health disparities; health and exercise science; health communication; health services research; health systems, management and policy; occupational medicine; preventive medicine; and public health nutrition. Students entering the public health programs have access to the collective resources and

expertise offered by the collaborating universities and multiple community and government partnerships.

Tuition, Fees and Financial Aid

At CU Denver, we have a longstanding belief that finances should never stand in the way of motivated, talented individuals who want to better themselves and make a positive impact on the world around them. Through a tradition providing strong financial assistance and aid programs, we enforce this belief every day.

Tuition and Fees

Bursar: Evan Icolari
Office: North Classroom, 1003
Telephone: 303-556-2710
E-mail: bursar@ucdenver.edu
Website: www.ucdenver.edu/bursar/
Student Service Center: North Classroom, 1001
Telephone: 303-556-2710

All tuition and fee rates are established by the Board of Regents, the governing body of the University of Colorado, in accordance with legislation enacted annually by the Colorado General Assembly. The regents set tuition rates and fees at a budget retreat in June for the coming fall, spring and summer terms, but reserve the right to change rates at any time. Rates for the current year are available online to assist prospective students in anticipating costs. Please refer to the Web site at www.ucdenver.edu/bursar in July for new rates.

Registration Advance Payment

All students will be required to pay a nonrefundable $200 registration advance payment each term prior to registering. Students may register for a term once that term's registration advance payment is made. This advance payment will be applied to that term's tuition and fees cost.

A waiver of the term's registration advance payment will be allowed if the student has applied for financial aid and has met other financial aid eligibility criteria for that term. If the student pays the registration advance payment and later applies for and receives full tuition and fees from financial aid, the excess paid will be refunded to the student.

For more information, please visit www.ucdenver.edu/bursar.

Drop Charge

Beginning the second Tuesday of the fall and spring terms until census date (the sixth day of summer term), a $100 drop transaction charge will be assessed each time a student drops a course. This includes student initiated drops done in order to change sections within a course. Section changes done for an administrative purpose through the deans' offices will be exempted from drop charges. If a student withdraws (therefore dropping all classes), a drop charge will be assessed for each course.

For more information, please visit www.ucdenver.edu/bursar.

Special tuition rates are available for nondegree graduate students taking undergraduate courses only. Contact the Office of the Registrar at 303-556-2389 to request this special tuition rate.

Payment of Tuition and Fees

All tuition and fees (except the application fee) are due on the day indicated on your billing statement. Students may choose the payment plan that is available on the Denver Campus. Specific information on the deferred payment plan is included on the Web site, published before each semester.

Students who register for courses are liable for payment of tuition and fees if they withdraw from school after census date. Refund policies for students who withdraw from the university both before and after census date are included in the academic calendar. A student with financial obligations to the university will not be permitted to register for any subsequent term, to graduate, to be issued transcripts or to be listed among those receiving a degree or special certificate. The only exception to this regulation involves loans and other types of indebtedness that are due after graduation. Personal checks are accepted for any university obligation. Any student who pays with a check that is not acceptable to the bank will be assessed an additional service charge. Students may also pay tuition and fees by credit card at the Student Service Center, or through the UCDAccess portal by credit card or an electronic withdrawal directly from a checking or savings account.

Students who register in a nondegree status, and who later apply and are admitted to a degree status for that term, are responsible for the difference in tuition between the nondegree program and their applicable degree program and will be billed accordingly.

Undergraduate tuition for resident students is based on the total number of completed semester hours. The rate increases once a student has completed 60 hours.

Direct Deposit

Direct deposit is the standard method of issuing student account refunds to CU Denver students with credit balances. Students are strongly encouraged to sign up for direct

deposit well in advance of any anticipated student aqccount refunds, and may do so online via the "Finances" section of the UCDAccess portal.

Students who do not sigh up for direct deposit will receive a paper refund check through the mail. **Students will no longer be able to pick up their refund check from the bursar's office—refunds will only be issued via direct deposit or through the mail.**

Tuition Appeals

Students are responsible for abiding by the published deadlines. Tuition is not refundable when students drop or withdraw from courses after the published deadlines. If circumstances beyond the student's control have made the late drop or withdraw necessary, the student may file a tuition appeal.

Instructions and forms for submitting a tuition appeal are available on the registrar's website, www.ucdenver.edu/registrar, or in the Office of the Registrar in the CU Building Annex. Completed tuition appeals packets must be submitted to the tuition appeals coordinator in the registrar's office within three months following the end of the term being appealed.

Past Due Tuition and Fees

Past due student accounts are referred to the Office of Student Debt Management (SDM) for collection. If accounts are not paid in full, a 20 percent internal collection cost will be assessed on the unpaid balance. This is in addition to the 1.75 percent service charge per month that all past due accounts are subject to. If your account is referred to a third-party agency, you must pay any collection costs and attorney fees allowed by the Uniform Consumer Credit Code.

College Opportunity Fund (Vouchers)

An act of the Colorado state legislature in May 2004 established a new way for the state to provide state tax dollar support for higher education at the undergraduate level. The state is no longer appropriating monies to institutions for undergraduate education, but is providing direct funding to undergraduate students through the College Opportunity Fund (COF). This program is also known as "vouchers" or "stipends." If an undergraduate in-state student applies for and authorizes use of the voucher, COF vouchers will be applied to the student's university bill. For details, see www.CollegeinColorado.org.

Residency Classification for Tuition Purposes

Tuition classification is governed by Colorado statutes that apply to all state-funded institutions in Colorado. Institutions are bound by the provisions of this statute and are not free to make exceptions to the rules set forth.

Students are initially classified as in-state or out-of-state for tuition purposes at the time of application. The classification is based upon information furnished by the student and from other relevant sources. After the student's status is determined, it remains unchanged in the absence of satisfactory evidence to the contrary.

Once a student is classified as a nonresident for tuition purposes, the student must petition for a change in classification. Petitions must be submitted NO LATER THAN THE FIRST OFFICIAL DAY OF CLASSES of the term for which the student wishes to be classified as a resident. It is preferred that petitions be received 30 days prior to the beginning of the term. Late petitions will not be considered until the next semester. Specific information may be obtained from the Office of Admissions.

The final decision regarding tuition status rests with the university. Questions regarding residence (tuition) status should be referred only to the tuition classification officer. Opinions of other persons are not official or binding upon the university. Additional information is available in the brochure *Classification of Students for Tuition Purposes,* which may be obtained from the admissions office.

Basic Requirements

The statute provides that an in-state student is one who has been a legal domiciliary of Colorado for one year or more immediately preceding the beginning of the term for which the in-state classification is being sought. Persons over 23 years of age or who are emancipated establish their own legal domicile. Those who are under 23 years of age and unemancipated assume the domicile of their parent or court-appointed legal guardian. An unemancipated minor's parent must, therefore, have a legal domicile in Colorado for one year or more before the minor may be classified as an in-state student for tuition purposes.

Establishing Domicile

Domicile is established when one has a permanent place of habitation in Colorado and the intention of making Colorado one's true, fixed and permanent home and place of habitation. The tuition statute places the burden of establishing a Colorado domicile on the person seeking to establish the domicile. The question of intent is one of documentable fact and needs to be shown by substantial connections with the state sufficient to evidence such intent. Legal domicile in Colorado for tuition purposes begins the day after connections with Colorado are made sufficient to evidence one's intent. The most common ties with the state are (1) change of driver's license to Colorado, (2) change of automobile registration to Colorado, (3) Colorado voter registration, (4)

permanent employment in Colorado and most important, (5) payment of state income taxes as a resident by one whose income is sufficient to be taxed. Caution: payment or filing of back taxes in no way serves to establish legal domicile retroactive to the time filed. In order to qualify for in-state tuition for a given term, the 12-month waiting period (which begins when the legal domicile is established) must be over by the first day of classes for the term in question. If one's 12-month waiting period expires during the semester, in-state tuition cannot be granted until the next semester.

Resident Tuition for Active Duty Military Personnel

The Colorado legislature approved resident tuition for active duty military personnel on permanent duty assignment in Colorado and for their dependents. ELIGIBLE STUDENTS MUST BE CERTIFIED **EACH TERM**. Students obtain a completed verification form from the base education officer and submit the form with their military ID to the admissions office after they have registered but before the end of the drop/add period. At the time the verification form is certified in the admissions office, the student's bill will be adjusted to reflect the resident tuition rate. Students who have been certified remain classified as nonresidents for tuition purposes and must petition to change their status once they establish permanent ties to Colorado.

Financial Aid

Director of Financial Aid: Patrick McTee
Office: North Classroom, 1030
Telephone: 303-556-2886
E-mail: finaid@ucdenver.edu
Website: www.ucdenver.edu/finaid

The financial aid office offers more than $70 million in financial aid awards to qualified students at the Denver Campus each year. If the student's financial aid application materials are received before the April 1 priority date, then the student is considered for a package of need-based grant, work-study (part-time employment), and/or student loan funds. If the financial aid application materials are received after the April 1 priority date, then the student is usually considered only for a Federal Pell Grant and student loans.

Eligibility

Each student must qualify for financial aid as follows:

1. Be a U.S. citizen or be admitted to the United States by the INS on a permanent basis.
2. Be classified as a degree-seeking student by the Denver Campus Office of Admissions (Teacher certification students are eligible to apply for financial aid and are considered undergraduate students according to federal guidelines).

3. Be enrolled for a minimum number of credits as specified on the financial aid award letter.
4. Meet the minimum requirements of Financial Aid Academic Standards.
5. Apply for financial aid by submitting all of the required documentation. The Free Application for Federal Student Aid (FAFSA) is required for all programs.
6. Not be in default on any student loan or owe a refund on any educational grant.
7. Male applicants must be registered with the Selective Service.

Applying

Each applicant must complete the financial aid application materials for submission to the financial aid office. Complete information must be available to the office before eligibility can be determined.

Limited Funds—The majority of general financial aid funds are awarded on a **first-come, first-served** basis to eligible students who document significant financial need and who submit a valid FAFSA application to the Financial Aid Office by the April 1 priority date. Application completion is defined as having the results of the FAFSA (Free Application for Federal Student Aid). The FAFSA is available at www.fafsa.gov. Financial aid is awarded to needy students who meet the priority date until all of the funds are committed for the year. If the file is completed after April 1, then awards will be limited to Federal Pell Grant (for needy undergraduate students only) and/or student loans. Application for financial aid must be made each year; application materials are available in January of each year.

It is the student's responsibility to be sure application materials are complete. Please contact the financial aid office for application forms and complete details. You may also obtain this information online at www.ucdenver.edu/finaid. All financial aid policies and procedures are subject to change due to revisions in federal and state laws, regulations, guidelines and applicable institution policies.

Qualifying

Financial Need

Most financial aid awards are based on the concept of financial need. Financial need is calculated as cost of attendance (tuition, fees, books, living expenses) minus family contribution (student/spouse contribution and parents' contribution for dependent students).

The cost of attendance is the estimated total cost to attend CU Denver, including tuition and fees, room and board, books and supplies, transportation and personal expenses. The financial aid office determines standard budgets based upon average tuition and fees charged and other budget items established by the Colorado Commission on

Higher Education. Current cost-of-attendance figures are available on our website at www.ucdenver.edu/finaid.

The contributions from the student/spouse and from the parents are calculated by a standardized formula that is required by federal law. The formula considers income, savings and other assets, family size, number of children in postsecondary school and other factors.

If the student/spouse contribution plus the parents' contribution is equal to or greater than the cost of attendance, then the student will not qualify for need-based financial aid. Students may appeal for special consideration if they are experiencing unusual circumstances. Financial aid is intended to supplement and not replace financial contributions from the student and parents.

Determining Dependency Status

The federal government provides specific guidelines that define dependency status for financial aid purposes. Dependency status is determined by a series of questions on the FAFSA that can be reviewed at www.fafsa.gov. Students classified as *dependent* are required to provide student **and** parent household and financial information from their parents when applying for financial aid. If a student is classified *independent*, then the student's parental information is not considered when the calculation of family contribution is made. Current law defines an *independent student* as one who meets at least one of the following conditions:

1. Age 24 or older (born after January 1, 1987)
2. Graduate student
3. Married student
4. Student with legal dependents other than a spouse
5. Student has children who receive more than half their support
6. Veteran of the U.S. armed forces or currently on active duty
7. At age 13 or older was an orphan, ward of the court or in foster care
8. Student is an emancipated minor or in a legal guardianship in their state of legal residence
9. On or after July 1, 2010, was a unaccompanied homeless youth or considered an unaccompanied, self-supporting youth at risk of becoming homeless

A dependency status may be appealed to the financial aid office if unusual circumstances exist. Contact the office for appeal guidelines.

Course Loads

Most undergraduate financial aid programs require at least 12 credits per semester, and graduate programs require at least 5 credits per semester. Federal Stafford Loan recipients must carry at least a half-time credit load (6 semester hours for

undergraduates per semester and 3 semester hours for graduates per semester). Higher or lower minimums may be required for individual awards (check your award letter for the exact number of credits required).

Satisfactory Academic Progress (SAP)

Students must make satisfactory academic progress as defined by the financial aid office to be eligible for financial aid. For more information, students should review the Financial Aid Academic Standards policy, available on our website or in the financial aid office.

Appeals

Students may appeal all decisions by contacting the financial aid office in person or by written request. Appeals will be reviewed and considered within three weeks of receipt and a written response will be mailed to the student. The decision of the appeals committee is final.

Refunds and Repayments

If a recipient of federal financial aid withdraws from all classes on or before the 60 percent point of the term, that student may be required to repay a portion of his/her financial aid. The federal government has defined that the recipient has only earned a portion of their financial aid, and the earned aid is directly proportional to the percentage of time the student attended classes up to and including the 60 percent point of the term. The rest of the financial aid is defined as unearned financial aid and must be returned to the federal financial aid programs. Unearned aid includes both the amount allocated to tuition and fees and the amount allocated to the student for other educational expenses. For a complete description of these requirements, request a copy of the financial aid repayment policy from the Financial Aid Office.

Reapply Each Year

Financial aid awards are not automatically renewed each year. Students must reapply and meet priority dates each year. Application materials for the next academic year are available beginning January 1.

Awards

Students are informaed by e-mail notification of their financial aid eligibility approximately four to six weeks after all application materials have been received in the financial aid office. If awarded, an e-mail notice is sent to the student advising them to review their

award on the student portal. This information will include the types and amounts of aid awarded and the minimum number of semester hours required each term.

Grants, Loans and Work-Study

The following aid programs are funded by the federal government:

1. *Federal Pell Grant*—Eligibility for the Federal Pell Grant is determined before any other aid is awarded. Awards are defined by a strict need-based formula provided by the federal government, and award amounts vary depending on the amount of financial need and enrollment status. Only undergraduate students seeking a first time bachelor's degree are eligible.
2. *Federal Teach Grant*—This Teach Grant program is available to students who intend to teach in a public or private service school that serves students from low-income families. Students can be considered for up to $4000 per academic year, if eligible. More information can be found on the Financial Aid Office website.
3. *Federal Direct Stafford Loan (2 types)*—The **subsidized** Federal Direct Stafford Loan program requires that students show financial need in order to qualify. Interest on the subsidized loan is paid for the student by the federal government as long as the student remains enrolled at least half-time and for a six-month grace period after graduation or dropping below half-time enrollment. The **unsubsidized** Federal Direct Stafford Loan program **does not** require the student to document financial need, but a valid FAFSA application is required. Eligibility is calculated as the cost of attendance minus other financial aid awarded. *Interest is not paid by the federal government for the unsubsidized program, and the student may elect to pay the interest now or to allow the interest to be added to the total principal loan amount.*
4. *Federal Direct PLUS Loan*—Graduate students and parents of *dependent students* are eligible to borrow under the Federal Direct PLUS program. The PLUS program is unsubsidized, and interest payments become the responsibility of the borrower at the time of disbursement.
5. *Federal Supplemental Educational Opportunity Grant (SEOG)*—This is a need-based grant program for students who have not yet obtained a bachelor’s degree. Students must be eligible for a Federal Pell Grant to be considered for SEOG. This funding is very limited.
6. *Federal Perkins Loan*—This is a need-based loan program, with an fixed interest rate currently at 5 percent. No repayment of interest or principal is due until nine months after the student ceases to be enrolled at least half-time or graduates.
7. *Federal College Work-Study*—Work-study is a need-based program that allows students to work on a part-time basis (on campus, off campus or at nonprofit agencies) to help meet their educational costs.

The state of Colorado funds the following programs:

1. *Colorado Student Grant*—A need-based grant for resident undergraduate students.
2. *Colorado Leveraging Educational Assistance Partnership Grant*—A need-based grant for resident undergraduates who have not yet obtained a bachelor's degree. This grant is funded 50 percent by the federal government and 50 percent by the state of Colorado.
3. *Colorado Graduate Grant*—A need-based grant for resident graduate students.
4. *Colorado Work-Study*—A program similar to the College Work-Study program but limited to resident undergraduate students. Limited amounts of Colorado Work-Study funds are available to students regardless of financial need. In addition, there are some grant programs funded by the institution.
5. *Colorado Teach Grant Program*—This scholarship to students in a approved teacher preparation program who excel in high-need content areas and who demonstrates an interest or committement to teaching as a career.

DRUG CONVICTIONS AND FINANCIAL AID ELIGIBILITY

A student who has been convicted of any offense under any federal or state law involving the possession or sale of a controlled substance shall not be eligible to receive any grant, loan or work assistance if the conviction occured during a period of enrollment for which the student was receiving aid.

If convicted of an offense involving:

The possession of a controlled substance: Ineligibility period is:
First offense ..... 1 year (from date of conviction)
Second offense ..... 2 years (from date of conviction)
Third offense ..... Indefinite

The sale of a controlled substance: Ineligibility period is:
First offense ..... 2 years (from date of conviction)
Second offense ..... Indefinite

Scholarships

For a complete listing of the many scholarships offered at the Denver Campus, go to www.ucdenver.edu/scholarships. In addition, many Internet search programs are available to help students identify scholarships for which they may be eligible. One of the largest is www.FastWeb.com.

Other Sources

There are several other sources of funds for students. Employment opportunities are listed in the Student Employment Office and the Career Center. Graduate students should inquire about additional types of financial aid through their academic

departments. American Indian students should request information about Bureau of Indian Affairs and tribal scholarships from their tribe.

Short-Term Loans

Short-term loans are available to enrolled students to cover unexpected financial needs. Loans are generally limited to $500 and are due within 30 days. There is a $10 per loan administrative charge.

Find it Here

Not sure of the difference between the registrar and the bursar? Here's a quick guide to finding what you need.

Admissions
CU-Denver Building Annex, 200
303-556-2704
www.ucdenver.edu/admissions
Application: pick up, drop off, application fee payment, admission status
Residency forms
Information about establishing domicile for tuition classification
General transfer credit information
Information about CU Denver
Scholarship guides
Talk to an admission counselor

Bursar
North Classroom, 1003
303-315-2710
www.ucdenver.edu/bursar
Application fees payments by credit card
College Opportunity Fund (vouchers)
Departmental deposit transactions
Payment of tuition and fees
Refunds
Student account reconciliation
Student Service Center—one-stop processing for bursar, financial aid, registration and admission functions
Third-party billing

Financial Aid
North Classroom, 1030
303-556-2886
www.ucdenver.edu/finaid
Free Application for Federal Student Aid (FASFA) www.fafsa.gov
Grant, work-study and student loan information

Short term loans
How to apply for financial aid

Registrar
CU-Denver Building Annex, 100
303-556-2389
www.ucdenver.edu/registrar
Class registration
Course descriptions
Diplomas
Enrollment verification
Grades and GPA
Schedule adjustment (drop/add) forms
Schedule Planner (online course schedule)
SMART (online registration system)
Transcripts
Tuition appeals

Student Debt Management
North Classroom, 1003
303-556-2937
www.ucdenver.edu/admin/studentfinancialservices/debtmanagement
Past-due tuition collection
Student loan processing

Office of the Registrar

CU Denver offers students a completely online system of planning their schedules and registering for classes. As a student, you are responsible for knowing the deadlines, rules, regulations, course loads, prerequisites and policies of the university, as well as those of the college or school in which you are enrolled, all of which is provided within this online catalog.

Office of the Registrar

Registrar: Teri Burleson
Office: CU Denver Building Annex, 100
Telephone: 303-556-2734
E-mail: Teri.Burleson@ucdenver.edu
Web site: www.ucdenver.edu/Registrar

Academic Calendar*

Maymester - Summer 2011

Registration	Begins mid-March
May 30	Memorial Day holiday (campus closed, no classes)
May 16–June 2	Maymester
June 6–July 30	Summer
July 4	Independence Day holiday observation (campus closed, no classes)
July 30	End of Term

Fall 2011

Registration	Begins early April
August 22	First day of classes
September 5	Labor Day holiday (campus closed, no classes)
November 21–27	Fall break for students (campus open, no classes)
November 24	Thanksgiving holiday (campus closed, no classes)
December 12–17	Finals week
December 17	Commencement

Spring 2012

Registration	Begins early November
January 16	Martin Luther King Jr. holiday (campus open, no classes)
January 17	First day of classes
March 19–25	Spring break (campus open, no classes)

May 7–12	Finals week
May 12	Commencement

Maymester - Summer 2012

Registration	Begins mid-March
May 28	Memorial Day holiday (campus closed, no classes)
TBD	Maymester
June 4–July 28	Summer
July 4	Independence Day holiday (campus closed, no classes)
July 28	End of Term

*The university reserves the right to alter the academic calendar at any time. Consult the website at www.ucdenver.edu/registrar for application deadline dates, deadlines for changing programs and registration dates and procedures.

Registration

Students should review the sections of this catalog that describe in detail the academic programs available at the Denver Campus.

New and transfer undeclared undergraduate students, as well as prebusiness and preengineering students, should contact the Academic Advising Center at 303-352-3520 to arrange for an advising appointment prior to registration. Other freshmen and transfer students should contact their school or college to arrange for an advising appointment prior to registration.

The registrar's office will send an e-mail message to the student's university-assigned e-mail address, inviting the student to register, including registration information and a registration time assignment. Registration is by time assignment only. Students may register via the web on or after their assigned time.

Web Registration and Student Information

Denver Campus students can register and obtain information regarding their academic and financial records by logging into their UCD Access portal.

Online registration allows the student to check the availability of specific courses prior to their registration time and to search for available courses by department, course level or

meeting time. If registration in a course is denied, the reason will be specified in UCD Access.

Student information available online currently includes mailing address verification (or change), admission application status, financial aid information, schedule by semester, grades by semester, unofficial transcript, account balance, online payment and degree audit (for some programs). For security reasons, none of the student information screens will display a student's name or student number.

Additional information regarding programs, faculty, courses and policies are available through the home page: www.ucdenver.edu.

Definition of Full-Time and Part-Time Status

Individual students receiving financial aid may be required to complete hours in addition to those listed below. The exact requirements for financial aid will be listed in the student's financial aid award letter.

Undergraduates and nondegree graduate students:

Full-time 12 or more semester hours

Part-time 6 or more semester hours

Graduate degree students:

Full-time:

5 or more semester hours
0 semester hours as candidate for degree
1 or more semester hours of thesis (not master's reports or thesis preparation)

Half-time:

3 or more semester hours

Notes

Enrollment verification including full-time/part-time attendance can be certified beginning the first day of class.

Hours for calculating full-time/part-time attendance do not include interinstitutional hours, nor do they include hours on another CU campus, unless the student is enrolled through concurrent registration.

Students receiving veteran benefits should contact the Veteran Student Services manager for the definition of full-time status for summer sessions. Contact information: 303-556-2745 or vaoffice@ucdenver.edu.

Individual exceptions to the minimum graduate course-load levels are considered for financial aid purposes by the financial aid committee. Students must file a written appeal with the Office of Financial Aid.

Add/Drop

Please review the current term's academic calendar for the most recent add/drop deadlines by visiting the registrar's website at www.ucdenver.edu/registrar.

Administrative Drop

An administrative drop is implemented by university officials in the registrar's office or the dean's office. A student may be administratively dropped from one or more classes or withdrawn from all classes for any of the following reasons:

- failure to meet certain preconditions, including but not limited to:
    - class cancellations
    - failure to meet course prerequisites
- whenever the safety of the student, faculty member or other students in a course would be jeopardized
- academic suspension, including but not limited to failure to attain or maintain a required GPA
- disciplinary suspension for having been found to have violated the student code of conduct
- disruptive behavior determined by the chair and/or associate dean to be detrimental to the progress of the course and the education of other students

Auditing Courses

To qualify as an auditor for fall or spring semester, a student must be 21 years of age or older or approved by the registrar. Auditors may not be registered for any other University of Colorado courses during the time they are auditing and are not eligible to audit courses if they are under suspension from the university or have outstanding financial obligations to the university. The registrar's office does not keep any record of courses audited; therefore, credit for these courses cannot be established. Auditors may attend as many courses as they wish (except those courses with laboratories or where special equipment is used), provided they have received permission from each instructor.

An auditor's card is issued after classes begin. This card should be presented to the instructor. Auditors, whether resident or nonresident, pay three semester hours of resident tuition for all audited courses during the fall or spring semester for class instruction and library privileges only. Auditors do not receive student parking privileges and are not eligible for other student services. For more information, contact the bursar's office.

Senior citizens (aged 60 and over) may audit classes at no charge. Contact the Division of Enrollment and Student Affairs at 1250 14th Street, 303-556-8427.

Candidate for Degree

You must be registered for at least one course during the semester in which you take the comprehensive exam, defend your dissertation or thesis or present your final project. If you are NOT registered for any other courses, you MUST register for CAND 5940 - Candidate for Degree. You may only register for this course once.

To register for CAND 5940, Candidate for Degree, (you may NOT be registered for any other courses) obtain the call number from your department or program director. You will be billed at one credit hour of resident tuition plus the SIS fee and the information technology fee. Students registered for CAND 5940 will be considered full-time for financial aid and enrollment verification purposes.

Course Load/Restrictions

In most cases, students wishing to take more than 18 semester hours (12 in the summer session) must have the overload approved by the dean of their college or school. Consult the individual college or school for specific guidelines as to course-load restrictions.

Credit by Examination

Degree students may take examinations for credit. To qualify for an examination, the student must be formally working toward a degree at CU Denver, have a GPA of at least 2.0 and be currently registered. Contact the registrar's office for instructions. A nonrefundable fee is charged. Students should contact their degree advising office to determine whether the credit will apply to their degree.

No Credit

Students may register for a course on a no-credit basis with the consent of their instructor and the dean of their school or college. No grade or credit is awarded. The transcript reflects the name of the course taken and an N/C notation.

Pass/Fail Procedure

1. Students who wish to register for a course on a pass/fail basis (or to revert from pass/fail to graded status) may do so only during the drop/add period.
2. Up to 16 semester hours of course work may be taken on a pass/fail basis and credited toward the bachelor's degree. *Only six hours of course work may be taken pass/fail in any given semester.* (Note: Individual schools and colleges may have additional restrictions as to pass/fail credits. See the accompanying chart for an overview.)
3. Instructors will not be informed of pass/fail registration. All students who register for a pass/fail appear on the regular class roster, and a normal letter grade is assigned by the professor. When grades are received in the registrar's office, those registrations with a pass/fail designation are automatically converted by the grade application system. Grades of D– and above convert to grades of P. Courses taken pass/fail will be included in hours toward graduation. Pass grades are not included in a student's GPA. An F grade in a course taken pass/fail will be included in the GPA.
4. Pass/fail registration records are maintained by the registrar's office.
5. Exceptions to the pass/fail regulations are permitted for specified courses offered by the School of Education & Human Development, the extended studies programs and study abroad programs.
6. Graduate degree students can exercise the P/F option for undergraduate courses only. **A grade of P will not be acceptable for graduate credit to satisfy any Graduate School requirement.**
7. Students who register for a course on a pass/fail basis may not later (after the drop/add period) decide to receive a letter grade.

Note: many other institutions will not accept a P grade for transfer credit.

PASS/FAIL OPTION RESTRICTIONS

Core Curriculum courses used to satisfy Intellectual Competencies cannot be taken on pass/fail basis.

College/School	General	Maximum
Business	Only nonbusiness electives may be taken pass/fail.	Only 6 semester hours may be taken pass/fail.

Engineering and Applied Science	Required courses may not be taken pass/fail. Upper division humanities and social sciences electives are acceptable; otherwise, major department approval is required.	A maximum of 16 semester hours may be taken pass/fail, including courses taken in the honors program.
Liberal Arts and Sciences	College requires a minimum of 30 semester hours of courses with letter grades. Courses used to satisfy major, minor or foreign language cannot be taken on a pass/fail basis.	No more than 6 hours pass/fail any semester. A maximum of 16 semester hours may be taken pass/fail.

Module/Intensive Courses

Courses are also offered in five-week modules, in special weekend courses and in seminars. Students should contact the college/school for information on short-term courses offered each semester.

Withdrawal from the University

To withdraw from the University of Colorado Denver, students must drop all courses for the semester. Prior to census (see current academic calendar for census date), students must use the web registration system to drop courses. Courses dropped during this period are not recorded on the student's permanent record.

After the census date (see current academic calendar for census date), through the 10th week (fourth week for summer) students must submit a withdrawal form with the approval of the dean and the Office of Financial Aid. Courses dropped during this period will be recorded on the student's permanent record with a grade of W.

Students seeking to withdraw after the 10th week (fourth week for summer) must petition the associate dean of their school or college. A student who stops attending classes without officially withdrawing from the university will receive grades of F for all course work during that term.

Deadlines for dropping module and intensive courses appear in the student portal.

Other Registrations

Concurrent Enrollment

Degree-seeking students who wish to attend two University of Colorado campuses concurrently must obtain permission from their school or college on their home campus.

A student in a degree program registered on the Denver Campus may take up to two courses or six semester hours (whichever is greater) on another CU campus if:

- the student obtains a concurrent registration form from the office of the academic dean or the registrar's office
- the course is not offered at the Denver Campus
- the student obtains approval from the academic dean
- there is space available at the other (host) campus
- the student pays tuition at the Denver Campus (home campus) at Denver Campus rates
- the home campus school or college arranges for space in the host campus classes
- the concurrent request is processed before the end of the drop/add period on both the host and home campuses

To drop a concurrent course during the *host* campus drop/add period, arrange the drop at the home campus registrar's office. To drop a concurrent course after the end of the host campus drop/add deadline, drop the course at the *host* campus registrar's office.

Interinstitutional Registration

CU Denver degree students may enroll in courses offered by the Community College of Denver. Students must be enrolled at CU Denver for at least one course during the term to be eligible to register interinstitutionally. Registration is on a space available basis. Interinstitutional courses are evaluated for transfer credit and are not included in a CU Denver student's GPA.

Pooled Courses at Metropolitan State College of Denver

Certain courses in the College of Liberal Arts and Sciences have been pooled with similar courses at Metropolitan State College of Denver (Metro State). *Undergraduate* students at the Denver Campus may register for any of the pooled courses listed in the CU Denver Web registration system. Restrictions apply to the pooled courses:

1. CU Denver, Denver Campus graduate students are not eligible to register for Metro State pooled courses.
2. Metro State pooled courses will not be included in the University of Colorado GPA. Metro State courses will appear on the University of Colorado transcript and will count in hours toward graduation. See an academic advisor for approval.
3. Metro State courses cannot be used to meet specific course requirements toward the major without prior written approval of the student's dean.
4. CU Denver, Denver Campus students who wish to take nonpooled Metro State courses must apply directly as a nondegree student to Metro State and pay tuition and fees to Metro State. Nonpooled classes will not appear on the University of Colorado transcript and will not be used in determining course loads

for financial aid eligibility. Students may request an Metro State transcript to be sent to the Denver Campus at the end of the term to determine if credit can be transferred.

5. Metro State common pool courses will not satisfy residency requirements at the Denver Campus. The last 30 semester hours applied toward the baccalaureate degree must be taken in residence at the Denver Campus.
6. CU Denver, Denver Campus students taking Metro State common pool courses are subject to the Metro State grading policy and student code of conduct.

Academic Records

Student Classification

Students are classified according to the number of semester hours passed:

Freshman	0–29 hours
Sophomore	30–59 hours
Junior	60–89 hours
Senior	90+ hours

All transfer students will be classified on the same basis according to their hours of credit accepted by the University of Colorado.

Grading System and Policies

The following grading system and policies have been standardized for all academic units of the university. Other academic policies are listed in the University Policies chapter of this catalog.

Grade Symbols

The instructor is responsible for whatever grade symbol (A, B, C, D, F, I or IP) is to be assigned. Special symbols (NC and W) are indications of registration or grade status and are not assigned by the instructor. Pass/fail designations are not assigned by the instructor but are automatically converted by the grade application system, as explained under “Pass/Fail Procedure.”

Standard Grades	Quality Points
A = superior/excellent	*4*

A(-) =	*3.7*
B(+) =	*3.3*
B = good/better than average	*3*
B(-) =	*2.7*
C(+) =	*2.3*
C = competent/average	*2*
C(-) =	*1.7*
D(+)=	*1.3*
D =	*1*
D(-) = minimum passing	*0.7*
F = failing	*0*

Instructors may, at their discretion, use the PLUS/MINUS system but are not required to do so.

I—incomplete—converted to an F if not completed within one year.
IP—in progress—thesis at the graduate level only.
P/F—pass/fail—P grade is not included in the GPA; the F grade is included; up to 16 hours of pass/fail course work may be credited toward a bachelor's degree.
H/P/F—honors/pass/fail—intended for honors courses; semester hours count toward the degree but are not included in the GPA.
NC indicates registration on a no-credit basis.
W indicates withdrawal without credit.

Explanation of I

An I is an incomplete grade. Policies with respect to I grades are available in the individual college and school dean's offices.

An I is given only when students, for reasons beyond their control, have been unable to complete course requirements. A substantial amount of work must have been satisfactorily completed before approval for such a grade is given.

The instructor who assigns an I sets the conditions under which the course work can be completed and the time limit for its completion. The student is expected to complete the requirements by the established deadline and not retake the entire course.

It is the instructor's and/or the student's decision whether a course should be retaken. If a course is retaken, it must be completed on the Denver Campus or in extended studies classes. The student must re-register for the course and pay the appropriate tuition.

The final grade (earned by completing the course requirements or by retaking the course) does not result in deletion of the I from the transcript. A second entry is posted on the transcript to show the final grade for the course.

At the end of one year, I grades for courses that are not completed or repeated are changed to an F.

Grade Point Average (GPA)

GPA is computed by multiplying the credit points per hour (for example, B = 3) by the number of semester hours for each course. Total the hours, total the credit points and divide the total points by the total hours. Grades of P, NC, ***, W, IP, and I are not included in the GPA. I grades that are not completed within one year are calculated as F in the GPA.

If a course is repeated, all grades earned are used in determining the GPA. Grades received at another institution are not included in the University of Colorado GPA.

Undergraduate, graduate and nondegree graduate GPAs are calculated separately. Enrollment in a second undergraduate or graduate program will not generate a second undergraduate or graduate GPA.

Students should refer to their academic dean's office for individual GPA calculations as they relate to academic progress and graduation from their college or school.

Good Academic Standing

Good academic standing requires a minimum GPA that is determined by the student's school or college. Grades earned at another institution are not used in calculating the GPA at the University of Colorado.

Degree students should consult the academic standards section of their school or college for degree program requirements.

Continuation as a nondegree student is contingent upon maintaining an overall GPA of 2.0 upon completion of 12 or more semester hours.

Failure to maintain the required average will result in a nondegree student being suspended. The suspension is for an indefinite period of time and becomes part of the student's permanent record at the university. While under suspension, enrollment at the university is restricted. For more information contact the dean's office of the school /college you are enrolled in.

Nondegree students are not placed on academic probation prior to being suspended.

Automated Degree Progress

A degree progress report is an automated record reflecting a student's academic progress toward completing degree requirements in a declared major. Each degree progress report draws its information from the university's student information system. Each time a new report is run, the most up-to-date course information and grades are used. A report can be requested by logging on to the student portal. Students should contact their schools and colleges for additional information on the availability of a specific degree progress report.

Grade Reports

Grades are normally available within two weeks after the end of the semester and can be accessed through the registrar's webpage at www.ucdenver.edu/registrar.

Graduation

Undergraduates

Students should make an appointment with the advising office of their school or college to determine what requirements remain for graduation. Students intending to graduate must complete an intent to graduate application found on the Office of the Registrar's Web page under Degree Planning between the first day of registration for the term and the last day of drop/add (noted on the academic calendar - census). Students will not be officially certified to graduate until a final audit of the student's record has been completed approximately six weeks after the end of the term. After students have been certified to graduate, they must reapply to return to the Denver Campus.

Graduates

Students on the Denver Campus must file an application for candidacy with their graduate school office and complete an intent to graduate application found on the Office of the Registrar's Web page under Degree Planning between the first day of registration for the term and the last day of drop/add. Check with your school for more information. Students will not be officially certified to graduate until a final audit of the student's record has been completed, approximately six weeks after the end of the term. After students have been certified to graduate, they must reapply to return to CU Denver.

Commencement

In early March, informational brochures will be mailed to students eligible to participate in the May spring-semester commencement. In early October, information regarding the December commencement will be mailed to students who graduated in summer term or expect to graduate in fall term. Information will be provided about ordering special display diplomas, fittings for caps and gowns and obtaining diplomas and transcripts with the degree recorded. This information is also available at www.ucdenver.edu/student-services/graduation/Pages/Graduation.aspx.

Class Rank

Class rank will be calculated by undergraduate degree program within a school or college. It is possible for more than one student to have the same class rank. If more than one student has equivalent class ranking it will be reported as such. The option for a letter indicating the student's class rank will be provided to any graduating undergraduate, but there will be no designation on the University of Colorado transcript for Denver Campus students receiving bachelor's degrees. There will be one class rank per student per degree. Students can obtain class rank letters through the student portal. Late postings and grade changes after degrees are posted will not recalculate rankings. Rankings will be a snapshot calculation conducted once per term for each graduating undergraduate student after degrees are posted.

Official Transcripts

The official transcript includes the complete undergraduate and graduate academic record of courses taken at all campus locations or divisions of the University of Colorado. It contains the signature of the registrar and the official seal of the university.

Official transcripts for any given semester are available approximately three weeks after final exams. A transcript on which a degree is to be recorded is available approximately eight weeks after final exams.

For Denver Campus students, transcripts may be ordered through the student portal or requested by fax at 303-556-4829. Transcript request forms are available at www.ucdenver.edu/registrar; click on Forms.

Requests must include the following:

- student's full name (include given or other name if applicable)
- student number
- birth date
- the last term and campus the student attended
- whether the current semester grades are to be included when a transcript is ordered near the end of a term
- whether the request should be held until a degree is recorded

- agency, college or individuals to whom transcripts are to be sent (Complete mailing addresses should be included; transcripts sent to students are labeled “issued to student”)
- student’s signature (This is the student’s authorization to release the records)

There is no charge for individual official transcripts (however fees are assessed for rush service). Transcripts are prepared only at the student’s request in writing or through online student PIN authentication. A student with financial obligations to the university that are due and unpaid will not be granted a transcript. Official transcripts require five to seven working days for processing. Rush service is available and fees are assessed based on the service requested.

Notification of Rights Under FERPA at University of Colorado Denver

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records:

1. The right to inspect and review the student’s educational records within 45 days of the day that the university receives a request for access. Students should submit to the registrar, dean, head of the academic department or other appropriate official written requests that identify the record(s) they wish to inspect. The university official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the university official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student’s educational records that the student believes are inaccurate or misleading. Students may ask the university to amend a record that they believe is inaccurate or misleading. They should write the university official responsible for the record, clearly identify the part of the record they want changed and specify why it is inaccurate or misleading. If the university decides not to amend the record as requested by the student, the university will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosure of personally identifiable information contained in the student’s educational records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic or research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the university has contracted (such as an attorney, auditor or collection agent); a

person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility. Upon request, the university discloses educational records without consent to officials of another school in which a student seeks or intends to enroll.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University of Colorado to comply with the requirements of FERPA.
   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Avenue, SW
   Washington, DC 20202-4605

The following items are designated “Directory Information” and may be released at the discretion of the University of Colorado Denver unless a student files a request to prevent their disclosure:

- name
- address
- e-mail address
- telephone number
- dates of attendance
- registration status
- class
- major
- awards
- honors
- degrees conferred
- photos
- past and present participation in officially recognized sports and non-curricular activities
- physical factors (height, weight) of athletes

Forms to prevent the disclosure of directory information can be obtained at the Student Service Center in North Classroom, 1003, or via the registrar’s Web site at www.ucdenver.edu/registrar. Questions regarding student rights under FERPA should be directed to the registrar’s office, 303-556-2389.

Campus Life

The University of Colorado Denver, Denver Campus is physically located on the 151-acre Auraria Campus, which is shared with two other institutions—Metropolitan State College of Denver and Community College of Denver. Because we share facilities, our

students have access to the level of resources found at much larger public universities. Since fall 2006, the university has also been able to offer student housing adjacent to this traditionally commuter campus. Details about the campus and Campus Village are explained in this chapter.

Auraria Campus

Since opening in 1976, Auraria has become the largest campus in Colorado, enrolling nearly 50,000 students—20 percent of all the students in public higher education in the state. This is the most efficiently utilized campus in the state. Classrooms on the Auraria Campus are used an average of 50+ hours per week. Classes are held from 7 a.m. to 10 p.m. Monday through Thursday and from 8 a.m. to 6 p.m. on Friday, Saturday and Sunday. Some courses and programs are offered cooperatively by the Auraria educational institutions. Those pertaining to CU Denver students are outlined in this catalog.

The Auraria Campus offers numerous amenities to students, faculty and staff, from the largest bookstore in the Rocky Mountain region to a state-of-the-art fitness facility. Details of these amenities are outlined in this chapter.

In addition to its proximity to the thriving business and industry of downtown Denver, the Auraria Campus has a distinct historic flavor. The Tivoli Student Union is housed in a renovated brewery originally built in the 1860s. Historic Ninth Street Park, St. Cajetan's Church/Performing Arts Center, St. Elizabeth's Church, the Emmanuel-Sherith Chapel/Synagogue/Art Gallery and the Golda Meir Museum are also located on campus.

Auraria Higher Education Center

The Auraria Higher Education Center (AHEC) is the administrative body that coordinates the facilities, services and activities for the three educational institutions on campus. AHEC provides common services for the campus including: classroom scheduling, facilities management and construction, campus police, telecommunications infrastructure, student union, media services, book store, early learning center, parking and transportation, mail services and facilities master planning. Visit their website for additional information.

Campus Amenities

Auraria Campus Bookstore

Location: Tivoli Student Union, 900 Auraria Parkway
Hours: Mon.–Thurs., 8 a.m.–6 p.m.; Fri. 8 a.m.–5 p.m.; Sat. 10 a.m.–3 p.m.; call for hours during vacation and interim periods
Telephone: 303-556-4286
Website: www.aurariabooks.com

The Auraria Campus Bookstore, a department of Student & Auxiliary Services—*your campus store*—is located in the historic Tivoli Student Union. The bookstore provides textbooks for the Auraria schools, plus a complete general book department that is especially strong in technical and reference areas. Best sellers, new releases and gift book selections change frequently and are often accompanied by displays of special value books on many subjects.

Students need to bring course printouts to locate textbooks. Books are located by school; subjects are arranged alphabetically—departmental abbreviations, with course and section numbers—and prices are printed on the shelf tag below. Each title has the designation of *required, preferred, optional* or *available*. You can also buy books online at www.aurariabooks.com and have them shipped to your home, or you may pick them up in person.

The Auraria Campus Bookstore carries more used textbooks than any other bookstore in Colorado, but shop early as used books are the first to go. A full refund is given for new and used books accompanied by the receipt and returned within the *first two weeks* of class for regular semesters and two days from the first day of class for short terms.

Please read the refund policy on the back of the receipt.

When a course ends, the textbook may still have value and may be bought back by the bookstore. The buy-back policy on used texts is to pay half of the new price on books that will be used again next semester on this campus. Other texts are purchased at lower percentages. The Auraria Campus Bookstore's buy-back services are dedicated to its student customers. A validated Auraria student ID is required to complete a buy-back transaction. Books are bought for the campus throughout the semester; however, buyers from national textbook companies are on hand at the end of each semester to purchase used books that may be required at other schools.

Campus Computers, 303-556-3726, offers the latest in hardware and software technology and is an authorized Apple Campus Store. An educational discount is offered to Auraria Campus students; a current, validated Auraria ID must be presented at the time of purchase. A full line of computer reference books and accessories are also available, as well as calculators and other small electronics. Campus Computers' is located on the second floor of the Auraria Campus Bookstore.

A current photo ID is required for purchases paid for by check. The bookstore also accepts MasterCard, VISA, American Express and Discover.

The Auraria Campus Bookstore is owned by the State of Colorado and supports the Auraria Student Bond Fund.

Auraria Early Learning Center (Child Care Center)

Location: West Colfax and Ninth Street Park
Hours: Mon.–Fri. 7 a.m.–6 p.m.
Telephone: 303-556-3188
Website: www.tivoli.org/earlylearning

The Auraria Early Learning Center serves the child care needs of Auraria's students, staff and faculty by providing high-quality early childhood education and care programs. The Auraria Early Learning Center is located at the south end of 9th Street Park. Its programs are consistently recognized by the educational community for their high-quality early childhood care and education. Developmentally appropriate practices for young children guide the educational programs that are provided. Curriculum planning is flexible and based on children's interests.

Supervising teachers in the Auraria Early Learning Center are all degreed teachers meeting the certification guidelines of the State of Colorado and of the National Academy of Early Childhood programs. Children aged 12 months to 5 years are served at the center. The center also has a fully accredited kindergarten program.

Auraria Event Center/Student Recreation Center

Location: 1255 Tenth Street Mall
Telephone: 303-352-4371 (fitness center); 303-556-3210 (recreation); 303-556-2755 (events)
Website: www.mscd.edu/~cra

The Auraria Campus PE/Event Center is a 2,800-seat facility for team and individual sport activities, academic programs, events and conferences. Funds from student recreation fees support the use by students of the many health and recreation facilities found within the building. Adjacent to the building are softball fields, tennis courts and a track.

Auraria Library

University Librarian/Director: Mary M. Somerville

Associate University Librarians/Directors: Meg Brown-Sica, Marical Farner, Cynthia Hashert, Denise Pan

Location: 1100 Lawrence Street, Denver, CO 80204-2041

Telephone: Directory and Hours: 303-556-2740
Ask Us Desk: 303-556-2639
Research Help: 303-556-2585

Website: http://library.auraria.edu

Faculty

Professor: Mary M. Somerville, MLS, University of Hawaii Manoa, MA, Goddard College, PhD, Union Institute and University

Associate Professor: Ellen Greenblatt, MA, University of Denver

Assistant Professors: Jeffrey Beall, MA, Oklahoma State University, MSLS, University of North Carolina at Chapel Hill; Meg Brown-Sica, MS, University of South Florida; Ignacio Ferrer-Vinent, MLIS, University of Denver, PhD, University of Miami; Nina McHale, MA/MSLS, Catholic University of America; Denise Pan, MLS, San Jose State University, MA, University of Colorado Boulder; Karen Sobel, MLS, University of North Carolina

Senior Instructors: Orlando Archibeque, MA, University of Denver; Thomas J. Beck, MLS, Emporia State University; Gayle Bradbeer, MLS, Emporia State University, MS, University of Arizona; Lorraine Evans, MLS, University of Maryland; Vera Gao, MLS, University of South Carolina; Cynthia Hashert, MLS, North Texas State University; Elaine Jurries, MA, University of Minnesota; Nikki McCaslin, MA, University of Denver; Ellen Metter, MS, Drexel University; Linda Tietjen, MA, University of Denver; Diane Turner, MLS, University of Pittsburgh; Judith Valdez, MLS, Emporia State University

Instructors: Eric Baker, MLS, Indiana University; Rosemary Evetts, MLS, Indiana University

About the Auraria Library

The Auraria Library provides a wide range of learning resources, research services and study environments to support academic programs. Whether you are looking for a quiet place to read and reflect, a source of authoritative academic information or a computer-enabled collaborative work space, the library offers a variety of spaces to meet your needs.

Learning Materials Collection

The Auraria Library collection contains nearly a million volumes of print books and ebooks, subscribes or links to more than 65,000 journals and offers in-house and online films. The library is also a selective depository for U.S. government publications and a depository for Colorado state documents. This collection is supplemented by access to other libraries within the state and across the nation through interlibrary loan services.

Access and Discover Library Resources

The library provides on- and off-campus access to a wide variety of electronic and print materials via the library's home page (http://library.auraria.edu). Nearly 300 databases

provide access to full text articles, journal citations, statistics, laws and business data in a multitude of disciplines. Locally available items can be found with the Skyline catalog, while the WorldCat @ Auraria Library catalog facilitates finding print and electronic book, article and media holdings at the Auraria Library, regional and United States libraries, and beyond. You can customize WorldCat @ Auraria Library by adding keywords to records, submitting comments and creating lists of resources for quick access later.

Information and Research Services

When in doubt, visit the Ask Us desk for assistance with basic research questions, to borrow items for a class (Course Reserves) or from the Library's collection, or to request materials from regional libraries (Prospector) or national libraries (Interlibrary Loan). Use the Self Check Out machines to expedite borrowing library books. For more in-depth research inquiries, you may be referred from the Ask Us desk to the Research Help desk. Librarians are also available for walk-in, appointment, telephone and online help.

Library Research Instruction

Throughout the semester, students can learn essential skills needed to conduct scholarly research through classroom sessions, online tutorials, specialized workshops and personal consultations. During individual and classroom learning experiences, find out about powerful library search tools and Web-based resources that inform research papers, support class projects and provide career information.

Learning Spaces and Computer Resources

The Learning Commons offer technology resources including computers, scanners and printers. The Tech Help desk assists with troubleshooting hardware and software computer problems. In general, the first floor of the library is dedicated to collaborative learning and research, and the second floor is devoted to quiet study and collections. Photocopiers, microform reader/printers, a copy center and study rooms are also available.

Services for Persons with Disabilities

The library is committed to making its resources and services available to all students. Library services to assist persons with disabilities include orientation to the physical layout of the library building and assistance with the retrieval of materials.

Auraria Media Center and Classroom Support Services

Location: 1100 Lawrence Street (Auraria Library), 015
Telephone: 303-556-2426
Website: http://mediacenter.ahec.edu

The Auraria Media Center and Classroom Support Services offers a full range of media services and classroom support:

- distance learning technologies including video conferencing, webinars, audio conferencing, video over IP and ISDN and videotaping of course delivery
- circulation of a wide range of audio, video and data (AVD) presentation equipment for one-time use
- long-term classroom equipment check-out
- production of content on digital tape, DVD, CD and videotape by an award-winning staff using state-of-the-art digital editing, graphics and animation systems
- quantity duplication of DVD, CD, audio and videotape media
- equipment maintenance and repair
- equipment/systems consultation and installation

The Auraria Media Center's 34-channel closed-circuit campus cable system can be used in the classroom to broadcast channels such as CNN, MSNBC, History, Discovery, A&E, PBS, CSPAN, NASA and local television networks. One channel is dedicated to and managed by each institution for distribution of programming of their choice.

Auraria Media Center staff are available to train faculty in the use of equipment in "smart" classrooms on campus and offer consulting services to faculty and other clients in such areas as media design and production, effective use of media types and effective use of distance learning technologies, effective use of those technologies and equipment selection to best meet instructional needs.

Auraria Media Center and Classroom Support Services will handle all of your classroom needs regarding furinture, projector screens, whiteboards, smart classroom equipment and ADA furniture placement.

Clicks! Copy and Printing Services

Locations:
Tivoli Student Union, 211, 303-556-3702
South Classroom, 119A, 303-556-2679
Auraria Library, 303-556-2751

Hours: Vary by location

Clicks! is an on-campus copying, printing and graphic design department. Four full-service copy centers around campus provide high-speed copying, color copies, laminating, binding and school supplies. Services vary by location.

Emmanuel Gallery

Curator: Shannon K. Corrigan
Location: 1205 Tenth Street Mall
Hours: Tues.–Fri. 10 a.m.–6 p.m.; Sat. 11 a.m.–5 p.m.
Telephone: 303-556-8337
Website: www.emmanuelgallery.org

Emmanuel Gallery is a tri-institutional, nonprofit art facility committed to enhancing the understanding of the visual arts. Through the presentation of high-quality art exhibits, lectures and events our purpose is to encourage critical thinking, creative research and training in gallery practices. Programs at Emmanuel Gallery promote excellence, education and enrichment to the diverse cultural community of the Auraria Campus and the Denver metropolitan area.

Health Center of Auraria

Location: Plaza Building, 150 (lower level)
Hours: Vary (see below)
Telephone: 303-556-2525
Website: www.mscd.edu/healthcenter

All Denver Campus students are entitled to medical services at the Health Center at Auraria, and student health insurance is NOT required to use this facility. The Health Center is approved to provide emergency triage care to persons covered by Medicare and/or Medicaid. Other medical conditions will be referred to approved Medicare /Medicaid providers. Physicians, physician assistants, nurse practitioners, radiological technologists and medical assistants staff the facility. Students will be asked to complete a sign-in sheet and show a current semester ID card each time they check in.

Services include:

- treatment of illness and injuries
- lab testing
- medications
- physicals
- annual GYN exams
- sexually transmitted disease information/testing
- birth control information/services
- minor surgery
- immunizations
- HIV testing
- blood pressure checks
- casting
- suturing

- X-ray

All services listed above are low cost. The Health Center is an “in-network” medical provider for Blue Cross/Blue Shield (BC/BS) insurance plans (including out-of-state plans) and for all college-sponsored student health insurance plans. Patients participating in any of these plans simply pay their applicable co-payments at the time of service. Charges will be submitted by the Health Center directly to the insurance company. Patients not enrolled in one of the above plans are also eligible for services, but are required to pay at time of service. Classes regarding health-related topics are taught each semester and are offered free to all students. Scheduled and walk-in appointments are available. Walk-in services begin at 8 a.m., Monday – Friday. Access is on a first-come, first-served basis. Walk-in varies daily, contingent upon when all patient slots have been filled; thus, the daily closure time for walk-in care is variable. Patients are encouraged to check in as early as possible. Brochures with additional information are available at the Health Center.

King Academic and Performing Arts Center

Location: 855 Lawrence Way
Telephone: 303-556-2179
Website: www.ahec.edu/kingcenter

The King Center houses six performing spaces: three permanently assigned production studios, a 197-seat recital hall; 520-seat concert hall; and the 168-297 seat (depending on stage configuration) Eugenia Rawls Courtyard Theatre. There are dressing rooms, green room, recording studio, lighting lab, music electronics lab, classroom space, box office, scene shop, paint shop and costume shop. All spaces are fully equipped with state-of-the-art equipment and a variety of spaces for exhibiting fine art. The entire facility has more than 180,000 square feet dedicated to the education of the student and development of the student who wishes to study performance/arts. The center can support many forms of entertainment, anywhere from legit theatre to large choral ensembles and other forms of performances.

Tivoli Student Union

Location: 900 Auraria Parkway (Ninth and Auraria Parkway)
Telephone: 303-556-6330
Website: www.tivoli.org/tivoli/

The Tivoli Student Union, managed by Auraria Student & Auxiliary Services, provides a wide variety of services for the Auraria community. The student union houses student government and student life offices, two credit unions and tri-institutional services such as the GLBT student services.

If you want a break or a quiet place to study, the Tivoli Student Union is just the place. With a food court, coffeehouse, deli and convenience store, you'll find a place to suit your appetite, schedule and budget. If you'd rather retreat than eat, you can watch plasma TVs in the Boiler Room Student Lounge, play a game of pool at Sigi's Pool Hall and Arcade, meet a study group in the multicultural lounge or study in total silence in the Garage Quiet Study Lounge.

Additional student services at the Tivoli Student Union include the Auraria Campus Bookstore, the Club Hub, Click's! Copy Center, event services and the ID program and Commuter Resource Center.

Club Hub
Suite 346, 303-556-8094

This uniquely designed club space on the third floor of the Tivoli features work space for more than 60 clubs, mailboxes for campus clubs, a limited number of lockers, club bulletin boards and a lounge area for group meetings. This office works closely with the Student Advisory Committee to the Auraria Board (SACAB) and the student activities/life offices.

Auraria Campus Event Services
Suite 325, 303-556-2755

Through the event services office, meeting and conference space at the Tivoli Student Union, Event Center, St. Cajetan's and outdoor spaces can be reserved for nonacademic purposes, including meetings, weddings and receptions. Events services has five caterers to choose from for all catering needs.

ID Program/Commuter and Housing Resources
Suite 269, 303-556-8385

Auraria staff, faculty and students go here to get their ID cards, which are necessary for parking in some campus lots and for checking out library books. Student IDs also serve as an RTD bus and light rail pass with a semester validation sticker. The center provides off-campus housing resources, RTD bus information, campus and Tivoli information, lost and found and a microwave oven.

Sigi's Pool Hall and Arcade
Suite 145, 303-556-3645

Sigi's, named after Tivoli Brewery founder Moritz Sigi, houses 15 video game machines and six billiard tables. Sigi's is open to the entire Auraria Campus population as well as the public. The student-friendly atmosphere encourages community socialization and relaxation.

Student Housing

University Policy and Support: Tivoli Student Union, 227
Telephone: 303-556-2444
E-mail: housing@ucdenver.edu
Website: www.ucdenver.edu/life/Pages/Housing.aspx

Leasing and Payment Options: Campus Village Aparments, 318 Walnut Street
Telephone: 303-573-5272
E-mail: mgrdenver@edrtrust.com
Website: www.campusvillageliving.com

The University of Colorado Denver, Denver Campus, has a live-in requirement for first-time undergraduate students

Benefits of living on-campus

Research has shown that living in student housing during the first year has numerous benefits for students both academically and socially. Students who live on-campus their first year experience:

- Higher graduation rates than students who live off campus.
- A higher level of satisfaction with their college experience.
- A higher level of involvement in clubs and activities on campus.
- More frequent interaction with faculty members and peers.

Live-in Policy

The University of Colorado Denver is a residential campus, and all first-year students live in the Campus Village Apartments at Auraria. No other apartments or buildings meet the live-in policy requirement. First-year students live together in a dedicated wing of Campus Village. This wing includes the following additional amenities:

- Additional Staff – This wing of the complex will have a higher ratio of staff to students to help provide additional support, guidance and resources for first-time students.
- Special Programming – Many of the programming efforts sponsored by the university will be taking place in the first-year student wing of Campus Village. Programs will focus on study skills, navigating the university and community, living with a roommate and a variety of other topics.
- Connections with other first-year students - First-year students share many of the same challenges and anxieties as they begin their college careers. Living in a community of students going through the same types of experiences provides a built-in support network and can lead to lasting friendships.

Exemptions

First-time freshman students wishing to live with their parent(s) or legal guardian(s) or who qualify under at least one of the exemptions listed below must submit the "Exemption Form" to be considered for exception from the live-in policy. Exemptions to this policy will be evaluated and made on a case-by-case basis. For further information, please contact the Office of Student Life at 303-556-3399 or via e-mail at housing@ucdenver.edu.

Exemptions to the first-time freshmen live-in requirement:

1. You will be living at home with parent(s) or legal guardian(s).
2. You are a veteran of the armed forces.
3. You are married or a parent with dependent(s).
4. You are a part-time undergraduate student enrolled for less than 10 credit hours per semester.
5. You are deemed medically excusable by the Office of Community Standards and Wellness (must be supported in writing by a doctor and with appropriate medical documentation).
6. You are over 21 years of age.
7. All other requests will be evaluated on a case-by-case basis.

Exemptions be evaluated and made on a case-by case basis. Exemption forms are available through the Office of Community Standards and Wellness, Tivoli Student Union, 259, or online at www.ucdenver.edu/housingexemption. For further information, please contact the Office of Community Standards and Wellness at 303-556-2444 or via e-mail at housing@ucdenver.edu.

Campus Village Frequently Asked Questions

Amenities

At Campus Village at Auraria, students will find a community to support their academic and personal interests. It’s convenient, comfortable and affordable. Features include:

- apartment-style living with kitchenettes or full kitchens for all students
- lease rates that include heating, cooling, electricity, water, cable and high-speed Internet service
- on-site tutoring and academic support
- a variety of floor plans (from individual studios to four bedroom apartments) to meet the needs of all students
- individual lease agreements for shared units
- fully furnished apartments
- various affordable meal plans

Diagrams of floor plans, details about meal plans, pricing, applications and exemption forms are available on the website at www.campusvillageliving.com.

Important Dates and Information

May 15, 2011: CU Denver First-Year Student Priority Deadline

Freshman students are required to live in Campus Village for two academic-year semesters but this policy is subject to availability of space. Most residence hall assignments are made on a first-come, first-served basis, so you are encouraged to apply for housing as soon as possible after you confirm your enrollment.

Payment and Billing

Campus Village housing and dining fees will be billed to your CU Denver student account. If you receive financial aid, your award(s) will be credited directly to your student account. Financial aid awards are used to pay your tuition and fees first; any remaining award(s) are then used to pay your housing charges. You are responsible for any and all charges not covered by financial aid and scholarships. You must provide Campus Village with proof/verification of funds by September 15, 2010.

Campus Safety

The University of Colorado Denver places a priority on the safety and security of its faculty, staff, students and visitors. Please visit the University Policies chapter of this catalog for additional information related to campus safety.

Emergency Notification System

The Emergency Notification System allows students, faculty and staff to register to receive alerts about threats of imminent danger at or near any CU Denver location. This service is used in conjunction with other communication channels including: public address systems, broadcast e-mail and voice-mail messages to campus telephone extensions, electronic signage, a coordinated use of public media outlets and 24-hour recorded emergency and information hotlines (Denver/Auraria Campus 303-556-2401; Anschutz Medical Campus in Aurora 303-724-4636). Participants can receive various notifications including text messaging, e-mail and phone calls. Visit the CU Denver website for details.

Auraria Police Department

Office: Administration Building, Suite 110
Telephone: 303-556-5000 (Police Dispatch)
Emergency: 911 from a campus phone or 303-556-5000
Website: www.ahec.edu/acpd.htm

On the Denver Campus, CU Denver works with the Auraria Police Department to ensure campus safety. The Auraria Police Department provides campus law enforcement services 24 hours a day, seven days a week including:

- security patrols, bicycle patrols and foot patrols
- crime prevention programs
- night escorts to a vehicle
- vehicle unlocks
- informational services

Auraria Police fulfill the campus responsibilities for reporting crime as required by the Clery Act. Clery statistics are available online at www.ahec.edu/campuspolice/ucd-clery.pdf.

Student Right To Know and Disclosure Information

Crime Statistics

In compliance with the federal Student Right-to-Know and Campus Security Act, the Auraria Campus publishes crime statistics on campus in the Auraria Campus Clery Report. In an emergency, please contact Auraria Campus Police at 303-556-5000 or dial 911 from a campus phone.

Persistence and Completion Data

Section 103 of Title 1 of Public Law 101-542 as amended by Public Law 102-26 (the Federal “Student Right-to-Know” Act) requires that institutions produce and make available to current and prospective students the completion rate of first-time, full-time, degree-seeking undergraduate students entering the institution. Six years after entering, 43 percent of the fall 2003 cohort graduated, another 13 percent transferred to other public higher education institutions in Colorado and 15 percent were still enrolled at the Denver Campus for a total six-year combined persistence and completion rate of 71 percent.

CU Denver's one-year fall-to-fall retention rate is 70 percent for the fall 2008 cohort. That is, of the first-time, full-time, degree-seeking undergraduate students who entered the university in fall 2008, 70 percent were enrolled at the Denver Campus in fall 2009.

Riot Law (Student Riot Bill)

Student enrollment-prohibition-public peace and order convictions: 1) No person who is convicted of a riot offense shall be enrolled in a state-supported institution of higher education for a period of 12 months following the date of conviction; 2) a student who is enrolled in a state-supported institution of higher education and who is convicted of a riot offense shall be immediately suspended from the institution upon the institution’s notification of such conviction for a period of 12 months following the date of conviction, except that if a student has been suspended prior to the date of conviction by the state-supported institution of higher education for the same riot activity, the twelve month

suspension shall run from the start of the suspension imposed by the institution; 3) nothing in this section shall be construed to prohibit a state-supported institution of higher education from implementing its own policies and procedures or disciplinary actions in addition to the suspension under (2) of this section, regarding students involved in riot.

Sex Offender Information (Campus Sex Crimes Prevention Act)

Sex offenders are required to list the locations of all institutions of post-secondary education where he or she volunteers or is enrolled or employed. The Colorado Bureau of Investigation maintains a database identifying all such persons and makes it available to all law enforcement agencies in which jurisdiction the institution of postsecondary education is located. The campus community can obtain this information by contacting the Auraria Police Department at 303-556-5000.

Voter Registration (National Voter Registration Act)

In compliance with the National Voter Registration Act, the state of Colorado voter registration application form and information is available online at www.sos.state.co.us/pubs/elections/ or www.fec.gov/votregis/vr.shtml.

Student Services

Academic Success and Advising Center

Office: North Classroom, 2024
Telephone: 303-352-3520
Website: http://www.ucdenver.edu/life/services/asac/advising/Pages/default.aspx

Academic advising is the foundation of a successful college experience and an important component in both choosing a major and career planning. The Academic Success and Advising Center (ASAC) assists students in the development of meaningful educational plans that will be compatible with their aspirations. This office serves as the first point of contact and provides academic advising for students who are prebusiness, preengineering, nondegree and undecided in the College of Liberal Arts and Sciences and all freshmen and undecided in the College of Arts & Media. Students assigned to the ASAC meet with an advisor every semester to plan a schedule, discuss academic support services and assist with referrals to other on-campus resources. In addition, the center provides general information and resource referrals to all students.

New student orientation for freshman/first year students is coordinated through the ASAC. Fall and spring welcomes for transfer, nondegree and graduate students are also coordinated through the center.

American Indian Student Services

Office: North Classroom, 2013
Telephone: 303-556-2860
Website: www.ucdenver.edu/life/services/studentlife/Pages/StudentLife.aspx

The American Indian Student Services program provides access and educational opportunities to American Indian students through specialized recruitment and retention efforts. The program provides academic advising, scholarship information, cultural programs, advocacy, student organization sponsorship and other supportive services tailored to the specific needs of the students. American Indian Student Services also serves as a resource to the campus, providing current information on issues and concerns of the American Indian community.

Asian American Student Services

Office: North Classroom, 2014
Telephone: 303-556-2578
Website: www.ucdenver.edu/life/services/studentlife/Pages/StudentLife.aspx

Asian American Student Services serves as a resource to the campus and community. The office seeks to support student success by providing services in an welcoming environment, which include:

- academic advising
- scholarship information
- cultural programming
- advocacy
- resource information
- student leadership development opportunities

Black Student Services

Office: North Classroom, 2010
Telephone: 303-556-2701
Website: www.ucdenver.edu/life/services/studentlife/Pages/StudentLife.aspx

The Black Student Services program provides access, educational opportunities and information to students through specialized recruitment and retention efforts. The program provides academic advising, scholarship information, cultural programs,

advocacy, student organization sponsorship and other supportive services tailored to the specific needs of the students. Black Student Services also serves as a resource to the campus, providing current information on issues and concerns affecting the community.

The Career Center

Office: Tivoli Student Union, 267
Telephone: 303-556-2250
Website: www.ucdenver.edu/careercenter

The Career Center offers a full array of services that prepare students for the transition from college to career. Students are encouraged to participate in career-related programs and services as early as their freshman year to begin to consider career options and gain the skills and experience necessary to be successful upon graduation.

The Career Center's slogan is **Just ASK!** **A**ccess-**S**earch-**K**nock!

- **ASSESS**: Understand and leverage student's abilities, skills, personality, values and interests for an excellent choice of an academic major or to determine a career direction.
- **SEARCH**: Preparation for job search, including development of career collaterals such as resumes, interviewing and negotiating skills, and developing job search strategies.
- **KNOCK**: Connects students with employers through services including: online job posting, resume referrals, on-campus interviewing, career fairs, employer presentations and networking events.

Just ASK! is designed to compliment a student's educational program and help student's achieve their career goals.

Community Standards and Wellness

Location: Tivoli Student Union, Suite 227
Telephone: 303-556-2444
Websites: www.ucdenver.edu/wellness; www.ucdenver.edu/standards; www.ucdenver.edu/housing

The Office of Student Conduct and Community Standards serves as a resource to the entire university community through its efforts to meet the developmental and educational needs of students related to community expectations, civility and respect for self and others. We function to support community members with conflict management and resolution and by responding to inappropriate and threatening behaviors. We provide student-centered educational services, which promote personal development and individual responsibility. We strive to create a dynamic, open and just environment where civility, cultural competence and learning are expected and celebrated.

Overall Office Goals

- To develop, disseminate, interpret campus policies and procedures related to community standards and expectations
- Protect the rights of students in the administration of the student conduct program
- Respond to student behavioral concerns in a fair, reasonable and efficient manner
- To promote a campus environment that encourages dialogue, mutual respect and cultural sensitivity
- Initiate and encourage educational activities that serve to reduce violation of campus regulations and increase the health and wellness of the campus community
- To foster collaborative partnership that allow for a holistic approach to supporting and developing healthy, engaged and productive students and citizens

Disability Resources and Services Office

Location: North Classroom, 2514
Telephone: 303-556-3450
TTY: 303-556-4766
E-mail: DisabilityResources@ucdenver.edu

The Office of Disability Resources and Services (DRS) is committed to providing equal opportunities and fostering the personal growth and development of students with disabilities. The DRS staff strive to meet the needs of a large and diverse community of students with disabilities. We are available to provide assistance and to arrange for reasonable accommodations that will address specific educational needs.

Accommodations may include but are not limited to the following:

- priority registration for classes
- assistance in identifying volunteer notetakers
- alternative testing (private room, additional time, reader/scribe)
- alternate textbook formats (scanned, enlarged print, Braille)
- interpreter services or captioning services

Gay, Lesbian, Bisexual, Trans (GLBT) Student Services at Auraria

Office: Tivoli Student Union, 213
Telephone: 303-556-6333
Website: www.glbtss.org

Gay, Lesbian, Bisexual, Transgender Student Services is open to all Auraria Campus students as a resource for exploring sexual orientation or gender identity issues. This program offers a variety of support, education and advocacy services for the entire campus community:

- support for those who may have questions about their own sexual orientation/gender identity or that of a friend or family member
- advocacy for students experiencing discrimination or harassment based on a real or perceived GLBT identity
- speakers for events, workshops and classes on various aspects of sexual orientation and gender identity
- programs and workshops about working with the gay, lesbian, bisexual and transgender communities
- resource library of 500 books and 90 videos (documentary and cinema) available for research and leisure, as well as a multitude of free literature regarding other organizations and services throughout Denver and Colorado that provide outreach, services and advocacy
- programs such as Speakers Bureau and other forums providing information and dialogue about GLBT issues

The GLBT Student Services office is staffed by a director with the support of student employees and volunteers. Input and involvement from the entire campus community are welcomed.

Global Education, Study Abroad

Director: John Sunnygard
Telephone: +1-303-315-2230
Website:
ucdenver.edu/academics/InternationalPrograms/OIA/StudyAbroad/Pages/StudyAbroad_GlobalEducation.aspx

Global Education is the university's central office that supports all students seeking to internationalize their education and gain professional preparation to more effectively serve and compete in a global world. The office advises and prepares students, faculty and staff to safely navigate the full range of global academic and learning opportunities. Global Education has a network of study abroad programs, international internship, volunteer and service learning opportunities in more than 80 countries. Graduate, professional and undergraduate students from both campuses also conduct international research also benefit from Global Education's support services.

Study abroad programs are offered in a variety of terms, costs and disciplines to suit the full spectrum of CU Denver students. Students may choose to immerse themselves in a more traditional academic year or semester program abroad; or to conduct research on field studies sites. Many students chose to study with CU Denver faculty on one of the

many affordable, focused travel-study programs over winter break, Maymester or summer.

The International College Beijing semester program is of particular interest to communication and economics students. While many students study abroad to learn or perfect language skills, most students participate in English-taught programs in non-English and English-speaking countries. Either CU Denver or transfer credit may be earned on approved programs abroad, giving students the opportunity to fulfill degree requirements while living, learning and growing in another culture.

Considerable effort is made to keep global educational opportunities affordable for all CU Denver students. Additionally, scholarships and financial aid may be available depending upon the program and location. Information and advice on scholarships such as Fulbright, NSEP, Gilman and others is also available. For the most current information on programs, policies and the benefits of global education, please visit the Global Education website at ucdenver.edu/academics/InternationalPrograms/OIA/StudyAbroad/Pages/StudyAbroad_GlobalEducation.aspx.

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Hispanic Student Services

Office: North Classroom, 2012
Telephone: 303-556-6209

The Hispanic Student Services program provides access and educational opportunities to Hispanic students through specialized recruitment and retention efforts. The program provides academic advising, scholarship information, cultural programs, advocacy, student organization sponsorship and other supportive services tailored to the specific needs of the students. Hispanic Student Services also serves as a resource to the campus, providing current information on issues and concerns of the Hispanic community.

Information Technology Services

Office: Lawrence Street Center, 1350
Telephone: 303-724-4357
Website: http://ucdenver.edu/admin/its/

Information Technology Services (IT Services) provides central support of the telecommunications, computing and network infrastructure for the Denver Campus and the Anschutz Medical Campus. IT Services also provides computing resources such as computer accounts, e-mail, file storage, server hosting, Internet, Internet2 and National Lambda Rail.

The IT Services help desk is a single point-of-contact for reporting computer-related problems or requesting services. Faculty and staff are encouraged to contact the help desk for general questions about computing at the university.

IT Services also provides student computing services to currently enrolled students within the computer labs located in the North Classroom 1206, St. Cajetans 101 and the Tivoli 241. The computer labs have Macintosh and Windows-based computers with Internet access available for student use on a first-come first-served basis.

For more information, call the IT Services Help Desk at 303-724-HELP.

International Affairs

Assistant Vice Chancellor: Carolyn North
Courier Address: International Affairs, 1380 Lawrence Street, 9th floor, Denver, CO 80204-2029, USA
Mailing Address: International Affairs, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364, USA
Telephone: +1-303-315-2230
Fax: +1-303-315-2246
Website: www.ucdenver.edu/international

The Office of International Affairs (OIA) serves the university by providing administrative support, expert advice, technical services, educational programs and related services that contribute to the strategic international goals of the university. The Office of International Affairs addresses international policy issues, has oversight of international risk management protocols, serves as a resource for best practices in the internationalization of higher education, maintains central data bases pertaining to international activities of the university, advises on the development of international affiliations and agreements, assists departments/programs and schools/colleges with the development of comprehensive international strategic planning and seeks to promote and support initiatives that advance international research, education and global cooperation.

OIA serves as a resource for faculty seeking international research opportunities, provides a comprehensive list of international scholarship/fellowship information and serves as the institutional liaison for the CIES Fulbright Scholars Program. OIA provides visa and orientation services to international students and scholars, provides expertise in the development and maintenance of undergraduate, graduate and professional global education, assists with brokering and designing bilateral international educational programs and offers comprehensive international recruitment and admissions services.

The four divisions of OIA include International Admissions, International Student and Scholar Services, Global Education and International Colleges.

Graduate Student and Faculty Fulbright Information

OIA maintains listings of opportunities and other information on various scholarships and fellowships for study and research abroad, including Fulbright graduate student and faculty visiting lectureships at foreign universities.

Community Outreach Services

During the year, OIA sponsors periodic guest lectures and special seminars focused on topics of current international interest. Many of these activities are open to the public as well as the university community. OIA is also an active participant in a number of Denver community international programs and events. For more information about these and other programs, contact OIA at 303-315-2230.

International Colleges and Partnerships

Telephone: +1-303-315-2240

International Colleges and Partnerships (ICP) develops and maintains sustainable academic programs abroad to enhance the globalization of teaching and learning at the University of Colorado Denver and its partner institutions and to facilitate the discovery and sharing of knowledge between CU Denver and the world.

International College Beijing

International College Beijing (ICB) is a joint education program between the University of Colorado Denver (CU Denver) and China Agricultural University (CAU), located in Beijing, People's Republic of China. The partnership, formed in 1994, was one of the first of its kind approved by the Chinese Ministry of Education.

At ICB students can choose to earn a CU Denver bachelor of arts degree in either economics or communication on site in Beijing. Or students can choose to study in Denver to complete their undergraduate programs after a year or two of study at ICB. As all courses are taught in English by CU Denver faculty, U.S. students can learn or perfect their Chinese while pursuing rigorous courses in English in their chosen undergraduate field of study alongside ICB Chinese students, fostering a truly global classroom experience.

ICB is located on the east campus of China Agricultural University in the Haidian district north of downtown Beijing. The campus is a 30-minute ride from downtown Beijing, Beijing International Airport and major cultural centers such as Tiananmen Square, the Forbidden City and the Summer Palace.

International Colleges & Partnership Staff

Rick Chaney, Director, **rick.chaney@ucdenver.edu**, 303-315-2240

Joanne Wambeke, Student Affairs, **joanne.wambeke@ucdenver.edu**, 303-315-2121

Khulan Dashpuntsag, Faculty & Fiscal Affairs, **Khulan.dashpuntsag@ucdenver.edu**, 303-315-2243

Kyle Westgard, Director of China Programs, Beijing, China, kyle.westgard@ucdenver.edu

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International Student and Scholar Services

Director: David Clubb
Telephone: +1-303-315-2230

The International Student Services unit provides a variety of services and programs to international students and scholars with a special emphasis on F-1 and J-1 students. The unit provides check-in sessions, orientations, work clinics and immigration advising, and we often partner with other CU Denver departments to offer programs and events to our international student population. For more information related to immigration matters, programs and advising services for international students, please visit our website at www.ucdenver.edu/academics/InternationalPrograms/OIA/ISSS/Pages/ISSS.aspx.

Internships and Experiential Learning

Director: Lissa Gallagher
Office: Tivoli Student Union, 260
Telephone: 303-556-6656
Website: http://www.ucdenver.edu/life/services/ExperientialLearning

Live your learning at CU Denver! Students have many opportunities to explore academic fields through direct experience including internships, service in the community, undergraduate research and international experiences. Link your studies to the real world and put your knowledge into practice. You will develop new skills, grow personally and professionally and enrich your academic experience.

INTERNSHIPS AND COOPERATIVE EDUCATION

Hundreds of CU Denver students engage in degree-related work experiences with corporations, government and nonprofit agencies in the Denver-metro area and around the world. Students can earn academic credit, pay or both while gaining relevant experience related to their career interests.

SERVICE LEARNING

Students gain a better understanding of community issues, develop practical skills and make a difference in the world around them when they engage in service activities. From the first-year experience course to senior capstone classes, faculty weave service projects into their courses, giving students a wider view of the world. Many volunteer opportunities are also available through the center. Students can also earn AmeriCorps education awards for service.

UNDERGRADUATE RESEARCH

Whether assisting faculty with research or pursuing their own research under faculty supervision, CU Denver students can experience what it means to be involved in the creation of knowledge. Students may apply for research grants through the Undergraduate Research Opportunities Program (UROP) and showcase their research projects at the annual *Research and Creative Activities Symposium*.

Learning Resource Center

Office: North Classroom, 2006
Telephone: 303-556-2802

The Learning Resource Center is designed to promote student success in the academic setting. Available to undergraduate and graduate students, services include:

- individual and open lab (group) tutoring
- study skills courses
- study strategies seminars
- a resource library
- supplemental instruction (SI) for courses in physics, chemistry and biology
- ESL (English as a second language) support through workshops, conversation and pronunciation groups

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Ombuds Office

Office: CU-Denver Building, 107P
Telephone: 303-556-4493
E-mail: Mary.ChavezRudolph@ucdenver.edu
Website: www.ucdenver.edu/about/departments/OmbudsOffice/Pages/OmbudsOffice.aspx/

The Ombuds Office is a designated neutral and independent resource available to all members of the university community to provide informal and confidential assistance in resolving conflicts, complaints and disputes. An ombuds person does not advocate for any party but is an advocate for fair process.

The ombuds person can provide information about policies, procedures, practices or decisions at CU Denver and can assist individuals and groups in resolving their concerns by listening; probing for understanding; and helping to understand options. The ombuds person will make referrals as necessary and can serve as an informal mediator or shuttle diplomat.

The Ombuds Office works toward positive change within the university, serving as a consultant in the preparation and review of policies and procedures and assisting in the solution of problems. While keeping names and cases confidential, the ombuds person reports trends and pervasive problems to the appropriate resolution channels.

The Ombuds Office can also assist with large group issues by providing group facilitation, conflict management training and personality profile assessments. In addition, the office has a lending library comprised of books and videos available for check-out.

Due to its informal, confidential and independent role outside the administrative structure of the university, notice to the ombuds about a problem does not result in the generation of records, nor does it constitute legal notice to the university about the existence of a problem. For those interested in making official complaints to the university about a problem, the Ombuds Office can assist by making appropriate referrals.

Center for Pre-Collegiate and Academic Outreach Programs

Office: Administration Building, 360
Telephone: 303-556-2322
E-mail: pcdp@ucdenver.edu
Website: www.ucdenver.edu/academics/degrees/pre-collegiate/Pages/default.aspx

The programs offered by the Center for Pre-Collegiate and Academic Outreach Center serve to motivate middle- and high-school students to pursue post-secondary education and provide them the academic skills necessary to be successful in their college endeavors.

Pre-Collegiate Development High School Program

The Pre-Collegiate Development High School Program is a systemwide, institutionally funded academic enhancement program for high school students. The primary focus of the program is to prepare youth (grades 9–12) who are first-generation and from an underrepresented group in higher education to successfully complete high school on a timely basis and possess the necessary skills to successfully enter and graduate from their choice post-secondary institution. During the academic year, students will take part in relevant Saturday Academies in basic study skills, interpersonal skills development

and college entrance exam preparation designed to acclimate them to the university and prepare them for college study. In addition, students are provided with either a two-week (sophomores) or five-week (juniors) intense summer academic program. During this experience, students are exposed to various academic courses, which are designed to enhance and augment their college entry requirements (e.g., mathematics, sciences, writing and seminar) once they return to their host high school for either their junior or senior year. For further information you may contact us at 303-556-2322.

Pre-Collegiate Middle School Academic Program

The Pre-Collegiate Middle School Academic Program is an academic enhancement program. The program is designed to adequately prepare potential first-generation college students in grades seven to eight to successfully complete their pre-secondary school career, enroll in a college preparatory high school curriculum and ultimately enroll to their choice college/university with the necessary skills and academic preparation to succeed at and graduate from that institution. The Pre-Collegiate Middle School Academic Program serves as a precursor to the Pre-Collegiate Development High School Program. Students who successfully complete the Pre-Collegiate Middle School Academic Program with a cumulative GPA of 2.75 or better will then be admitted to the Pre-Collegiate Development Program at the end of their 8th grade year.

During the academic year, the students are provided relevant Saturday Academies in areas such as basic study skills, academic skills enhancement, leadership and interpersonal skills development. Parents of the participating students will also be offered relevant workshops during the Saturday Academy sessions, which include effective parenting strategies, as well as strategies on how to prepare financially for their student's college education. Tutoring services will also be provided on an ongoing basis during the academic year at their middle school. The academic year Saturday Academies are designed to augment middle school curriculums (e.g., mathematics, writing, sciences, computer skills, etc.) and enhance parenting skills and strategies designed to more fully support their student. For further information you may contact the program coordinator, Junior Reina, at 303-556-2322.

Upward Bound Program Power-Up Project

The Upward Bound program, a federally funded TRIO program, is an educational pre-collegiate program for selected students from Sheridan and Jefferson High Schools. Upward Bound's mission is to prepare and help motivate students with potential for success in postsecondary education. Participants are selected based on their academic performance, motivation for success, recommendations from teachers and counselors and additional criteria.

Upward Bound aims to provide program participants with the necessary skills needed to successfully graduate from high school and complete a four-year college degree.

Students participate in after-school and weekend programs that include supplemental education, academic themed workshops, field trips and college campus tours. Every student also participates in a six-week summer program designed to prepare them for their high school classes and the college application process. Additionally, all students participate in a shadowing program with current college students and working professionals in the Denver metro area. The program is 100 percent funded by the U.S. Department of Education.

CU Succeed

The CU Succeed program enables juniors and seniors to earn fully transferable college credit while still in high school. There are two programs for students to choose from: CU Succeed Gold and CU Succeed Silver.

CU Succeed Gold: Courses are taught during regular school periods by specially qualified high school teachers who hold honorarium faculty appointments at UC Denver.

CU Succeed Silver: Courses may be taught during school periods and after school hours and are taught by CU Denver full-time or part-time faculty.

Courses taken through the CU Succeed programs are eligible for transfer to University of Colorado campuses, as well as to many other universities and colleges. More information about the CU Succeed programs is available at ucdenver.edu/academics/continuing-education/CUSucceed/Pages/default.aspx.

Scholars Program

The Scholars Program is an early college enrollment program for college-bound, high-achieving students who are potential first-generation who are *current graduating high school seniors.* The program allows students to begin their college studies by taking one course on the CU Denver campus during the fall and spring semester of their senior year. The credit earned in the course can be applied toward a bachelor's degree at CU Denver or at another institution.

Prior to and during their fall and spring enrollment, scholars engage in orientation, admissions and financial aid seminars and other workshops, *along with their parents,* designed to acclimate them to the university and prepare them for full-time college study. Assistance with course selection, educational planning and tutoring is provided.

Who may participate in the program? Students who are potential first-generation college students, and/or underrepresented in higher education may apply to the program. Applicants must be current juniors who are graduating from their respective high schools at the end of the following spring semester.

Applicants must meet the following criteria:

- A minimum GPA of 3.0 at the time of application
- Completion of at least two years of math (two years of algebra or one year of algebra and one year of geometry) with an average grade of B or better
- Completion of two years of English (one year must be composition) with an average grade of B or better
- A commitment to participate in all of the program's orientations and workshops prior to and during enrollment

NOTE: *Interested students are cautioned that college work requires considerable time and discipline*. Therefore, only students who have completed the majority of their high school requirements, who do not work after school and who are **not** heavily involved in extra-curricular activities are encouraged to apply. Since CU Denver courses are available throughout the day and into the early evening, students will have many options in choosing a course that best fits their schedule.

What are the student's responsibilities?

The CU Denver Scholars Program is committed to providing students with every opportunity to enhance their academic skills and to succeed in the college courses they take at CU Denver. However, students will gain the most benefit from their experience at CU Denver if they commit themselves to the goals of the program and actively participate in its activities. Therefore students will be expected to:

- Commit themselves to actively participating in the program for the semester
- Attend their college class faithfully, completing assignments and participating fully (tutors or teaching assistants will be made available)
- Attend all tutorial sessions as required by instructors and staff

The program involves a serious commitment by students because college is a serious commitment. If a student earns a failing or a low grade in a college class, a prospective college or university may be reluctant to grant admission to that student. Students who are already involved in extra-curricular activities should apply to the program only if they are sure that these activities will not interfere with their full participation in the program.

How much does the program cost?

CU Denver covers most of the direct educational expenses, which includes tuition and matriculation fees. Students will be responsible for the following:

- Books (ranging from $50 - $100)
- A student identification card ($10), available in the Tivoli Student Union upon acceptance into the program
- Parking ($3.75 to $10 per day)

NOTE: Students must arrange their own transportation to and from the Auraria Campus. Those who choose to drive may park in the student lots for an hourly or daily fee.

How do students apply?

Application to the CU Denver Scholars Program must be made through a high school counselor. Applicants should ensure that their counselor submits the following materials/credentials to the Scholars Program.

- A University of Colorado Denver **nondegree** application form; **Non-U.S. citizens** must attach photocopy of VISA or permanent resident card
- A *completed* application packet, including student general information form, counselor recommendation form and two teacher recommendation forms
- An unofficial copy of the student's high school transcript

Students should be advised that no application will be considered if it is incomplete.

Completed applications should be turned in to your high school college counselor. For additional information contact:

Abenicio D. Rael, Assistant Director
University of Colorado Denver Scholars Programs
Campus Box 147
P.O. Box 173364
Administration Bldg., Suite #360
Denver, CO 80217-3364
303-556-2322
abenicio.rael@ucdenver.edu

Student Activities Office

Office: Tivoli Student Union, 303
Telephone: 303-556-3399
Website: www.ucdenver.edu/events

The Office of Student Activities offers a comprehensive student activities program that helps bring about a positive college experience for every student. Our goal is to integrate what students learn from the full range of their experiences and to engage them in active learning both inside and outside the classroom. We are committed to bringing new and exciting activities, events and workshops that provide innovative opportunities for student learning, especially in the areas of self-knowledge, leadership, diversity, communication, service, civic engagement and social responsibility. Through participation in co-curricular activities, we help students enhance interpersonal, leadership and critical thinking skills and help prepare them for active citizenship beyond college.

Student Advocacy Center

Office: North Classroom, 2012
Telephone: 303-556-2546

The Student Advocacy Center provides support services to CU Denver students, particularly during their first year on campus. Services are designed to help students make a smooth transition to life at CU Denver and to succeed in their college studies. Professional staff and student peer advocates provide information about campus resources and assist students with class scheduling, academic policies and procedures and problem solving. The center also houses an extensive scholarship library.

Student and Community Counseling Center

Director: Dr. Patricia Larsen
Office: North Classroom, 4036
Telephone: 303-556-4372
Website: www.ucdenver.edu/counselingcenter

The CU Denver Student and Community Counseling Center provides culturally competent mental health services focused on support, growth and solutions. Services include:

- quality counseling, case management, consultation, testing, outreach, life-skills groups and preventative mental health services to the CU Denver campus community
- outreach and case management to CU Denver students who are identified as at-risk
- sensitivity to diversity and inclusion of all clients regardless of gender, race, ethnicity, religion, sexual orientation, age, socio-economic status and ability
- strength based counseling approach that assists students in finding solutions using their own strengths and abilities
- consultation and classroom presentations to faculty and staff upon request

All students are eligible for up to 10 counseling sessions per academic year and unlimited groups, workshops and case management services at no cost.

Student Government Association

Office: Tivoli Student Union, 301
Telephone: 303-556-2510
Website: www.ucdenver.edu/sga

The Student Government Association serves as a voice for students. Similar to the structure of the U.S. government, SGA has executive, legislative and judicial branches. Executives are elected each year in the spring. SGA assists students with information concerning student clubs and organizations, campus events, issues concerning student status and other information of general interest to students. SGA

also provides students assistance with grievances and the opportunity to become more closely involved with the university community through active participation in student government itself or through service on university, tri-institutional and Auraria committees.

Student Health Insurance Office

Office: Tivoli Student Union, 303
Telephone: 303-556-3399
Website: www.ucdenver.edu/studenthealthinsurance

The Student Health Insurance Office strongly encourages all students to have adequate health insurance coverage. The university health plan is designed to coordinate services with the Health Center at Auraria to provide quality health care at the lowest possible cost. For domestic students, the university health plan is voluntary. International students with F-1 and J-1 student visas are required to carry the health insurance plan provided by the university.

Student Life

Office: Tivoli Student Union, 303
Telephone: 303-556-3399
Website: www.ucdenver.edu/studentlife

It is the mission of the Office of Student life to complement the academic programs of study at CU Denver and enhance the overall educational experience of students through the development of, exposure to and participation in social, cultural, intellectual, recreational, leadership and governance programs. The Office of Student Life is the advising, coordinating, resource and general information center for student organizations, the academic honor societies student government and the student newspaper.

The office is responsible for the administration of the student fee budget and monitors all student fee expenditures to assure compliance with CU Denver and state of Colorado regulations and procedures. The director of student life represents the assistant vice chancellor for university life on selected CU Denver, tri-institutional and Auraria committees and maintains effective lines of communication with Metropolitan State College of Denver, Community College of Denver and Auraria Higher Education Center.

Student Newspaper: The Advocate

Office: Tivoli Student Union, 345
Telephone: 303-556-2535
Website: www.ucdadvocate.com

The purpose of the *The Advocate* is to provide students with information about campus issues and events. The newspaper strives to include good investigative reporting, feature articles and items of general interest to its campus readership. In addition, the newspaper is a tool to encourage and develop writers, journalists, artists and other student members of its general management and production staff.

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Transfer Initiative, Denver

Office: 1027 Ninth Street Park
Telephone: 303-352-3309

The Denver Transfer Initiative (DTI) is a cooperative project between the Community College of Denver (CCD) and the University of Colorado Denver (CU Denver) aimed at increasing the graduation rate and completion of bachelor's degrees for traditionally underserved populations, specifically first-generation, low-income and Hispanic. The project is designed to provide assistance and support to students throughout their course work and educational careers. Students attend their first two years at Community College of Denver then transfer to CU Denver for their last two years of course work.

DTI students receive continuous assistance in the form of:

- support, guidance and advocacy
- financial aid and scholarship application assistance
- two-year to four-year transfer degree planning
- career assessment, exploration and counseling
- peer mentoring and tutoring services
- connection to campus and community resources
- attendance to informational workshops
- the opportunity to attend student events andmulticultural activities

DTI is a Title V grant project funded by the Department of Education's Developing Hispanic-Serving Institutions Program, which helps eligible institutions of higher education enhance and expand their capacity to serve Hispanic and low-income students by providing funds to improve and strengthen the academic quality, institutional stability, management and fiscal capabilities of eligible institutions (www.ed.gov/programs/idueshsi/index.html).

TRIO Program:Student Support Services

Office: North Classroom, 2506
Telephone: 303-556-3420

TRIO/Student Support Services is a federally funded by the Department of Education. The program for first-generation, low-income and disabled students provides services which include:

- academic support
- preparation for graduate school
- career planning, workshops
- scholarship information
- tutoring
- book scholarships
- peer mentoring

Veteran Student Services

Office: CU-Denver Building, 107A/B
Telephone: 303-556-2630, 303-556-2745
E-mail: vaoffice@ucdenver.edu
Web site: http://ucdenver.edu/life/services/Veteran

The University of Colorado Denver Office of Veteran Student Services (OVSS) has been charged with representing veteran and veteran-dependent students on campus and in the Denver metropolitan area. Our mission is to improve and enrich the educational experience of our servicemen, servicewomen and their dependents through advocacy, as well as appropriate and responsive services.

The Office of Veterans Student Services is the initial contact point for eligible veterans and dependent students wishing to seek a postsecondary education or CU Denver students who wish to utilize Veterans Administration educational benefits. This office services include:

- assistance in filling out VA paperwork
- assistnace in solving problems associated with the receipt of VA-related educational benefits
- maintaining proper certification for eligible students to ensure that each student meets Veterans Administration requirements for attendance, course load and content, and other regulations necessary to receive educational benefits payments
- providing VA vocational rehabilitation referrals
- serving as a campus resource
- providing information on VA tutorial assistance
- offering VA work/study positions for qualified veterans

Writing Center

Director: Justin J. Bain
Office: North Classroom, 4014
Telephone: 303-556-4845
Website: http://writingcenter.ucdenver.edu

The CU Denver Writing Center equips our community of writers (students, staff, faculty, alumni) with the necessary skills of composition to expand their academic opportunities and further their careers. We view writing as a process and all texts as works in progress. We build confident and accomplished writers through the development of strong cognitive and writing abilities. Our mission is to empower writers through collaborative work.

Services include one-on-one and small-group writing consultations in areas such as:

- Generating, organizing and developing ideas
- Establishing effective proofreading skills
- Analysis, synthesis and argument
- Summary, paraphrase and documentation
- Error pattern analysis
- Information literacy and research strategies

The Writing Center offers a variety of locations and services to best meet your needs:

- NORTH 4014 (DDC): Mon.-Thurs. 9 a.m.–6 p.m. and Fri. 9 a.m.–2 p.m.
- Campus Village (DDC): Sun., Mon., Wed. 6–9 p.m. and Fri. 2–5 p.m.
- HSL 1204 (AMC): Tues. and Fri. 10 a.m.–6 p.m. and Sun. 2–8 p.m.
- Online (real-time): Every evening 6–10 p.m.
- A virtual drop-box for graduate students only
- A text/Twitter-based service for quick questions

All consultations are by appointment; to schedule an appointment, please visit our website.

University Policies

Every organization, large and small, runs more smoothly when policies and procedures are in place. This chapter touches briefly on policies that are most important to students and their academic pursuits. The University of Colorado Denver's Policies and Guidelines website, www.ucdenver.edu/admin/policies/, provides a complete list of policies for every facet of the organization, including those from other organizations that affect the Denver Campus, such as the Laws of the Regents and policies of the Auraria Higher Education Center.

Academic Honor Code and Discipline Policies

Policies related to academic credit and grades are explained in the Registration and Records chapter of this catalog.

Academic Honesty

A university's reputation is built on a standing tradition of excellence and scholastic integrity. As members of the CU Denver academic community, faculty and students accept the responsibility to maintain the highest standards of intellectual honesty and ethical conduct in completing all forms of academic work at the university.

Forms of Academic Dishonesty

Students are expected to know, understand and comply with the ethical standards of the university. In addition, students have an obligation to inform the appropriate official of any acts of academic dishonesty by other students of the university. Academic dishonesty is defined as a student's use of unauthorized assistance with intent to deceive an instructor or other such person who may be assigned to evaluate the student's work in meeting course and degree requirements. Examples of academic dishonesty include, but are not limited to the following:

A. Plagiarism

Plagiarism is the use of another person's distinctive ideas or words without acknowledgment. The incorporation of another person's work into one's own requires appropriate identification and acknowledgment, regardless of the means of appropriation. The following are considered to be forms of plagiarism when the source is not noted:

- word-for-word copying of another person's ideas or words
- the mosaic (the interspersing of one's own words here and there while, in essence, copying another's work)
- the paraphrase (the rewriting of another's work, yet still using their fundamental idea or theory)
- fabrication (inventing or counterfeiting sources)
- submission of another's work as one's own
- neglecting quotation marks on material that is otherwise acknowledged

Acknowledgement is not necessary when the material used is common knowledge.

B. Cheating

Cheating involves the possession, communication or use of information, materials, notes, study aids or other devices not authorized by the instructor in any academic exercise or communication with another person during such an exercise. Examples of cheating are:

- copying from another's paper or receiving unauthorized assistance from another during an academic exercise or in the submission of academic material
- using a calculator when its use has been disallowed
- collaborating with another student or students during an academic exercise without the consent of the instructor

C. Fabrication and Falsification

Fabrication involves inventing or counterfeiting information, i.e., creating results not obtained in a study or laboratory experiment. Falsification, on the other hand, involves the deliberate alteration or changing of results to suit one's needs in an experiment or other academic exercise.

D. Multiple Submission

This is the submission of academic work for which academic credit has already been earned, when such submission is made without instructor authorization.

E. Misuse of Academic Materials

The misuse of academic materials includes but is not limited to the following:

- stealing or destroying library or reference materials or computer programs
- stealing or destroying another student's notes or materials or having such materials in one's possession without the owner's permission
- receiving assistance in locating or using sources of information in an assignment when such assistance has been forbidden by the instructor
- illegitimate possession, disposition or use of examinations or answer keys to examinations
- unauthorized alteration, forgery or falsification of academic records
- unauthorized sale or purchase of examinations, papers or assignments

F. Complicity in Academic Dishonesty

Complicity involves knowingly contributing to another's acts of academic dishonesty.

Procedures in Cases of Suspected Academic Dishonesty

All matters of academic policy, including academic dishonesty, are under the jurisdiction of each of the university's schools and colleges pursuant to Article 4.A.2 and Article 5.E.5 of the Laws of the Regents. Accordingly, each school and college has established

procedures for addressing matters of academic dishonesty and for determining the severity and consequences of each infraction. Students should contact their school or college dean's office for procedures specific to their school or college.

Academic Probation and Suspension Policies

Students at the University are expected to maintain progress in their degree program, as defined by being in “good academic standing.” Good academic standing requires minimally a cumulative grade point average (GPA) of 2.0 on all University of Colorado course work.

Academic Probation

- Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.
- Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via university-assigned e-mail and postal letter) of their academic probation status.
- Students on academic probation will be required to complete the academic success plan during their first semester on academic probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed academic success plan before they will be allowed to register for the subsequent term.
- Students on academic probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on academic probation before they will be allowed to register.
- Academic probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing. Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students who fail to earn the 2.3 semester GPA during any semester of academic probation will be placed on restricted academic probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on academic suspension.

- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from academic probation and notified via university-assigned e-mail that s/he is in academic good standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester of academic probation will be placed on restricted academic probation.
- Students are informed in writing (via university-assigned e-mail and postal letter) of restricted academic probation status.
- Students on restricted academic probation will be allowed to enroll for a maximum of 6 credits/two classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on restricted academic probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.
- Students on restricted academic probation will not be able to register online; they will need to register for courses using a schedule adjustment form, which must be submitted to the Service Center (North Classroom #1003) for processing.
- Restricted academic probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Students must achieve a minimum 2.0 cumulative CU GPA to return to good academic standing and to meet graduation requirements.
- Students on restricted academic probation who do not meet the 2.3 minimum semester GPA will be placed on academic suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours on academic probation and restricted academic probation will be placed on academic suspension.

Academic Suspension

- Students on restricted academic probation who do not meet the 2.3 minimum semester GPA will be placed on academic suspension.
- Students are informed in writing via certified/registered letter of their academic suspension status.
- The minimum duration of academic probation is for a period of one year (three semesters, including summer term). Students placed on academic suspension will be unable to take courses from any CU campus during this time.

- Should a student be placed on academic suspension while registered for the next semester, s/he will be administratively dropped from their courses by the university.

- A student's academic suspension status is permanently indicated on his/her official University of Colorado transcript.

- During the one-year academic suspension period, students who wish to return to the university should consider one (or both) of the following actions:

    - Attend another regionally-accredited college/university.
        - Students who choose to attend another institution while on academic suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work.
        - Students should consult their academic advisor to discuss appropriate course work.
    - Use the time off to directly address and resolve the factors that contributed to the academic difficulty.
- After the one-year suspension period has elapsed, students must petition the appellate committee (of the school or college they wish to enter) for readmission and meet and document at least one of the following criteria:

    - Attendance at another regionally accredited college/university where they earned a minimum cumulative GPA of 2.75 in transferable credit.
    - Explanation of their previous academic difficulty, demonstration of what has changed and how this will allow them to now achieve and maintain good academic standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0).
- Students who choose to petition their college's appellate committee for re-admission must submit their petitions by the following deadlines:

    - For fall admission: June 1
    - For spring admission: December 1
    - For Maymester/summer admission: April 1
- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be re-admitted *on restricted academic probation*. These students must meet the condition of restricted academic probation every semester until their cumulative CU GPA is at least a 2.0.

Second Suspension

- Students who are readmitted after their first academic suspension and fail to meet the conditions of restricted academic probation for a second time are placed on a second suspension for an indefinite period of time.

- Students on a second suspension may be readmitted to the university only by petition to the college's appellate committee.
- Students will not be considered for re-admission unless they have demonstrated *significant* improvement in academic performance at the college/university level, and/or considerable and positive change in personal circumstances.

Code of Student Conduct - Community Standards and Wellness

Director: Larry Loften
Office: Tivoli Student Union, 227
Telephone: 303-556-2444

Preamble

As members of the CU Denver community, students are expected to uphold University standards, which include abiding by state, civil and criminal laws and all university policies and standards of conduct. These standards assist in promoting a safe and welcoming community.

The university strives to make the campus community a place of study, work and residence where people are treated, and treat one another, with respect and courtesy. The university views the student conduct process as a learning experience that can result in growth and personal understanding of one's responsibilities and privileges within both the university community and the greater community. All students must follow these standards. Students who violate these standards will be subject to the actions described below. These procedures are designed to provide fairness to all who are involved in the conduct process.

Philosophy of Student Conduct

The Office of Community Standards and Wellness views the conduct process as a learning experience that helps students to understand their responsibility both to themselves and their living and learning community. We strive to learn from one another in an educational environment that holds mutual respect for individuals and community in high regard and self-responsibility for behaviors. Behavior that conflicts with established standards, policies and guidelines may be referred for conduct proceedings.

Every member of the student community must assume responsibility for becoming educated about the various university and housing standards, policies and guidelines. It is against the basic nature of this community for anyone to demean or discriminate against another human being. A caring, educational community does not tolerate physical or psychological threats, harassment, intimidation or violence directed against a person.

Such behavior is subject to the university conduct processes.

Diversity

We are committed to a campus community where diversity is appreciated and valued, and where all individuals are treated fairly and with respect. We encourage curiosity, open communication, continuous learning and community service as ways to create a socially just environment. We support the right to respectful disagreement with ideas and philosophies different from their own. However, we do not permit any form of behavior that places anyone in dangerous, discriminatory, or harassing environments. As a community, we expect all community members to work towards these same goals.

Article I – Authority

Article 7, Part B, of the Laws of the Regents requires each campus to develop a student code of conduct. The Office of Community Standards and Wellness (CSW) is authorized to establish and administer this policy. Any questions regarding interpretation of this code or any of its provisions should be directed to the assistant vice chancellor for university life or his/her designee for final determination.

1. The director of community standards and wellness shall appoint student conduct officers and appeals officers and determine which student conduct administrator and appeals officer shall be authorized to hear each matter.
2. The director of community standards and wellness shall develop policies for the administration of the student conduct system and procedural rules.
3. Decisions made by a student conduct administrator shall be final, pending the normal appeal process.

Article II – Jurisdiction

1. The University of Colorado Denver (CU Denver) student conduct code shall apply to conduct that occurs on university premises, university-sponsored programs or activities, Campus Village Apartments and to off-campus conduct that adversely affects the university community, poses a threat to the safety of persons or property, or damages the institution's reputation or relationship with the greater community. In addition, CU Denver, in collaboration with the communities of the greater Denver metropolitan area, may respond to student violations of community-based laws and ordinances designed to protect civility and quality of life. The director of community standards and wellness or his/her designee shall decide whether the Student Conduct Code shall be applied to conduct occurring off-campus on a case-by-case basis.
2. Each student shall be responsible for his/her conduct from the time of application for admission through the actual conferral of a degree, even though conduct may

occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment. The disciplinary process may proceed even if the student withdraws from school while a disciplinary matter is pending.

3. It is the duty of all students who are potential parties or witnesses to an alleged violation of the student code of conduct to participate conscientiously. Students have a duty to cooperate and to discuss the incident with an investigator and conduct officer, adhere to stated deadlines, attend scheduled meetings and participate in all proceedings. Failure to meet these duties may result in a decision being made without the benefit of the student's participation or may result in a student being charged with failing to comply with the direction of a university official (Article IV, 12). It is the responsibility of a charged student to seek modification to any criminal or civil restraining orders to allow for the completion of any conduct process defined in the student conduct code.
4. Proceedings initiated under this policy are separate from civil or criminal proceedings that may relate to the same incident. Investigations or conduct proceedings by the university are not postponed while criminal or civil proceedings are pending unless otherwise determined by the conduct officer.
5. The unexcused failure of a student to appear and/or respond to the conduct process does not prevent the university from proceeding with the conduct process.

Article III – Definitions

1. *Acceptance of Responsibility.* The charged student agrees that their behavior constitutes a violation of the code of conduct, as outlined in the conference notice.
2. *Affirmative Consent.* For the purposes of this rule, consent shall be defined as the act of knowingly and voluntarily agreeing verbally or nonverbally to engage in sexual activity. An individual cannot consent who is obviously substantially impaired by any drug or intoxicant; or who has been purposely compelled by force, threat of force, or deception; or who is unaware that the act is being committed; or whose ability to consent or resist is obviously impaired because of a mental or physical condition; or who is coerced by supervisory or disciplinary authority.
3. *Aggravating Factor.* Any circumstances accompanying the commission of misconduct that add to its seriousness. Examples may include the use of violence or force, violation of a trust or duty, premeditation of an incident, the existence of a previous conduct violation, and elements of hate and bias.
4. *Appeal Officer.* Any individual appointed by the director of community standards to process student conduct appeals.
5. *Complainant.* Any person who submits a report alleging that a student violated this student code.

6. *Conduct Administrator/Conduct Officer.* Any individual appointed by the director of community standards and Wellness to process student conduct matters.
7. *Conduct Process.* Any process outlined in this student conduct code policies and procedures.
8. *Designation.* A student's classification; i.e., graduate, undergraduate, continuing education, degree seeking or non-degree-seeking.
9. *Faculty Member.* Any person hired by the university to conduct classroom or teaching activities or who is otherwise considered by the university to be a member of its faculty.
10. *Member of the University and Campus Community.* Includes any person who is a student, faculty member, university official or any other person employed by the university. This term also applies to students, faculty members and university officials of the other institutions on the Auraria Campus, including but not limited to: the Metropolitan State College of Denver (MSCD), the Community College of Denver (CCD), and the Auraria Higher Education Center (AHEC). A person's status in a particular situation shall be determined by the director of community standards and wellness.
11. *Mitigating Factor.* Extenuating circumstances that may be taken into account to reduce a sanction. They do not constitute a justification or excuse for the offense in question.
12. *Parent.* A student's parent or legal guardian.
13. *Peace Officer.* A person designated by the University of Colorado, its agents, or the state or federal government with the responsibility of enforcing laws or policies.
14. *Policy.* The written regulations of the University as found in, but not limited to, the student code of conduct, Campus Village resident handbook, the university web page and computer use policy, and graduate/undergraduate catalogs.
15. *Preponderance of Evidence.* What happened more likely than not, or "50% plus a feather." This shall be the standard of proof used in all conduct proceedings under this code.
16. *Respondent.* Any student accused of violating this student code.
17. Student. The term student includes all persons taking courses at the university, either full time or part time, pursuing undergraduate, graduate or professional studies, as well as non-degree students and concurrently enrolled high school students. This also includes individuals admitted, those attending orientation sessions and those that were enrolled at the date of an alleged incident. Persons who withdraw after allegedly violating the student conduct code are also considered "students." This student code applies at all locations of the university, including the Denver and Anschutz Medical campuses and any off-campus locations hosting classes or official university functions may be held.
18. *University.* The University of Colorado Denver.
19. *University Official.* A university employee working in the performance of his or her duly authorized duties. University officials may be full or part time, or may be student staff members or resident advisors.

20. *University Premises.* Includes all land, buildings, facilities and other property in the possession of or owned, used or controlled by the university (including adjacent streets and sidewalks, all AHEC facilities, and Campus Village Apartments)
21. *Witness.* Any individual who may have information relating to a conduct case.
22. *Working Day.* Monday through Friday, except for official university holidays.

Article IV – Rules, Regulations and Statement of Community Expectations

The conduct listed below is prohibited, as are attempts to commit, aid, abet or incite others to commit conduct prohibited by this code. Engaging in retaliatory acts against a person who reports an alleged violation of the code or testifies, assists or participates in a conduct proceeding or investigation is a violation of this code.

The recommended minimum sanction for violating any of the below standards with bold type shall be suspension unless specific and significant mitigating factors are present.

1. Assaulting or physically abusing another person or being involved in brawling.
    a. **In the case of a student who is found responsible via the student conduct code process to have caused severe injury or bodily harm, the minimum sanction shall be suspension.**
    b. Severe injury and bodily harm includes but is not limited to the following: broken bones, concussions, lacerations, etc.
2. Intimate partner violence. Intimate partner violence is conduct between people who are or were involved in a sexual or romantic relationship when one person in the relationship causes harm or significant alarm or distress to the other person. This includes but is not limited to threats, assault, or other action against the person or their property when used as a method of coercion, control, punishment, intimidation or revenge. For more information on interpersonal violence policies and procedures please see Appendix V.
3. Threatening or endangering the health or safety of a person (one's self or others).
4. Sexual Misconduct: Sexual misconduct includes nonconsensual sexual intercourse, nonconsensual sexual contact and sexual exploitation or exposure, and sexual harassment.
    a. **Nonconsensual sexual intercourse:** Nonconsensual sexual intercourse is any sexual intercourse (anal, oral or vaginal), including sexual intercourse with an object, however slight, by one person upon another without consent.
    b. **Nonconsensual sexual contact:** Nonconsensual sexual contact is any sexual touching (including touching with an object), however slight, by one person on another without consent.

c. Sexual exploitation and/or exposure: Sexual exploitation is when a student takes nonconsensual, unjust or abusive sexual advantage of another for his/her own pleasure, advantage or benefit, or to pleasure, benefit or advantage anyone other than the one being exploited. Sexual exposure occurs when a student engages in lewd exposure of the body done with the intent to arouse or satisfy the sexual desire of any person.
d. Sexual harassment

Note: For the purposes of this rule, consent shall be defined as the act of knowingly and voluntarily agreeing verbally or nonverbally to engage in sexual activity. An individual cannot consent who is obviously substantially impaired by any drug or intoxicant; or who has been purposely compelled by force, threat of force, or deception; or who is unaware that the act is being committed; or whose ability to consent or resist is obviously impaired because of a mental or physical condition; or who is coerced by supervisory or disciplinary authority.

5. Indecently exposing one's body.
6. **Stalking.** Repeated conduct which reasonably and subjectively causes another person to fear for his/her safety or repeated conduct which causes a person to alter his/her activities in response to the repeated conduct. Such repeated conduct may include but is not limited to any of the following: following or approaching a person or a member of that person's family or household; contacting a person or a member of that person's family or household whether or not conversation ensues; and placing a person or a member of that person's family or household under surveillance.
7. **Hazing.** Any action or situation that recklessly or intentionally endangers the health, safety or welfare of an individual for the purpose of initiation, participation, admission into or affiliation with any organization at the University. Hazing includes, but is not limited to, any abuse of a mental or physical nature, forced consumption of any food, liquor, drugs or substances, or any forced physical activity that could adversely affect the health or safety of an individual. Hazing also includes any activity that would subject the individual to embarrassment or humiliation, the willingness of the participant in such activity notwithstanding. (See Appendix 2)
8. Abusive conduct. Unwelcome conduct by an individual(s) that is sufficiently severe or pervasive that it alters the conditions of education or employment and creates an environment that a reasonable person would find intimidating, hostile or offensive. The determination of whether an environment is "hostile" must be based on all of the circumstances. These circumstances could include the frequency of the conduct, its severity and whether it is threatening or humiliating. Simple teasing, offhand comments and isolated incidents (unless extremely serious) will not amount to abusive conduct.
    a. This policy should not be construed, and will not be enacted, to deny any student the right of free speech and expression.

9. Violating any federal, state or local law or university regulation or policy. University policy may include but is not limited to:
    a. Violating the university's administrative policy statement entitled, "Sexual Harassment Policy Campus Appendix."
    b. Violating the University of Colorado Denver policy entitled, "Non-Discrimination Policy."
    c. Violating the University of Colorado Denver policy entitled, "Computing Policy Statement."
10. Interfering with, obstructing or disrupting a University activity.
    a. University activities include, but are not limited to, all normal university activities, such as teaching, research, recreation, meetings, public events and disciplinary proceedings.
    b. This prohibition includes, but is not limited to, interference, obstruction or disruption of the freedom of expression or movement of students or other members of the university community and their guests.
11. Interfering with, obstructing or disrupting police or fire responses. This prohibition includes, but is not limited to:
    a. Resisting arrest.
    b. Failing to abide by the directions of a peace officer.
    c. Tampering with, impairing, disabling or misusing fire protection systems such as smoke detectors, fire extinguishers sprinklers or alarms.
    d. Failing to evacuate during a fire **alarm**.
    e. **Arson/setting fires.**
12. Failing to comply with the direction of university or housing officials who are performing their duties. Students are required to comply with instructions or directions given by University or housing officials, including, but not limited to, an instruction to present identification and an instruction to appear at conduct proceedings or other mandatory meetings.
13. Failing to abide by or complete a university sanction in a satisfactory manner, including violating the student conduct code while on university probation or suspension in abeyance.
14. Providing false information to university officials, student conduct administrators or peace officers in performance of their duties or forging, altering, falsifying or misusing documents or records or knowingly using/possessing forged, altered or false documents or records.
15. Retaliating against or discouraging an individual from participating in a university process, acting improperly to influence a university conduct process, or the unauthorized release of confidential student or university information/records.
    a. Direct contact with an individual or conduct body or contact through third party may constitute a violation of this provision.
16. Violating any policy or procedure listed in the Campus Village at Auraria Resident Handbook while in Campus Village. See a complete list of Campus Village policies and procedures at:

http://www.ucdenver.edu/life/services/housing/prospective-students/international-students/Documents/CampusVillageatAuraria_Handbook.pdf.

17. Unauthorized entry into or exit from a university facility or property including Campus Village Apartments.
18. Damaging university property or property belonging to another.
19. **Engaging in, inciting or arming someone for a riot or public disturbance.**
20. Use of electronic or other devices to make an audio or video record of another person without that person's express consent and/or knowledge when such a recording is likely to cause injury or distress to the individual being recorded.
21. **Possessing firearms, explosives, fireworks, incendiary devices, ammunition or other weapons on campus.**
    a. Possession of a harmless instrument designed to look like a firearm, explosive or dangerous weapon is also prohibited by this policy (including but not limited to BB guns, pellet guns, airsoft guns, martial arts equipment and knives with a blade over 3" in length).
    b. As mandated by regent's policy, in the case of a student who is found responsible via the student conduct code process to have intentionally or recklessly used or possessed a weapon in a way that would intimidate, harass, injure, or otherwise interfere with the learning and working environment of the university, the minimum disciplinary sanction shall be expulsion.
    c. In the case of a harmless instrument as described in section 21a., the minimum sanction shall be expulsion if the student used the item with the intent to cause fear in or assault to another person.
    d. **Mere possession of firearms, explosives, fireworks, incendiary devices, ammunition, other weapons or instruments designed to look like any of the above will result in suspension unless mitigating factors are present.**
22. Theft, including but not limited to, possessing property known to be stolen, or taking property of another without consent, even with an intent to return the property.
23. Possessing, using, providing, **manufacturing, distributing or selling** drugs or drug paraphernalia or prescription drugs in violation of law or university policies.
    a. If the violation occurs in Campus Village Apartments, this prohibition includes a student who knew or reasonably should have known, s/he was in the presence of illegal drugs or drug paraphernalia or prescription drugs.
    b. Attending classes or university functions while under the influence of drugs/illegal substances shall also be considered a violation of this policy. This includes inappropriate alcohol-related behavior at official university functions where alcohol is served.
    c. **In the case of a student who is found responsible via the student conduct code process to have endangered the health, safety or**

welfare of an individual through the provision of drugs, the minimum disciplinary sanction shall be suspension.

Note: Although possession and use of marijuana for certain medical conditions consistent with the requirements of the Colorado Constitution is no longer a crime in the state of Colorado, the possession and use of marijuana remains illegal under federal law. Consistent with federal law, including the Controlled Substances Act and the Drug Free Schools and Communities Act, the use and/or possession of marijuana continues to be prohibited while a student is on campus, including while in campus housing.

NOTICE TO STUDENTS CONCERNING PENALTIES FOR DRUG VIOLATIONS.
(1) NOTICE UPON ENROLLMENT—Each institution of higher education shall provide to each student, upon enrollment, a separate, clear and conspicuous written notice that advises the student of the penalties under section 484(r).

(r) SUSPENSION OF ELIGIBILITY FOR DRUG-RELATED OFFENSES—

(1) IN GENERAL—A student who has been convicted of any offense under any federal or state law involving the possession or sale of a controlled substance shall not be eligible to receive any grant, loan, or work assistance under this title during the period beginning on the date of such conviction and ending after the interval specified in the following table:

If convicted of an offense involving:
The possession of a controlled substance: Ineligibility period is:
First offense ..... 1 year
Second offense ..... 2 years
Third offense ..... Indefinite
The sale of a controlled substance: Ineligibility period is:
First offense ..... 2 years
Second offense ..... Indefinite

Article V – Student Conduct Code Procedures – Individual Students

A. Charges

1. The discipline process can be initiated by police reports, Campus Village incident reports, or a report from any faculty, administrative staff, student or other member of the university/campus/general community. This process is initiated through the submission of a written account of the incident to the Office of Community Standards and Wellness.

2. In some cases, alternative dispute resolution such as restorative justice or mediation may be offered by mutual consent of the parties involved and on a basis acceptable to the conduct officer. A written summary of these agreements are provided to all parties. These agreements are binding and once entered are not subject to appeal. Failure to abide by the agreements could result in the situation being returned through the conduct process for possible disciplinary action.
3. Upon the receipt of a written report, the conduct officer may determine that there is sufficient reason to charge the student with a violation of the student conduct code and a university disciplinary hearing is warranted. The conduct officer may 1) initiate conduct proceedings by sending the student a conference notification; 2) resolve the situation through an informal resolution process including but not limited to mediation or a meeting between the respondent and a student conduct officer or a third party; or 3) determine that the facts of the complaint or report, even if true, would not constitute a violation of the conduct code or applicable policy.

B. Conference Notification

1. All charges shall be presented to the respondent in electronic form via their official CU Denver e-mail account. This notification will provide the respondent with information on how to obtain or review the initiating reports and set a time for the conference. The notification shall also include:
    1. A description of the alleged misconduct and violation
    2. The conduct code provisions that are alleged to have been violated
    3. Instructions on how to request copies of records obtained from outside agencies
    4. An explanation of the student conduct process
2. Conferences are scheduled not less than three (3) business days (less than the three day minimum would require mutual agreement between the student and conduct officer) nor typically more than fifteen (15) business days after the student has been notified of the charges
    1. Expedited Process
        i. When the conduct officer determines that a prompt review is essential (e.g., end of the semester, the student is graduating or there is substantial concern for the health, safety or welfare of a member of the university community), the conduct officer may require that the student meet with him or her within 24-48 hours. In these cases notice may be given by telephone or by e-mail.
3. The notification may contain specific requirements or restrictions, pending the resolution of the matter through the conduct process as needed to protect the interests of involved students or the university. These requirements could include but are not limited to, temporary relocation in student housing, restriction from specific campus locations, or orders prohibiting contact with complainants or

witnesses. The notification will be sent to the student's official university e-mail address.

C. Options for Resolution of Disciplinary Charges

After review of the information contained with the conference notification, the respondent has the following options:

1. Accept responsibility for the charges
    a. When the respondent substantially agrees with the contents of the complaint and accepts responsibility for the infraction, the conference will involve an administrative meeting with the conduct officer to determine the appropriate level of discipline and other sanctions or restorative resolution outcomes.
2. Dispute the charges
    a. In the event that the student does not accept responsibility for the charges or substantially disagrees with information contained within the report, a formal university conduct conference will be conducted.
3. 3. Alternative Dispute Resolution Methods
    a. In some instances there may be additional options offered to resolve the conflict or concern. These shall be utilized at the discretion of the conduct administrator.

D. Conferences

Student conduct conferences shall be conducted by university conduct officers according to the following guidelines:

The complainant and the respondent may be accompanied by an advisor or support person of their choice at their own expense. Such advisor may be an attorney. Since the direct interaction with the student(s) involved is essential to the educational relationship with the university, the advisor is limited to counseling the student and may not act as a representative of the student, speak on the student's behalf or participate directly in any conference.

University conduct officers may also consult with or choose to have University Counsel, in an advisory capacity, present at a conference. The student conduct officer reserves the right to remove the advisor/support person should s/he not adhere to the above guidelines or become a disruption to the process.

If a student chooses to bring an advisor to the meeting, it is the student's obligation to select an advisor whose schedule allows attendance within the time frame designated in the student conduct conference notice. The conduct officer is not obligated to reschedule the conference to accommodate attorneys acting as advisors to students.

University conduct conferences and administrative meetings are considered private educational interactions between the student(s) and the university. The complainant, respondent and their advisors, if any, shall be allowed to attend the entire conference at which information is received (excluding deliberations). Admission of any other person to the conference shall be at the discretion of the conduct officer.

Pertinent records, exhibits and written statements, including personal impact statements, may be accepted as information for consideration. The complainant and the respondent shall be allowed to review and respond to any reports or statements the conference officer will consider as the basis for the charges or determination of evidence related to the conference. Reports may be redacted in order to protect the privacy of educational records of all parties involved.

The complainant and the respondent will have the opportunity to present his/her own version of the incident or events by personal statements, as well as through written statements from witnesses and other forms of documentation or information. If a respondent, with notice, does not appear for the conference, a decision may be made in their absence taking into consideration the totality of the information related to the charges available at the time of the conference.

For official purposes of the university conduct process there shall be a single verbatim record of the proceedings maintained by the university. This record shall remain the property of the university and will not be disseminated. A student may request a review of the recording in accordance with the community standards and wellness records request procedures.

In disputed cases, the complainant, the respondent may provide written statements from witnesses and/or ask for relevant witnesses to be contacted by the conduct officer. Witnesses shall be present only during the time they are presenting information in the conference. Witnesses will provide information to and answer questions directed from the conduct officer. Questions may be suggested by the respondent and/or complainant to be answered by each other or by witnesses. In order to preserve the educational tone of the conference and to a manage the proceedings appropriately, the conduct officer may ask that all questioning be directed through him/her and use discretion related to limiting repetitive information/statements.

All procedural questions are subject to the final decision of the conduct officer. If information presented in the conference creates additional need for clarification or investigation, or to accommodate irresolvable scheduling conflicts with key witnesses, the conduct officer may reschedule the conference.

If the conference involves more than one respondent, the conduct officer, in his or her discretion, may permit the conferences concerning each student to be conducted either jointly or separately. The conduct officer may accommodate availability and/or remote location of witnesses through conference phone calls or other alternate means. Accommodations may also be made related to concerns for the personal safety, well-

being, and/or fears of confrontation of the complainant, respondent, and/or or other witness during the conference by providing separate facilities, by using a visual screen, and/or by permitting participation by telephone, videophone, closed circuit television, video conferencing, videotape, audio tape, written statement or other means, where and as determined in the sole judgment of the conduct officer to be appropriate.

Formal rules of process, procedure or evidence as established and applied in the civil or criminal justice system do not apply to this process.

E. Decisions

After the conference concludes, the conduct officer will review all pertinent information and make a determination related to each of the charges specified from the student conduct code. The determination is based on the preponderance of evidence standard- whether it is more likely than not that the respondent violated the student conduct code. conduct officers have the authority to determine the appropriate level of discipline action taking into consideration the severity of the infraction, impact on individuals or the community and the past record of discipline.

In addition to the sanctions listed below, the conduct officer may place limits or conditions, require relocation in or removal from Campus Village, restitution, community service and/or specify participation in educational programs and interventions including but not limited to those related to alcohol or drug use, ethical decision making, personal counseling, community issues and restorative justice.

Written notice of the conduct officer's decision will be sent to the student within fifteen (15) business days of the conference. The notification shall consist of the determination of responsibility, level of discipline imposed and a complete description of any sanctions or requirements.

In disputed cases, when the respondent is found responsible for the charges, the notification will also include a summary of the basis for the determination. A copy of the decision may also be sent to other appropriate university offices.

F. Sanctions

The following sanctions may be applied when appropriate to individual students.

More than one of the sanctions listed below may be imposed for any single violation. Failure to complete disciplinary sanctions within required deadlines will result in a hold being placed on the student's registration status. These sanctions may include but are not limited to:

- Warning or Written Reprimand - A student may be given a warning or written reprimand for minor infractions.

- General Disciplinary Probation - Probation is for a designated period of time during which the student is required to show appropriate changes in attitude and behavior. Specific sanctions or restrictions may be imposed as a part of this sanction but do not result in loss of good standing with the university. A violation of the terms of general disciplinary probation, or subsequent misconduct after discipline, is grounds for further disciplinary action, including loss of good standing, suspension, or expulsion.
- Disciplinary Probation/Loss of Good Standing - Probation is for a designated period of time in which appropriate changes in attitude and behavior are expected to occur. Specific sanctions or restrictions may be imposed as a part of this probation. A student on this disciplinary probation is not in good standing with the university. Good standing shall include but not be limited to a requirement for eligibility to represent the university, to serve on a university committee, to participate in intercollegiate or sports club athletics, and for recognition by the university including any office held in a student organization. A violation of the terms of disciplinary probation or subsequent misconduct is grounds for further disciplinary action, including suspension or expulsion.
- Discretionary/Educational Sanctions - Educational programs or assignments, restorative justice, mediation, community service, individual assessment, counseling, substance abuse education, intervention or treatment, or other related discretionary sanctions may be offered or required.
- Restitution - Compensation for loss, damage or injury. This may take the form of appropriate service or monetary or material replacement.
- Residential Reassignment - A student may be reassigned to another student housing room when disruption has occurred in the residential community or in order to separate persons on a temporary or permanent basis. The student will be responsible for all costs and fees associated with relocation as a result of this sanction.
- Residential Termination/Eviction - Permanent separation of the student from Campus Village as a result of a student conduct conference. The university expects first-year students to live in student housing and manage their behavior to comply with community standards. If a first year student is expelled from the Campus Village, the conduct office will determine if the student may be allowed to continue as a student without complying with the university's live-in regulations.
- Disciplinary Suspension - Suspension for a distinct period of time and/or the specification that a student must fulfill certain requirements before re-admission or re-instatement will be considered. While suspended, the student is not entitled to attend classes, use university facilities, participate in university activities, or be employed by the university. Special conditions may be stipulated for reinstatement at the conclusion of the period of suspension. The student is not in good standing with the university during the term of the suspension.

- Suspension in Abeyance - A suspension may be held in abeyance or deferred under special conditions in which the student participates in a designated program as a condition to remain in school under a strict probationary status.
- Disciplinary Expulsion - Expulsion is permanent removal from the university with no opportunity to return.
- Revocation of Admission or Degree - Admission to or a degree awarded from the university may be revoked for fraud, misrepresentation, or for other serious violations committed by a student prior to matriculation or graduation.
- Withholding of Degree - The university may withhold awarding a degree otherwise earned until the completion of the process set forth in this student conduct code, including the completion of sanctions imposed.
- Parental Notification - Parents may be notified of disciplinary decisions when a student under the age of 21 is found responsible for engaging in an infraction(s) involving alcohol, drugs, or the threat or use of violence and the disciplinary decision involves disciplinary probation, suspension, or expulsion and/or student housing relocation or expulsion. Letters are sent to the primary parent address provided to the university.
- Exclusion/Trespass – The student is denied access to all or a portion of campus. Unless otherwise noted exclusion includes all buildings and property on the Auraria Campus and any building owned or operated by cUDenver. When a student is excluded from campus, that student may be permitted onto campus for limited periods and specific activities with the permission of the director of community standards or his/her designee. Should the student enter campus without permission, action may be taken by the police for trespass, including arrest.
- Interim Suspension - The chancellor, provost and the associate vice chancellor for student affairs, and their designee(s) have the authority to suspend on an interim basis, pending final disposition of the case, any student when, in the opinion of these officials, such a suspension is necessary to: Maintain order on the campus; Preserve the orderly functioning of the university; Stop interference in any manner with the public or private rights of others on university premises; Stop actions or potential actions that threaten the health or safety of any person; or Stop actions or potential actions that destroy or damage property of the university, its students, faculty, staff or guests. Interim suspension will also include excluding the student from campus. This exclusion begins immediately upon notice from the appropriate university official, without a conference with a conduct officer. A conference with a conduct officer is then scheduled as soon as possible (usually within 10 calendar days) to determine how the case will continue and to begin the conduct process. In extreme matters, an interim suspension may be put in place until a student receives a final disposition in a court process after having been charged with a serious crime.

G. Appeal of a Disciplinary Decision

A student may only appeal if s/he has received a sanction including loss of good standing, housing termination, suspension or expulsion. A decision reached by a conduct officer may be appealed to a university appeals officer by either the respondent(s) or complainant(s). For an appeal to be considered it must meet at least one of the criteria listed below.

The appellant shall submit a written request for an appeal through the community standards and wellness website. The appeal must be specific and clearly state the reasons for the request. The appeal request shall be submitted within three (3) business days of the date the appellant is notified of the decision rendered by the conduct officer. Failure to submit a request for appeal within the specified time will render the decision of the conduct officer final and conclusive. An extension may be granted at the discretion of the conduct officer.

Except as necessary to explain the basis of new information, an appeal shall generally be limited to a review of the record of the conference and supporting documents for one or more of the following reasons: To determine whether the conference was conducted fairly in light of the charges and information presented, and in conformity with proscribed procedures giving both the respondent and complaining parties the opportunity to prepare and present relevant information to be considered in the determination of an appropriate outcome.

Minor deviations from designated procedures will not be a basis for sustaining an appeal unless there is a demonstrable adverse effect on the outcome of the conference. To determine whether the sanctions(s) imposed were appropriate for the violation of the student conduct code which the student was found to have committed. To consider new information, sufficient to alter the decision or other relevant facts not brought out in the original conference, because such information and/or facts were not known to the person appealing at the time of the original conference. This does not include information that was known at the time of the conference but was not shared.

The university appeals officer will review the written request for appeal to determine if the acceptable grounds for the appeal are met. After review of the appellant’s request, which may include but is not limited to review of the record, the appeals officer shall take one of the following actions:

- If the appeal does not meet one or more of the stated criteria the appeal will be denied.
- Affirm the decision: the appeals officer agrees that the information before him or her supports the decision reached by the conduct officer.
- Return the case to the original conduct officer for further consideration; while the case is being reconsidered, the student must continue to abide by any stated conditions When questions of law arise, the appeal
- Officer may consult with University Counsel.

- If an appeal is returned to the original conduct officer to consider new information, the general process outlined under conference procedures will be used.
- The appeals officer will communicate his or her decision in writing in a timely manner. Except where the matter is returned to the conduct officer for further consideration, the matter shall be considered final and binding upon all involved.

Article VI – Student Records

A. Student Records

1. Student disciplinary records will be maintained in keeping with the Federal Family Educational Rights and Privacy Act of 1974 (FERPA) and subsequent amendments and the guidelines for implementation. The record of disciplinary actions will be kept in the community standards and wellness office. Disciplinary records are actively maintained for a minimum period of seven years from the date of graduation or withdrawal from the university. Expulsion is a permanent notation on the official transcript. Information regarding a student's disciplinary record is available to persons or offices internal to the university or at institutions where a student seeks to enroll who have a "demonstrated educational need to know." Disclosure of disciplinary records outside of the above listed entities generally requires a written release from the student. This may also include parents.
2. Every student may review, upon request, all nonconfidential contents of his/her conduct file, to the extent permitted by law.
3. Release of Conduct Information –
    a. Provisions of the Family Educational Rights and Privacy Act of 1974, as amended by the Higher Education Amendments of 1998, govern access to a student's academic transcript or conduct file. The student and/or those university officials who demonstrate a legitimate educational need for disciplinary information may have access to the student's conduct file. Parent(s) who provide proof that a student is a dependent as defined in Section 152 of the Internal Revenue Code of 1954, i.e., a copy of the last federal income tax return listing the student as a dependent, can have access to the student's conduct file without written consent of the student. In this case, parents may also have access to a conduct file even if the student has requested otherwise.
    b. In addition, parent(s) may be notified if a student under 21 years of age is found responsible for a violation involving use or possession of alcohol or other drugs. All other inquiries, including but not limited to inquiries from employers, government agencies, news media, family, friends or police agencies, require a written release from the student before access to university conduct files is granted. Information may be released pursuant

to a lawfully issued subpoena and as provided by the Campus Security Act as amended by the Higher Education Amendments of 1992.

c. The Campus Security Act permits higher education institutions to disclose to alleged victims of any crime of violence (murder, robbery, sexual assault, aggravated assault, burglary, motor vehicle theft, arson) the results of the conduct proceedings conducted by the institution against an alleged perpetrator with respect to such crime. The Campus Security Act also requires that both accused and the accuser be informed of the result of campus conduct proceedings involving a sexual assault.

B. Transcript Notations and Holds

1. Notations of disciplinary action on the student's transcript will only be made by the Office of Community Standards and Wellness.
    a. Disciplinary expulsion will be permanently noted on the academic transcript.
    b. Disciplinary suspension is noted on the transcript during the period of suspension and/or until the conditions for re-admission have been met. In the case of suspension, when the conditions for re-admission have been met.

C. Conduct Hold

1. While conduct proceedings are pending, the university may place a conduct hold on the student’s records. The disciplinary hold is honored by the University of Colorado at Denver campus, including Continuing Education, and prohibits the student from registering for classes until the conduct process, has been completed. The hold prohibits the academic transcript from being released until all actions have been completed.
2. A conduct hold shall be placed on a student’s record if they are suspended as the outcome of the conduct proceedings. A conduct hold is honored by all University of Colorado campuses and prohibits a student from being admitted to any of the campuses and from registering for classes until the suspension period is over and the student has reapplied and has been re-admitted.

Article VII – Victims

A. Records

In situations involving both a respondent student(s) (or group or organization) and a student claiming to be the victim of another student’s conduct, the records of the process and of the sanctions imposed, if any, shall be considered to be the education records of both parties because the educational career and chances of success in the university of

each may be impacted. This provision allows for alleged victims/complainants to participate in the hearing process and be informed of the determination and sanctions imposed, if any. In addition, at the victim's request, be informed (to the extent permitted by law) of the impending return of the respondent student to campus, if the conditions of the suspension were met prior to the victim's departure/graduation from campus.

B. Support for Victims:

1. The university is committed to providing appropriate support and referrals to persons who have been the victims of crimes or violations of the student conduct code. A student who has experienced being the victim of another person's unlawful or prohibited actions may choose to seek personal support, explore options and report the incident.
2. Strictly confidential services are available through the University Counseling Center and Student Health Center. Other University agencies may be required by law and university policy to take appropriate action when notified.
3. Victims also have the option to receive assistance from other appropriate university resources. This could include assistance in relocation within or to campus housing if desired; referral for academic support services; notification of appropriate persons/agencies; and at the victim's request, to receive university cooperation in using university procedures to deter harassment or retribution.
4. Students are encouraged to report complaints of:
    - sexual harassment or discrimination to the Office of Equal Opportunity and Diversity
    - crimes to the Auraria Campus Police or Denver Police
    - violations of the university conduct code to housing staff and/or the Office of Student Life
    - interpersonal and sexual violence to the Office of Student Life and Auraria Campus police
    - violations of their right to free speech in the classroom directly to the faculty member involved or his/her department chair or the Office of Student Life

Article VIII: Interpretation and Revision

Under the authority of the Board of Regents, any question of interpretation or application of the student conduct code shall be referred to the associate vice chancellor for student affairs or his or her designee for final determination.

The student conduct code shall be reviewed every five years under the direction of the chief conduct officer, in consultation with legal counsel.

Use of University/Auraria Property or Facilities

Nothing in this code of conduct shall be construed to prevent peaceful and orderly assembly for the voicing of concerns or grievances. The university is dedicated to the pursuit of knowledge through a free exchange of ideas, and this shall be a cardinal principle in the determination of whether or not a proposed use of university facilities is appropriate.

The Auraria Higher Education Center has established campus regulations and procedures governing the use of CU Denver/Auraria grounds, buildings and other facilities. Such regulations are designed to prevent interference with university functions and activities. Except where otherwise specifically authorized, or when members of the public are invited, the use of CU Denver/Auraria facilities shall be limited to faculty, staff and students of the CU Denver/Auraria Campus and to organizations having chapters, local groups or other recognized university-connected representation among faculty, staff or students of the three academic institutions on the Auraria Campus.

Classroom Conduct

Students are expected to conduct themselves appropriately in classroom situations. If disruptive behavior occurs in a classroom, an instructor has the authority to ask the disruptive student to leave the classroom. Should such disorderly or disruptive conduct persist, the instructor should report the matter to the Auraria Campus Police Department and/or the appropriate dean's office. The appropriate dean or his/her representative may dismiss a student from a particular class for disruptive behavior, while the student discipline committee may recommend to the director of community standards and wellness to withdraw, suspend, permanently expel and/or permanently exclude the student from the campus. Appeal questions concerning disruptive behavior should be directed to the academic dean's office when withdrawal from a class is involved and to the director of community standards and Wellness when suspension or expulsion from the university is involved.

Tri-Institutional Violations

Procedures in deciding violations of the code of student conduct involving students from other academic institutions on the Auraria Campus have been developed by the Denver Campus and the institution(s) involved. In such cases, the assistant director of student life should be contacted.

Amorous Relationships

Amorous relationships exist when two individuals mutually and consensually understand a relationship to be romantic and/or sexual in nature. The policy requires only that direct evaluative authority not be exercised in cases where amorous relationships exist or existed within the last seven years between two individuals whether the same or opposite sex.

The policy is intended to establish a reporting structure to protect participants in these relationships from violations of university conflict-of-interest guidelines (when a direct evaluative relationship exists between two employees or between an employee and a student). The relationship must be disclosed to the unit head, department chair, dean or head of the primary unit with all parties present. The person to whom disclosure is made must take action to resolve the conflict and must keep the information confidential. The individual in the evaluative position shall recuse her or himself from all future evaluative actions. The parties may choose to have this disclosure in written form placed in their own personnel files. (This information is removed and destroyed seven years after the time of disclosure if requested and if the relationship has ended.) The responsibility to disclose rests with the person in the evaluative position. A report of the action taken to resolve the conflict must be made to the chancellor or designee who may require other action.

When a relationship exists, either current or within the last seven years, between an individual and an employee who, although not his/her direct supervisor but is in a direct line of report (e.g., dean involved with a faculty member in his/her college or a second or higher level supervisor who in involved with a staff member in the unit), the higher-level employee may not act in an evaluative capacity. When these individuals are parties to a personnel action (appointments/hiring, firing/layoff, promotions/demotions, tenure decisions, salary setting, performance appraisals, grievance and disciplinary procedures), the evaluative authority must recuse himself/herself from participating in the action. The action taken to resolve the conflict must be reported to the chancellor or designee.

Antiviolence

The University of Colorado Denver strives to maintain a campus free of and prohibits violent behavior, including but not limited to verbal and/or physical aggression, attack, threats, harassment, intimidation or other disruptive behavior in any form or by any media, which causes or could cause a reasonable person to fear physical harm by any individual(s) or group(s) against any person(s) and/or property. This policy applies to academic, administrative, research and service departments, programs activities and/or services wherever university business is conducted, including extended studies and international locations.

Employees, students and visitors who engage in prohibited behavior shall be held accountable under university policy, as well as local, state and federal law. Any employee or student who commits or threatens to commit violent behavior shall be subject to disciplinary action, up to and including dismissal or expulsion, as well as arrest and prosecution. Any visitor who commits or threatens to commit violent behavior shall be subject to exclusion from the campus, termination of business relationships and/or arrest and prosecution.

Prohibited Behaviors

Examples of prohibited behaviors may include but are not limited to: (1) disturbing the peace by violent, tumultuous, offensive or obstreperous conduct; (2) engaging in intimidating, threatening or hostile statements or actions; (3) making gestures that convey threats; (4) raising one's voice in anger or using fighting words; (5) uttering ethnic, racial or sexual epithets; (6) using unseemly, profane, offensive or obscene language or making obscene gestures; (7) making bizarre comments about or references to violent events and/or behaviors; (8) waving fists, pushing, stalking, bullying, hazing; (9) engaging in the abusive exercise of legitimate authority; (10) destroying personal property in the workplace; (11) destroying university property; (12) throwing objects at persons or property; (13) physically assaulting or attacking persons or property; (14) engaging in vandalism, arson or sabotage.

Weapons

The possession, display or use of any weapon, including any firearm, or the display or use of any object as a weapon, by any person other than a law enforcement officer in the course of his/her duty, in any location where university business is conducted, is in violation of Regental Policy (14-I) and is strictly prohibited. Possession of a firearm or weapon on University of Colorado Denver-owned property or the Auraria Campus is cause for immediate termination of employees or expulsion of students.

Reporting Procedures

Emergency or Life-Threatening Situations

In the case of an emergency or life-threatening situation, immediately call 911. A call to 911 will go to the appropriate campus, city or county law enforcement agency. A call to 911 from any campus telephone automatically registers the location of the telephone on which 911 a call was placed, even if no words are spoken.

Nonemergency Situations

In all other situations, notify the Office of Human Resources, 303-315-2700. Before or after normal business hours or if human resources is otherwise unavailable, notify the Anschutz Medical Campus Police at 303-724-4444 or Auraria Police Department at 303-556-5000.

Responsibility to Report

Anyone witnessing or receiving a report of prohibited behavior or possession, display or use of any weapon shall immediately notify the appropriate authority as listed above.

Emergency Notification System

The emergency notification system allows students, faculty and staff to register to receive alerts about threats of imminent danger at or near any CU Denver location. This service is used in conjunction with other communication channels including: public address systems, broadcast e-mail, voice-mail messages to campus telephone extensions, electronic signage, a coordinated use of public media outlets and 24-hour recorded emergency and information hotlines (Anschutz Medical Campus in Aurora 303-724-4636; Downtown/Auraria Campus 303-556-2401). Participants choose from various notification options including text messaging, e-mail, phone, instant messaging, pager, fax and BlackBerry devices. Visit the website for details.

Drugs and Alcohol Information

Standards of Conduct

The University of Colorado Denver complies with the federal Drug Free Schools and Communities Act. CU Denver does not allow the unlawful manufacture, dispensation, possession, use or distribution of a controlled substance (illicit drugs and alcohol) of any kind and of any amount. These prohibitions cover any individual's actions which are part of university activities, including those occurring while on university property or in the conduct of university business away from the campus.

Health risks associated with the use of drugs and the abuse of alcohol

Alcohol

Alcohol consumption causes a number of marked changes in behavior. Even a low amount can significantly impair the judgment and coordination required to drive a car safely, increasing the likelihood that the driver will be involved in an accident. Low to moderate amounts of alcohol also increase the incidence of a variety of aggressive acts, including spouse and child abuse. Moderate to high amounts of alcohol cause marked impairments in higher mental functions, severely altering a person's ability to learn and remember information. Very high amounts cause respiratory repression and death. If combined with other depressants of the central nervous system, much lower amounts of alcohol will produce the effects described here.

Repeated use of alcohol can lead to dependence. Sudden cessation of alcohol intake is likely to produce withdrawal symptoms, including severe anxiety, tremors, hallucinations, and convulsions. Alcohol withdrawal can be life threatening. Long term consumption of large quantities of alcohol, particularly combined with poor nutrition, can also lead to

permanent damage to vital organs, such as the brain and the liver.
Females who drink alcohol during pregnancy may give birth to infants with fetal alcohol syndrome. These infants have irreversible physical abnormalities and mental retardation. In addition, research indicates that children of alcoholic parents are at greater risk of becoming alcoholics than are other youngsters.

Drugs

For a description of the uses and effects of various drugs go to:
http://www.usdoj.gov/dea/pubs/abuse/chart.htm and
http://www.usdoj.gov/dea/concern/cocaine.html.

Assistance in recognizing and dealing with the abuse of alcohol and illegal drugs

Information from the Department of Health, Alcohol and Drug Division, Licensed Treatment Programs is available at: http://www.cdhs.state.co.us/adad/treatment.htm.

Drug and Alcohol Counseling, Treatment or Rehabilitation or re-entry programs

For drug and alcohol related emergencies, call 911.

University employees may contact human resources at 303-315-2700 for more information regarding available resources, programs and services.

All CU Denver faculty and staff members may receive free confidential counseling from the Colorado State Employee Assistance Program (C-SEAP): 1-800-821-8154 or 303-866-4314.

Denver Campus employees and students may contact the Counseling Center at 303-556-2525 or the Counseling and Family Therapy Center at 303-556-4372/North Classroom 4036, for confidential information and/or referrals. Employees and students at the Anschutz Medical Campus may contact the counseling network at 303-315-8159 or 720-848-9094, or their respective school student affairs offices for referral information.

Information may also be obtained by calling the National Institute on Drug Abuse Hotline at 1-800-662-HELP or the National Clearinghouse for Alcohol and Drug Information at: 1-800-729-6686. You may also find helpful information at: http://www.drug-rehabs.org/Colorado-drug-rehab-treatment.htm

Related Policies

University of Colorado System Alcohol Policy:
https://www.cu.edu/psc/procedures/PPS/PPS-Alcohol.pdf

UC Denver Alcohol Policy:
http://www.ucdenver.edu/faculty_staff/employees/policies/Policies%20Library/Fiscal/Alcohol_UCDenverCampus.pdf

Legal Sanctions

Federal

See: http://www.usdoj.gov/dea/agency/penalties.htm and Appendix C below for a description of "Federal Trafficking Penalties."

State Drug Laws

State criminal statues, (which may be generally found under Titles 12 and 18 of the Colorado Revised Statues) cover the same scope of conduct as the federal laws, and although the sentences and fines are generally less severe than federal law provides, life sentences are possible for repeat offenders. The maximum penalty for the most serious single offense, (manufacture, sale, or distribution) is 16 years in prison and a $750,000.00 fine. The maximum penalty for the least serious state offense (possession or use of one ounce or less of marijuana) is a fine of $100.00. The state laws concerning driving under the influence of alcohol (see below) apply equally to driving under the influence of drugs.

Local ordinances such as the Denver, Boulder, Longmont, Louisville and Lafayette municipal codes impose a variety of penalties.

Secondary civil consequences may also flow from criminal drug violations. Property associated with the criminal acts, including homes and vehicles, can be confiscated by the state or the federal governments.

Those who are convicted of felony violations may be barred from governmental employment and from licensed professions such as law, medicine and teaching.

State Alcohol Laws

State laws regulating the production, dispensation, possession, and use of alcohol may be found in Title 12 of the Colorado Revised Statutes. Perhaps the most significant aspect for CU Denver is the prohibition of the distribution of alcoholic beverages to any person under the age of 21, to a visibly intoxicated person, or to a known alcoholic. State laws also prohibit any form of assistance to these categories of people in obtaining alcoholic beverages. Violation of these laws is a misdemeanor punishable by fines of

$1,000.00 and jail sentences of a year. However, such conduct may, in some circumstances, constitute contributing to the delinquency of a minor, and it could then be determined to be a felony offense punishable by an eight year prison sentence and a $500,000.00 fine. Secondary civil consequences for liquor law violations may include ineligibility for liquor and driver's licenses.

Criminal sanctions may also apply to those who operate motor vehicles while under the influence of alcohol and/or drugs. Under Section 42-4-1301 (1) (a), Colorado Revised Statutes, the maximum penalty for such an act is two years in jail and a $5,000.00 fine.

If a person is injured as a result of someone operating a motor vehicle while under the influence of alcohol and/or drugs, the act is a felony punishable by four years in prison and a $100,000.00 fine. If a person is killed, the sentence can be eight years in prison with a $500,000.00 fine. All such convictions also result in the revocation of driving privileges.

State law requires drivers who are stopped by the police for suspected violation of this law to submit to scientific tests which determine the amount of alcohol in their blood, and those who refuse to be tested automatically lose their driver's license. Remember, one need not be "out of control" to be "under the influence." A substantial effect on physical capability is all that is required. Chemical test results combined with the testimony of an expert toxicologist can result in a conviction even when some people may feel minimally intoxicated.

In addition, individuals may face a variety of penalties imposed by municipal ordinances.

Note: This description is intended only to give those who read it a basic, general understanding of the range of serious legal sanctions which can arise from the unlawful possession, distribution and/or use of illicit drugs and alcohol. Individuals who are concerned about specific circumstances should seek the advice of their personal attorney.

Disciplinary sanctions for CU employees who violate drug and alcohol laws in violation of this policy

It is a violation of university policy for any member of the faculty, staff, or student body to jeopardize the operation or interests of the University of Colorado through the use of alcohol or drugs. Sanctions that will be imposed by the University of Colorado for employees who are found to be in violation of this policy may include expulsion and/or termination of employment. Compliance with this policy is a condition of employment for all employees.

Implementation

A copy of the policy statement shall be annually distributed to all current employees and students by e-mail, the university's website, at new student orientation and at a new employee orientation.

Review

The university will conduct a biennial review of the program to determine its effectiveness and to ensure that the disciplinary sanctions described above are consistently enforced. Changes to this program will be implemented as needed. The most recent biennial review was conducted September 2010.

Inclusiveness and Nondiscrimination

The University of Colorado Denver is committed to enhancing the inclusiveness of its work force and its student body. Inclusiveness among students, faculty, staff and administrators is essential to educational excellence and to accomplishing CU Denver's urban mission. Inclusiveness among faculty, staff and administrators provides role models and mentors for students, who will become leaders in academe and in the larger society, and ensures that a broad array of experiences and world views informs and shapes teaching, research, service and decision making at CU Denver.

Pursuant to Article 10, Laws of the University of Colorado Board of Regents, the university does not discriminate on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation or veteran status in admission and access to, and treatment and employment in, its educational programs and activities. The university takes action to increase ethnic, cultural and gender diversity, to employ qualified disabled individuals and to provide equal opportunity to all students and employees.

All students shall have the same fundamental rights to equal respect, due process and judgment of them based solely on factors demonstrably related to performance and expectations as students. All students share equally the obligations to perform their duties and exercise judgments of others in accordance with the basic standards of fairness, equity and inquiry that should always guide education.

A statement of Article 10 may be found online at www.cu.edu/regents/Laws/Article10.html. CU Denver procedures for investigating complaints of discrimination may be found online at ucdenver.edu/faculty_staff/employees/policies/Policies%20Library/HR/Nondiscrimination.pdf.

To report a violation of Article 10 or for additional information, contact the CU Denver Equal Opportunity/Affirmative Action Compliance Officer at 303-315-2700; mailing address: EO/AA Compliance Office, CU Denver, P.O. Box 173364, Campus Box 130, Denver, CO 80217-3364.

Disability Accommodation

The Americans with Disabilities Act (ADA) provides that individuals who are otherwise qualified for jobs or educational programs will not be denied access simply because they have a disability. Its goal is to guarantee that individuals with disabilities are not discriminated against or denied equal access to the same programs, services and facilities available to others. The ADA prohibits employers, including CU Denver, from discriminating against applicants and workers with disabilities in all aspects of employment. The act also prohibits the university from discriminating on the basis of disability in access to its programs and services.

The ADA requires that CU Denver provide reasonable accommodations to qualified individuals with disabilities who are employees or applicants for employment, and for persons who participate in or apply for participation in the university's programs and activities. Exceptions to the obligation for providing accommodation may be made if doing so would cause undue financial or administrative burdens, fundamental alteration to a program or activity, or significant risk to health or safety to self and/or others. Additional information regarding the ADA may be obtained online at www.usdoj.gov/crt/ada/adahom1.htm.

If you are a student at CU Denver and need assistance with access to or participation in the academic curriculum, contact the Office of Disability Resources/Services at: 303-556-3450; TTY 303-556-4766; mailing address P.O. Box 173364, Campus Box 118, Denver, CO 80217-3364.

Reporting Disability Discrimination

Article 10 of the laws of the University of Colorado Board of Regents prohibits discrimination on the basis of disability (or on the basis of membership in other protected classes) in admission and access to, and treatment and employment in, University of Colorado educational programs and activities. To report discrimination or to obtain additional information, contact the CU Denver ADA coordinator, 303-315-2724; mailing address: P.O. Box 173364, Campus Box 130, Denver, CO 80217-3364. Complaints of discrimination based upon disability will be processed according to the provisions of the CU Denver nondiscrimination procedures, which may be found online at: ucdenver.edu/faculty_staff/employees/policies/Policies%20Library/HR/Nondiscrimination.pdf.

Sexual Harassment

The University of Colorado is committed to maintaining a positive learning, working and living environment. In pursuit of these goals, the university will not tolerate acts of sexual harassment or related retaliation against or by any employee or student.

Sexual harassment: consists of interaction between individuals of the same or opposite sex that is characterized by unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when: (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, living conditions and/or educational evaluation; (2) submission to or rejection of such conduct by an individual is used as the basis for tangible employment or educational decisions affecting such individual; or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile or offensive working or educational environment.

Hostile environment sexual harassment: (described in subpart (3) above) is unwelcome sexual conduct that is sufficiently severe or pervasive that it alters the conditions of education or employment and creates an environment that a reasonable person would find intimidating, hostile or offensive. The determination of whether an environment is "hostile" must be based on all of the circumstances. These circumstances could include the frequency of the conduct, its severity and whether it is threatening or humiliating.

Retaliatory acts: It is a violation of this policy to engage in retaliatory acts against any employee or student who reports an incident of alleged sexual harassment or any employee or student who testifies, assists or participates in a proceeding, investigation or hearing relating to such allegation of sexual harassment.

The University of Colorado System Administrative Policy Statement (APS) on sexual harassment policy and procedures may be obtained from the UC Denver sexual harassment officer (see "Reporting Sexual Harassment") or found online at: ucdenver.edu/faculty_staff/employees/policies/Policies%20Library/HR/SexualHarassment.pdf.

Reporting Sexual Harassment

If you need to report sexual harassment or if you have any questions regarding sexual harassment or policy above, please contact the CU Denver sexual harassment officer at 303-315-2724; send correspondence to Human Resources, P.O. Box 173364, Campus Box 130, Denver, CO 80217-3364.

Who to Call When You Need Help

ADA Coordinator

Contact: Human Resources
Office: Lawrence Street Center, 1050
Telephone: 303-315-2700

Contact the ADA coordinator to report disability discrimination.

Auraria Police Department

Office: Administration Building, 110 (1201 5th Street)
Telephone: 303-556-5000
Emergency: 911

Contact the Auraria Police Department to report on-campus criminal conduct, including sexual assault or other serious allegations of sexual harassment in which the complainant believes that his or her safety is threatened. Allegations of serious sexual harassment should be reported to the Auraria Police Department if they occur after hours or on weekends.

Disability Resources and Services

Director: Lisa McGill
Office: Arts Building, 177
Telephone: 303-556-3450
TTY: 303-556-4766

The Office of Disability Resources and Services provides equal opportunities and fosters the personal growth and development of students with disabilities. Contact DRS for priority registration for classes, assistance in identifying volunteer note takers, alternative testing, oral/sign language interpreters, real-time captioning and textbooks in alternative formats.

Disruptive/Threatening Behavior

Chair: Larry Loften
Office: Tivoli Student Union, 259
Telephone: 303-817-2813
Website: www.ucdenver.edu/beta

The Behavioral Evaluation and Threat Assessment Team (BETA) is a resource on the University of Colorado Denver campus that can provide support and information to faculty, staff or student community members who are confronted with individuals who may be threatening, disruptive, or otherwise problematic. The Team provides guidance and consultation and may make referrals to appropriate campus or community resources.

Equal Opportunity/Affirmative Action

Contact: Human Resources
Office: Lawrence Street Center, 1050
Telephone: 303-315-2700

Contact the compliance officer to report discrimination on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation or veteran status.

Human Resources

Office: Lawrence Street Center, 1050
Telephone: 303-315-2700

Contact the Office of Human Resources for a referral and to speak to someone immediately about your problem.

Ombuds Office

Associate Director: Mary Chavez Rudolph
Office: CU-Denver Building, 107P
Telephone: 303-556-4493
E-mail: mary.chavezrudolph@ucdenver.edu
Website: www.ucdenver.edu/about/departments/OmbudsOffice/Pages/OmbudsOffice.aspx/

The Ombuds Office is a confidential and impartial resource for students, faculty and staff. Contact the Ombuds Office: as a first step if you don't know where to turn, as a last resort, or anywhere along the way; when you are confused about university policy or procedure and would like clarification; to explore your options, share your concerns, evaluate your situation and plan your next step; when you feel as if you have been treated unfairly; and for information and identification of resources to resolve issues.

Sexual Harassment

Contact: Human Resources
Office: Lawrence Street Center, 1050
Telephone: 303-315-2724

Contact the sexual harassment officer with questions about or to report sexual harassment.

Student and Community Counseling Center

Contact: Patricia Larsen
Office: North Classroom, 4036

Telephone: 303-556-4372
Website: www.ucdenver.edu/counselingcenter

The Student and Community Counseling Center provides mental health counseling services to the student body as well as the metropolitan community. CU Denver students receive 10 counseling sessions at no cost per fiscal year as part of their student fees.

College of Architecture and Planning

Dean: Mark Gelernter

Associate Deans of Academic Affairs:

Denver: Yuk Lee
Boulder: Allen Harlow

Contact

CU DENVER-GRADUATE PROGRAM
303-556-3382
Fax: 303-556-3687
CAP@ucdenver.edu

Mailing Address
Campus Box 126
P.O. Box 173364
Denver, CO 80217-3364

Location
CU Denver Building
1250 14th Street, Suite 330
Denver, CO 80202

CU BOULDER-UNDERGRADUATE PROGRAM
303-492-8010
Fax: 303-492-6163

Mailing Address
Campus Box 314
Boulder, CO 80309

Location
Enviromental Design Building
1060 18th Street, Room 168
Boulder, CO 80309

Application Deadlines

Deadlines vary by program. Visit the college website for more information.

If you're interested in a career in architecture, urban and regional planning, landscape architecture, urban design or historic preservation, you'll want to get acquainted with the College of Architecture and Planning at CU Denver. We offer the only undergraduate and graduate education in these fields in the state of Colorado. Many students intending to enter the design and planning professions complete the college's undergraduate degree as preparation for our graduate-level professional programs. Our graduate programs also are available for those who already hold an undergraduate degree in an unrelated field. Our graduate programs in architecture, landscape architecture, urban and regional planning, urban design and historic preservation, and our graduate certificates in design build and GIS, are taught at CU Denver, in the heart of a vital downtown. Our undergraduate bachelor of environmental design program is offered in Boulder, an environment ideally suited to the needs of undergraduates (see the University of Colorado at Boulder catalog for details). We offer a multidisciplinary PhD in design and planning based in Denver. With a diverse faculty committed to excellence in teaching, research, scholarship and creative work, the college provides students with a broad range of learning opportunities.

The College's Vision

To help students prepare for an engaging, productive career in the design and planning professions, the College of Architecture and Planning has developed a bold vision called Integrative Design. This vision directs the college to:

- Engage design and planning challenges that are significant for our society. We are not an ivory tower. Learning experiences address real issues facing designers and planners as they create healthier, more sustainable, more meaningful environments for the 21st century. In recent years, among many other socially important projects, our students have: designed alternatives to suburbia; built award-winning solar-powered homes; written new codes to encourage livelier, safer cities; discovered ecological design principles in Colorado ranches; proposed ways for neighborhoods to recover from natural disasters; and invented new ideas for affordable housing.
- Engage these challenges in partnerships among the disciplines and with our external communities. No one discipline can address these issues alone. Architects, landscape architects, planners, urban designers and developers must work together to create holistic, healthy, sustainable environments.

In our college, students have opportunities to:

- Participate in multi-disciplinary teams, modeling the practices of today's successful design and planning firms.
- Interact with outstanding practicing designers and planners in the Denver metro area through internships, mentorships, design juries, lectures and student professional organizations.

Communities of Interest

To implement this vision, the college has organized many of its activities around "communities of interest." These bring together faculty, students and practitioners across the disciplines who share an interest and expertise in a particular theme, building synergistic relationships as they explore new design and planning ideas.

The college's communities of interest currently include:

- **Emerging Practices in Design**
  Exploring how the digital design revolution and sustainable design practices are reshaping the professions. These include sustainable design and design/build practices as well as digital visualization and building information modeling (BIM) technologies.
- **Sustainable Urbanism**
  Exploring new ideas about creating livable cities in the midst of intense pressures for growth and fragile ecosystems.
- **Healthy Environments**
  Exploring how to build healthier buildings, cities and landscapes.
- **Cultural Heritage**
  Understanding, interpreting and preserving our cultural heritage in design and planning, including historic buildings, landscapes and intellectual and cultural ideas.

Special Activities and Programs

The college provides a diverse range of opportunities that enrich and enhance the education of its students. Through activities and functions—including a lecture series, a visiting critic series, exhibits, publications and active student organizations—the college encourages contact among students, faculty and members of the design professions. Each summer, the college offers foreign study travel programs, which in recent years have traveled to Prague, Rome, Helsinki, Paris, Beijing and Madrid. In addition, for the past eight summers the college has offered an integrated urban design studio in Turkey. The college makes available a range of scholarships and fellowships, some of which are based on need, others on performance and still others of which are specifically intended to provide enrichment opportunities. The college supports an active and focused

internship program for its students, giving them access to elective internship opportunities in the Denver metropolitan area and beyond. Finally, the college encourages students to take control of their own education and supports, within its ability, any reasonable proposals from students that would enrich their own educational experiences.

College Facilities

The college's administrative headquarters and graduate programs are located at 1250 14th Street in downtown Denver, on the northeastern edge of the Auraria Campus. This favorable location gives easy access both to the extensive campus facilities and to the urban amenities of Denver's lively lower downtown. Most of the major professional design offices in Denver and many planning firms and agencies are within easy reach of the college. These provide many opportunities for contact between students and practitioners. College facilities include studio spaces for students, lecture and seminar rooms, design jury spaces, exhibition spaces and faculty offices. The college also provides a portfolio photography studio room, a model and furniture-making woodshop with laser cutters and a 3-D printer, and an extensive computer laboratory whose focus is computer aided design (CAD), computer 2-D and 3-D imaging and analytic tools for planning. The computer lab includes Windows PCs and G4 Macintoshes, small and large format scanners, large format plotters, laser printers and computer data projection devices. All systems are 100base T Ethernet / Internet savvy and accessible 24 hours a day in a secure room. Find more details about college facilities on the website. Also associated with the college is a geographic information system (GIS) computer laboratory, which is open to all CU Denver students.

Scholarships/Financial Aid

Students in the college have access to a number of scholarships and other financial assistance funds. Some of these funds are provided by the institution itself, while others are provided by external sources like the American Institute of Architects Education Fund, the American Planning Association, the American Society of Landscape Architects and the Rocky Mountain Masonry Institute. For further information on these scholarships and graduate tuition awards, visit the college's website or request a list via e-mail at patricia.mckissock@ucdenver.edu. For information on federal and state financial aid, contact the Office of Financial Aid, University of Colorado Denver, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364, 303-556-2886 or visit their website.

Admissions

General Requirements

The college periodically updates admissions deadlines and application procedures. Please visit the college website at http://cap.ucdenver.edu to view current deadlines and application procedures.

Applicants to the College of Architecture and Planning are required to submit the following credentials:

- University of Colorado application for graduate admission form
- Two official transcripts from each institution the applicant has attended. Transcripts must be mailed by the institution directly to the college. A certified literal English translation also must be submitted for documents that are not in English.
- Letters of recommendation: U.S. residents, three letters; international applicants, four letters.
- Statement of purpose: Applicants to all programs must submit a statement summarizing career objectives and reasons for pursuing the intended program of study. Applicants to the MURP program should indicate their area of concentration. Applicants to the PhD program should discuss the intellectual and policy challenges they hope to address, methodological skills they plan to pursue, and briefly note any tentative dissertation research topics and, if possible, overlap of research interests with program faculty.
- Supporting materials architecture and landscape architecture: Applicants to the graduate architecture and landscape architecture programs are required to submit a portfolio. A portfolio is 6-12 bound pages, 8.5 × 11 inches. Slides are not accepted. A portfolio is an orderly presentation of one's work. This includes examples of creative and analytical work including but not limited to essays, papers, photographs and photographic reproductions of artistic work such as sculptures, drawings, paintings, musical compositions and other fine arts. A stamped, self-addressed envelope must be included for return of the portfolio. Applicants to architecture and landscape architecture are encouraged to submit GRE scores if their GPAs are below 3.0.
- Supporting materials for urban and regional planning: Applicants to the urban and regional planning program should submit their statement of purpose, a resume and a copy of a student or professional paper or project. Applicants to the urban and regional planning program are encouraged to submit GRE (general) scores; those whose undergraduate GPA is below 3.0 are required to submit GRE scores.
- Supporting materials for the PhD: Applicants to the PhD program must submit a sample of written work and any other evidence relevant to admission to the program, in accordance with submission guidelines that can be obtained from the college. Applicants to the PhD program are required to submit GRE scores.
- Application fee. Nonrefundable ($50, U.S. residents; $75, international applicants).

Confirmation Deposit

A nonrefundable confirmation deposit of $200 is required to secure an applicant's place in the architecture, landscape architecture and PhD programs. The deposit is due at the time the applicant accepts the program's offer of admission. The deposit will be applied to the first semester's tuition when the student registers for classes.

Computing in the College

The College of Architecture and Planning requires all incoming graduate students to acquire and use their own computers and software applications in their studies. To assist students with procurement of their personal computers, the IT committee formulated performance-based computing specifications. These are listed online here. Please note that CU Denver neither endorses nor requires students to procure a machine from a particular vendor. While desktop configurations are listed, students are urged to procure laptops mainly for reasons of security and mobility in studios and classrooms. Software application (program) requirements relate to specific course curricula. In general, students widely use products such as Microsoft Office for word processing, e-mail, presentations and spreadsheet applications. Consult with instructors or refer to course syllabi regarding applications for imaging, CAD, GIS, modeling or rendering before buying them. In addition, not all programs are needed during the first semester; certain release versions may be preferable over others. The college intends to provide computer IT orientation sessions at the beginning of each semester.

Academic Policies

Academic Standing

Students must maintain a minimum overall GPA of 3.0 in the graduate programs to remain in good standing and to graduate. If a student's GPA falls below a 3.0, then he or she will be placed on academic probation beginning the following semester. If the GPA remains below a 3.0 after the probationary semester, then he or she may be dismissed from the college.

Appeals

Any student may appeal the grade he or she receives in a class within 30 days from the issuance of the grade. The student should first discuss the issue and adjustment sought with the relevant course instructor. If the course instructor does not reply within 30 days, the student submits a written appeal to the department chair. Within 30 days, the department chair shall process the appeal and prepare a written report explaining the reason(s) for the department recommendation. If the grade appeal still remains unresolved at the department level, the student submits a written request to the associate dean of academic affairs, who will direct the Academic Affairs Committee to

review the appeal. If the grade appeal remains unresolved at the college level, the student may appeal to the dean.

Attendance and Timeliness of Work

Students are expected to attend all meetings of classes. Excessive unexcused absences may result in a grade reduction at the discretion of the instructor. Absence from a class will be excused for verified medical reasons, religious obligations or for extreme personal emergencies. The student may be required to furnish evidence.

Students' assignments are to be completed in a timely manner. Any assignment turned in late may have its grade reduced by an amount set at the discretion of the instructor. An assignment may be turned in late without penalty for verified medical reasons, religious obligations or for extreme personal emergencies. Students must have their instructor's written permission to turn an assignment in late. Students with excused late work may turn in the assignment by the end of finals week without penalty. Otherwise, the grade "I" will be assigned at the discretion of the faculty.

Course Sequencing and Advancement

Programs in the college are structured so that certain courses must be taken concurrently, others sequentially. Students will not be allowed to enroll in a course if its co-requisites or prerequisites have not been satisfied.

Originality of Work

Students must submit their own work. Where other sources are used in a student submission, they are to be clearly identified and referenced. The university considers plagiarism and similar acts of falsification to be a serious matter that may result in suspension or expulsion. Information on codes of conduct and grievance procedures are available from the Office of Enrollment and Engagement on the Denver campus.

Retention of Student Work

The College of Architecture and Planning may, with a student's written permission, retain student work submitted in fulfillment of class requirements for a period of time. This retained work is normally used to provide accrediting agencies with tangible evidence of performance, to serve as additional visual aid material in presentations to other students and to contribute to possible educational exhibits requested by the university community and the general public.

Departments and Programs

Certificate

Design Build Graduate Certificate

Contact: Erik (Rick) Sommerfeld
Telephone: 303-556-6160
E-mail: sommere@colorado.edu

The College of Architecture and Planning offers a graduate certificate in the emerging area of design build as an extension of the MArch program. The certificate course work totals 18 credit hours and emphasizes design build from the designer's point of view.

Certificate Requirements

Five courses totaling 18 semester hours can be applied to the MArch graduation requirements:

- ARCH 6370 - Introduction To Design Build **gtPATHWAYS:**
- ARCH 6471 - Managing Quality & Risks **gtPATHWAYS:**
- ARCH 6472 - Architecture in a Single Source Project Delivery **gtPATHWAYS:**
- ARCH 6373 - Construction in Design Build **gtPATHWAYS:**
- ARCH 6170 - Advanced Design Studio **gtPATHWAYS:**
  taken with
- ARCH 6171 - Advanced Design Seminar **gtPATHWAYS:**

Total: 18 Hours

Geospatial Information Science Graduate Certificate

Contact: Brian Muller
Telephone: 303-315-2421
E-mail: brian.muller@ucdenver.edu

The College of Architecture and Planning offers a certificate in geospatial information science through participating departments. The emphasis of this certificate is on applications of GIS in urban and environmental planning and design fields. The

certificate is available to any student earning one of our graduate degrees; to students earning cognate degrees, for example in the School of Public Affairs, College of Engineering and Applied Science or from the Department of Geography; and to nondegree students who have already earned such a degree.

Certificate Requirements

1. A minimum of 18 semester hours (with at least 12 related planning and design hours to be earned in residence at UC Denver or University of Colorado at Boulder);

2. A minimum B (3.0) average and a minimum grade of B- (2.7) in any course, as outlined in the certificate curriculum:

- *One required introductory class:* Introduction to GIS (both theory and methods) (3 semester hours)
- *At least three additional courses in GIS or remote sensing methods* to be approved in advance by the GIS committee (9 semester hours). Such courses may include:
    - Cartography (Boulder and Denver, geography)
    - GIS Analysis (Denver, civil engineering)
    - GIS II (Boulder, geography)
    - Advanced GIS Workshops (Boulder and Denver, multiple departments)
    - GIS Management (Denver, civil engineering)
    - Quantitative Methods in Geography (Boulder, geography)
    - Remote Sensing (Boulder and Denver, multiple departments)
- *Applications Option 1*: Studio or thesis project involving application of planning and design GIS-based methods to be approved by the faculty GIS committee (6 semester hours)
- *Applications Option 2*: Internship or other work experience is strongly encouraged for all students and may at the discretion of the committee be substituted for other courses (6 semester hours)

It is not possible or desirable to specify every course that should count toward a certificate. CAP and other participating programs will continue to generate new GIS-related courses as the curriculum evolves, and CAP delivers much of its instruction through studio courses that vary in content each semester. A certificate program must include an ongoing structure for managing course requirements and determining when individual students have met them.

Master of Science

Historic Preservation MS

► Graduate School Rules 11-12 apply to this program

Program Director: Christopher Koziol
Office: CU Denver Building, 320O
Telephone: 303-556-6516
E-mail: christopher.koziol@ucdenver.edu

In a rapidly changing cultural, economic and professional environment, it is valuable to have an understanding of what is worth saving of the built environment. However, appreciation for the past alone is insufficient for making the informed and creative decisions expected and required of cutting-edge professionals. The desire to know can become the opportunity to lead. There is an increasingly urgent need in our professional community and in our society for the skills and knowledge that this effort requires and this degree offers.

As global economies change fewer resources are available for new buildings and we must adaptively reuse our existing structures. This trend will continue beyond short-term economic conditions, because it will always be a more sustainable practice to reuse existing buildings than to tear them down and harvest or manufacture new materials.

The College of Architecture and Planning, and the professional community that it serves, foresee a significant and permanent shift towards more adaptive reuse of existing buildings. The master of science in historic preservation is a program designed to prepare students for a true 21st Century career.

Historic preservationists come from a variety of backgrounds. Some are well-educated in the humanities and desire to increase their technical understanding. Those familiar with the social sciences might be seeking “real world” applications for their expertise. Many already with “first professional degrees” in design and planning disciplines, as well as the law and business, seek to deepen their competence in the vibrant and interesting professional niche of historic preservation.

Prerequisites

Accepted students are expected to show basic competence or demonstrated potential in:

1. Manual technical drawing, and
2. CAD graphics, as well as having had exposure to
3. The study and/or practice of historic preservation.

These competencies can be demonstrated by previous course work or by portfolio/resume submission. Should any of these competencies for an admitted student be judged insufficient by the faculty, the program director may require the student to gain supplemental instruction prior to, or upon matriculation to, the MS in historical preservation degree program. Any credit awarded for such supplemental work will not be counted toward the required number of credit hours for the degree.

Admissions

Application to the master of science in historic preservation program is open to all students holding the bachelor's (undergraduate) degree from an accredited college (or its equivalent from a foreign institution). You make application through the CU Denver Graduate School.

Materials required

- A brief statement of interest (500 word max.)
- A compact portfolio (max. 20 pages 8.5” X 11”) of writing samples, and optionally, graphic work and professional resume is strongly recommended.
- Submission of Graduate Record Exam (GRE) scores is recommended for applicants without evidence of prior successful graduate level accomplishment. [There is an expedited application procedure for current CU Denver students in another CAP masters program. Please inquire to the MS in historical preservation program director.]

Transfer Credit

Transfer credit of up to 12 credit hours (up to 15 credit hours for those seeking/holding a related master's degree from CU Denver) may be awarded for equivalent graduate (post-bachelor's) course work at the discretion of the program director and in keeping with CU Denver Graduate School rules.

Undergraduate Course Work

Undergraduate course work substantively equivalent to a MSHP required course may be accepted as a substitution for that course at the program director’s discretion, but such substitution will not reduce the total number of credit hours required for the degree.

Program Requirements

The course of study is designed to accommodate the background and needs of both those students with substantial experience, and those new to the field. The curriculum is flexible but rigorous, requiring:

- Twenty-seven (27) semester hours of core courses
- Nine (9) hour capstone requirement
- Nine (9) electives

Students enrolling full-time in the 45 credit-hour curriculum typically complete the program in 3 or 4 semesters, or 18 months. However, course work other than the completion of the capstone requirement may be accomplished in a period of residency as short as 15 months. Students receiving significant transfer credit and those with a related degree may further reduce the time required for the MS in historical preservation degree.

Our program is compliant with National Council of Preservation Education Standards.

Required Core Courses

- URPL 6634 - Preservation Theory and Practice **gtPATHWAYS:** (new prefix is HIPR 6010)
  HIPR 6110 - Regionalisms & the Vernacular
  HIPR 6210 - Survey, Significance & Recognition
  HIPR 6310 - Documentation, Analysis & Representation
  HIPR 6410 - Urban Conservation: Context for Reuse
  HIPR 6510 - Building Conservation: Evidence & Intervention
  HIPR 6170 - Preservation Design Studio
  HIPR 6171 - Preservation Design Seminar
  Choose one of the following 3-semester-hour courses:
- ARCH 6210 - History of American Architecture **gtPATHWAYS:**
  or
- ARCH 6212 - History of Modern Architecture **gtPATHWAYS:**
  or
- LDAR 5521 - History of Landscape Architecture **gtPATHWAYS:**
  or
- URBN 6640 - History of the City **gtPATHWAYS:**

Total: 27 Hours

Capstone Work

Choose either Professional Project and additional requirements, or Thesis and additional requirements.

1. HIPR 6851 - Professional Project

Preceded by **one** of the following:

- Additional (2nd) Studio + Seminar (HIPR 6170-71)
  or
- 3 semester hours of Internship credit (HIPR 6930) and an additional directed elective
  or

- ARCH 6450 - Pre-Design and an additional directed elective
  or
- Maymester course, either
  - HIPR 6170 - Working Landscapes Field School and a related elective
    or
  - HIPR 6610 - Reading the City Field School and a related elective

2. HIPR 6951 - Thesis

With LDAR 6949 - Research Tools, Strategies, Methods

Total: 9 hours

Electives

Choose 9 semester hours total, at least 6 semester hours from the same group. Each course listed is 3 semester hours.

Group One: Project Development

- URPL 6660 - Real Estate Development Process **gtPATHWAYS:**
- URPL 6661 - Real Estate Development Finance **gtPATHWAYS:**
- URPL 6665 - Urban Market Analysis **gtPATHWAYS:**
- URPL 6651 - Environmental Impact Assessment **gtPATHWAYS:**
- PUAD 5110 - Seminar in Nonprofit Management **gtPATHWAYS:**
- PUAD 5115 - Effective Grant Writing for Nonprofit and Public Sector Managers **gtPATHWAYS:**

Group Two: Context of Planning & Design

- URBN 6642 - Design Policy/Regulation **gtPATHWAYS:**
- URBN 6641 - Design Process/Practice **gtPATHWAYS:**
- URPL 5530 - Planning Law **gtPATHWAYS:**
- URPL 6640 - Community Development Process **gtPATHWAYS:**
- URPL 6676 - Urban Housing **gtPATHWAYS:**
- PUAD 5625 - Local Government Management **gtPATHWAYS:**
- PUAD 5626 - Local Government Politics and Policy **gtPATHWAYS:**

Group Three: History

- GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
- HIST 5240 - National Parks History **gtPATHWAYS:**
- HIST 5229 - Colorado Historic Places **gtPATHWAYS:**
- HIST 5228 - Western Art and Architecture **gtPATHWAYS:**
- HIST 5231 - History in Museums **gtPATHWAYS:**
- HIST 5234 - Introduction to Public History **gtPATHWAYS:**
- HIST 5236 - Colorado Mining and Railroads **gtPATHWAYS:**
- HIST 5242 - Oral History **gtPATHWAYS:**
- HIST 5243 - Public History Administration **gtPATHWAYS:**

- HIST 5244 - Interpretation of History in Museums: Exhibits and Education
  gtPATHWAYS:
- HIST 5810 - Special Topics **gtPATHWAYS:** Heritage Tourism
  Group Four: Preservation Design
  Additional studio (4) + seminar (2) AND/OR additional built environment history/practice courses

Total: 9 hours

Master of Urban Design

Urban Design MUD

► Graduate School Rules apply to this program

Program Information: Jeremy Németh
Telephone: 303-556-3688
Email: jeremy.nemeth@ucdenver.edu

The master of urban design (MUD) is an intensive, one-year, interdisciplinary postprofessional degree program intended for talented persons already holding a professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Urban design is an integrative activity focused on creating vibrant, environmentally sustainable and socially just public places. By contextualizing architecture while providing a means of implementation for planners and landscape architects, urban design occupies a realm supportive of these fields while simultaneously generating its own responses to the most pressing urban issues. Although urban designers often intervene on the neighborhood scale, the program fosters mastery of inclusive and participatory community design processes and the attendant means for effectively implementing physical plans at the metropolitan, neighborhood, district, corridor, street and block scale.

The MUD program focuses on creating sustainable urban infrastructure and interprets the city as a set of overlaid and integrated systems. The program views urban designers playing a vital role in the production of the built environment, because of their dual responsibility to illustrate preferable design solutions and shape the regulatory patterns governing future development. The inherent interdisciplinarity of this approach brings students into frequent contact with professors, practitioners and experts in urban planning, architecture and landscape architecture, and encourages students to forge their own tailored degree by pursuing an independent study and a variety of electives in

the college. Students relate their independent study projects to one of the college's fields of expertise, such as participatory design in distressed communities, postindustrial landscapes, "green streets," vernacular design or historic preservation.

Denver and the American West provide an exciting urban laboratory as we face a number of complex and difficult challenges (e.g. water scarcity, urban sprawl). Students undertake at least one studio in the Denver metropolitan region while remaining cognizant that similar systems and challenges exist in a variety of domestic and international contexts. As a capstone project during their final term, students enroll in an international studio course, preparing for this studio by taking a mandatory seminar in global design history and practice.

The MUD program is informed by innovations in practice. Tested techniques and methods are brought into classroom and studio settings to be evaluated, refined and disseminated in ways that prepare graduates for highly innovative work as critical, reflective urban designers employed in both the public and private sectors. In addition, each spring semester brings a visiting urban design fellow to the college. This practitioner-in-residence is selected from a highly competitive pool of designers from around the world. The selected practitioner teaches an advanced urban design studio and supervises independent study projects.

Prerequisites

Students are required to hold a first professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Admissions

The master of urban design admissions committee accepts applications for fall semester entry. Right now, the program does not allow entry to the program in any spring semester. The general requirements the admissions committee considers are:

- Evidence of a professional degree (BArch, BLA, MArch, MLA, MURP/MUP) or equivalent
- At least a 3.0 undergraduate or graduate cumulative GPA
- A portfolio (8.5 × 11-inch bound document) that includes:
    - Your statement of purpose (which should include your educational and professional goals and objectives)
    - Résumé (which describes your educational and professional background)
    - Examples of student or professional projects
    - A list of courses that you have taken that relate to design and planning
    - A writing sample from previous professional or academic work
- Graduate Record Exam (GRE) scores are encouraged

Program Requirements

The requirements for the postprofessional master of urban design (MUD) degree depend on your current standing and educational background. The basic study plan is a 36-semester-hour plan that includes two elective courses. Students obtaining a first professional degree in University of Colorado Denver College of Architecture and Planning may receive up to 12 semester hours of advanced standing.

Core Courses

The basic study plan is 36 semester hours including these core courses, plus two elective courses.

- URBN 6610 - Infrastructure Studio **gtPATHWAYS:**
- URBN 6611 - Regulatory Studio **gtPATHWAYS:**
- URBN 6612 - Urban Synthesis Studio **gtPATHWAYS:**
- URBN 6640 - History of the City **gtPATHWAYS:**
- URBN 6641 - Design Process/Practice **gtPATHWAYS:**
- URBN 6642 - Design Policy/Regulation **gtPATHWAYS:**
- URBN 6840 - Independent Study: URBN **gtPATHWAYS:**
  or
- URBN 6930 - Urban Design Internship **gtPATHWAYS:**

Total: 30 hours

Course Sequence

Fall

- URBN 6610 - Infrastructure Studio **gtPATHWAYS:**
- URBN 6640 - History of the City **gtPATHWAYS:**
- URBN 6641 - Design Process/Practice **gtPATHWAYS:**
  Elective Course

Spring

- URBN 6611 - Regulatory Studio **gtPATHWAYS:**
- URBN 6642 - Design Policy/Regulation **gtPATHWAYS:**
  Then choose two of the following courses:
- URBN 6840 - Independent Study: URBN **gtPATHWAYS:**
  or
- URBN 6930 - Urban Design Internship **gtPATHWAYS:**

or
URBN 6644. Sustainable Urban Design (pending course approval)
or
Elective Course

Summer

- URBN 6612 - Urban Synthesis Studio **gtPATHWAYS:**

Doctor of Philosophy

Design and Planning PhD

► Graduate School Rules apply to this program

Program Director: Kevin J. Krizek
Telephone: 303-315-2422

The PhD in design and planning from University of Colorado Denver trains scholars for careers in higher education, research and high-level policy positions. It is a research-oriented doctoral degree with a flexible, interdisciplinary focus. Students actively draw from the rich intellectual resources of the University of Colorado campuses in both Denver and Boulder for classes, personalized instruction, teaching opportunities and research appointments. Graduates of the program work in universities, government, nonprofits and the private sector, both in the U.S. and around the world.

Planning and design form a well-established and expanding field of knowledge and practice regarding the relationships of natural, behavioral, technological, political, economic and cultural factors to the organization of physical space, and their combined influence on the quality of life in general. Housed within the college, the departments of architecture, landscape architecture, and planning and design share the idea that the complex problems of the built environment are best addressed through collaboration among the various design and planning disciplines. As a result of this collaboration, the departments jointly offer the advanced research degree, a PhD in design and planning.

Areas of Specialization

The PhD program serves as the intellectual driver of the College of Architecture and Planning; its mission is to provide a scientific foundation for planning and design. Unique and distinguishing characteristics include the physical environment as the domain of interest, the interdisciplinary and integrative orientation of study and the applied nature of prescriptions. Being broad in its offerings, available study covers issues ranging from highly technical urban modeling to the history of architecture. Students in the program

are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum specific to the domains of expertise and faculty interests; in exceptional circumstances, advanced study on a related topic (e.g., historic preservation, green buildings) is available to bridge the two specialty areas.

Sustainable and Healthy Environments (SHE)

Studies in SHE are concerned with the design making by public agencies to guide the pattern and timing of land development that advance goals of sustainable and healthy environments. Subfields include land use planning, growth management, transportation, urban design, housing and community development, environmental planning and management of urban, rural and natural areas. Primary work in this area focuses on land use controls, design review processes and the development of models and tools to understand and support decision processes and design practices.

History of Architecture, Landscape and Urbanism (HALU)

Studies in HALU include the history and theory of architecture, landscape and urbanism considered within socioeconomic and political contexts, intellectual history and cultural studies, as well as questions concerning the evolution of technology, technique and materiality. Interdisciplinary and cross-cultural collaboration is encouraged. In this manner, the disparate range of ideologies and methodologies within the discipline itself are introduced. It is critical for the contemporary scholar and teacher to be aware of the tradition of strategies and perspectives in order to operate in an intellectually responsible manner in the present. A background in a professional design field is desirable for all applicants.

As part of studies in either specialty area, students work on diverse topics, advancing the intellectual environment of the college by participating in a common colloquium, organizing workshops, presenting at conferences and writing publications.

Admission Requirements

As a candidate for admission to the PhD program, you must meet the requirements of the Office of Vice Chancellor of Academic and Student Affairs of CU Denver. These include but are not limited to:

- Matters of provisional admission
- Transfer credit restrictions
- Residency requirements
- Eligibility of courses for graduate-level credit

- Foreign language requirements
- Examination schedules

Residency

To be accepted, you will have to meet the academic residency requirement, which requires six semesters of scholarly work beyond the attainment of an acceptable bachelor’s degree.

Two semesters of residence credit may be allowed for a master’s degree from another institution of approved standing.

At least four semesters of resident credit, two of which must be consecutive in one academic year, must be earned from this university.

Specific Requirements

The specific admission requirements for the PhD program in design and planning are as follows:

1. Degree

Minimally, to be a successful applicant, you must have a bachelor's degree, however, it is strongly advised that students entering the program will have completed both a bachelor's and a master's degree. Field specialization and background are open. However, you will preferably have completed a professional (master's or bachelor's) program in planning or a design-related field, such as:

- Architecture
- Landscape Architecture
- Architectural Engineering
- Urban Design

In combination with a degree in an area, such as:

- Geography
- Urban Economics
- Environmental Law
- Urban Sociology
- Real Estate
- Management Science
- Computer Science
- Public Administration
- Environmental Psychology

2. Knowledge from Prior Course Work

The applicability of your prior course work will be decided by the program committee upon review of your transcript and additional materials. If you do not have the requisite educational background, grade point average or GRE scores, you may be admitted on a conditional or provisional basis and additional course work may be required in accordance with Graduate School Rules.

A. Design and Planning: You can satisfy this requirement by virtue of having completed either a professional or a pre-professional degree program in these areas.

If you do not have such prior qualifications, you must complete 12 hours of upper level undergraduate course
work in the College of Architecture and Planning, while obtaining in each of these courses a grade of ‘B’ or
higher. These courses are to be chosen from a selected list, in consultation with your faculty advisor, and are
to be completed within two years after admission to the program, and may count towards fulfilling the degree
requirements.

B. Undergraduate Work: You must have completed 12 semester hours of undergraduate work in one of the following areas:

Social and Behavioral Sciences
Environmental and Natural Sciences
Engineering
Humanities

C. Prerequisites: You must also have completed one of the following prerequisites with a grade of "B-" or above (the choice depends on your area of specialization):

Statistics. Including probability theory, parametric and nonparametric methods, and acquaintance with basic multivariate techniques. A minimum of 3 hours.

Mathematics. Including differential equations, finite mathematics, algorithms, data structures or other appropriate courses. A minimum of 3 hours.

Language. Ability to read at least one foreign language relevant to the area of specialization.

Computer Applications. Background in computer aided Design (CAD) or Geographic Information Systems (GIS). A minimum of 3 hours.

3. Demonstrated Academic Achievement

- Academic achievement as evidenced by an undergraduate grade point average of 3.0 (on a 4.0 scale) or better, and a graduate grade point average of 3.5 or better.
- A 575 TOEFL (Test of English as a Foreign Language) score is required if you are a foreign applicant whose native language is not English.

Curriculum

Degree requirements are set both by the Graduate School at the University of Colorado Denver and the PhD program within the college. Degree requirements are divided into two parts: pre-candidacy and candidacy/dissertation research. The former involves course work, qualifying examinations and a dissertation prospectus. Candidacy is certification that all requirements have been met except the dissertation. The doctor of philosophy (PhD) degree in design and planning is granted upon the successful completion and defense of the dissertation.

Students meet these requirements through course work and exams over a two year period. During this time, a student's cumulative grade point average may not fall below a 'B' without academic discipline or probation.

Degree Completion

Students in the PhD program in design and planning have up to eight years to complete all requirements for the degree. It is possible to take a leave of absence (referred to as a 'time out,' however, such circumstances should be pursued in tandem with your advisor and/or your committee). A leave of absence form, obtained from PhD program administrative coordinator, must be completed to ensure your place in the program.

Three Components

The PhD curriculum consists of three components:

- Core curriculum
- Additional course work
- Dissertation

1. Core Curriculum (12 semester hours)

Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum that is specific to the domains of expertise and faculty interests. The core curriculum includes 12 semester hours of course work and consists of a series of theory and methods and application courses, which all students must complete during

their first two years of residence, plus an additional three hours of programwide colloquia.

The core curriculum for the specialization in sustainable and healthy environments (SHE) includes:

DSPL 7011 - Research Design: the Logic of Inquiry. **Semester Hours:** 3
DSPL 7013 - Environment and Behavior. **Semester Hours:** 3
DSPL 7012 - Theories of Planning, Government Intervention and Implementation: Means and Ends. **Semester Hours:** 3

The core curriculum for the specialization in history of architecture, landscape and urbanism (HALU) includes:

DSPL 7686 - Special Topics. Historiography: History of the Scholarly Discipline. **Semester Hours:** 3
DSPL 7686 - Special Topics. History of Theory: History of the Ideas Informing Practice. **Semester Hours:** 3
DSPL 7686 - Special Topics. Pro-Seminar: Advanced Seminar on Faculty Research Interests. **Semester Hours:** 3

Advanced study on related topics (e.g., historic preservation, green buildings) is available to bridge the two specialty areas, in which case a core curriculum would consist of one of the above tracks complemented by select offerings from the other track. Such circumstances are addressed in close consultation with your initial advisors and/or your committee.

All students are also required to complete three sessions of the colloquium (DSPL 7014 - Colloquium in Design) during their first two years in the program (1 semester hour, pass/fail credits only). You also have the option of taking more than the three required credits. The colloquium includes presentations by speakers (internal to the program, external to the program/university, students), workshops on research/scholarship skills, and perhaps even more social-type activities.
The year-long colloquium has three primary objectives:

1. It exposes students to various approaches to research related to design and planning.
2. It enables students to formulate and test out researchable topics among faculty and student peers.
3. Finally, it serves as a bridge between the two specializations offered within the program, HALU and SHE.

2. Additional Course Work (total 34 semester hours)

In addition to the core curriculum, each student must take at least 12 semester hours of course work in classes broadly conceptualized as “methods” indicative to your field of research. The type of research methods courses varies considerably depending on your chosen area of study. Students must also have 12 semester hours of course work in their minor field of study and will typically take 10 semester hours of support electives. Courses outside the core curriculum may be chosen from outside the college on either the Denver or Boulder campus. Up to 18 semester hours of graduate-level course work can be transferred into the program to qualify for advanced standing.

3. Dissertation (30 semester hours)

It is most important that you continue to work closely with your advisor while you are doing your dissertation research. Meet at least once a month to discuss your progress and be sure to communicate with your other committee members as well. It is a continual process that should be a joint effort to assure that your committee will be well informed and prepared at your defense.

Required Semester Hours

The required semester hours are as follows:

Core Curriculum	12 semester hours
Specialization	12 semester hours
Minor	12 semester hours
Electives	10 semester hours
Dissertation	30 semester hours
Total	76 semester hours

The average course load is 15 semester hours per academic year, especially for the first two years.

Suggested Timing of the Program

(for full-time students without advanced standing):

Year One

- Develop your degree plan
- Complete any prerequisite courses

- Enroll in 11 semester hours of the required core curriculum and additional courses in your specialty area
- Finish the preliminary examination

Year Two

- Enroll in one semester of Colloquium
- Continue or begin to take electives in your minor and specialty areas as described in your degree plan
- Begin literature review papers
- Prepare for your comprehensive exam

Years Three and Beyond

- Complete your literature review papers
- Prepare a dissertation proposal
- Take the comprehensive exam
- Establish your dissertation committee

The remainder of the third and fourth years you will spend researching and writing the dissertation, under the supervision of the dissertation committee.

Architecture

Chair: Taisto Mäkelä
Office: CU Denver Building, 330
Telephone: 303-556-3382
Fax: 303-556-3687

Faculty

Professors:

Mark Gelernter, PhD, Bartlett School of Architecture, University of London

*Julee Herdt, MArch, Southern California Institute of Architecture

George Hoover, BArch, Cornell University

Patricia O'Leary, MArch, Arizona State University

*Peter Schneider, BArch, University of Cape Town

*Ping Xu, DDesign, Harvard University

Associate Professors:

Amir Ameri, PhD, Cornell University

Osman Attmann, PhD, Georgia Institute of Technology

*Robert H. Flanagan, MArch, University of Colorado Denver

Phillip Gallegos, DArch, University of Hawaii

*Michael K. Jenson, PhD, University of Edinburgh

Christopher Koziol, PhD, University of Colorado Denver

Laurence K. Loftin III, MArch, University of Virginia

Taisto H. Mäkelä, PhD, Princeton University

*Hans R. Morgenthaler, PhD, Stanford University

Ekaterini Vlahos, MArch, University of Colorado Denver

Associate Professor (Clinical Teaching Track):

Barbara Ambach, MArch, Southern California Institute of Architecture

Assistant Professor:

*Matthew Jelacic, MArch, Harvard University

Senior Instructors:

Joseph Colistra, MArch, University of Colorado Denver

*Allen Harlow, MArch, University of Colorado Denver

*Martha Hutchinson, MArch, Cornell University

*Eric Morris, MArch, University of Houston

Ranko Ruzic, MArch, University of Colorado Denver

*Melanie Shellenbarger, PhD, University of Colorado Denver

Erik Sommerfeld, MArch, University of Colorado Denver

*Michael Tavel, MArch, University of California, Berkeley

Instructors:

*Amir Alrubaiy, MArch, University of Colorado Denver

Kenneth Andrews, MArch, Rice University

*Meredith Banasiak, MArch, Arizona State University

*Marianne Bellino, MArch, Washington University in St. Louis

*Marcel de Lange, MArch, Delft University of Technology

*Ron Faleide, MDesign, Harvard University

*Marcus Farr, MArch, Rice University

*Tamarah Long, MArch, University of Florida

*Laura Malinin, MEd, University of Texas, Brownsville

*Steven Perce, MArch, University of Colorado Denver

*Jade Polizzi, MArch, University of Colorado Denver

*Rob Pyatt, MArch, University of Colorado Denver

*Ken Renaud, MArch, University of Colorado Denver

*Matthew Shea, MArch, University of Colorado Denver

Additional information about faculty in this department is available online here.

*Teach in the undergraduate Architecture Studies program.

Mission

The architecture department’s mission is to lead in the discovery, communication and application of knowledge in the discipline of architecture. The department aims to excel in the education of its students, in the research and creative endeavors of its faculty and

in service to the community. To respond to this mission, the department has developed a unique intellectual, educational and architectural culture.

- First, the department celebrates its place in a special environment—urbanized Denver with the Front Range and the spectacular natural landscape of the high plains and the Rocky Mountains. The architecture department focuses not only on the design of buildings, but also on the interactions between buildings and their urban and natural settings.
- Second, the department examines the interplay between architectural form and the complex cultural and technological context in which architects operate. As a result of these dominant concerns, the department has created an academic environment that is intellectually stimulating and educationally challenging and that aims to educate students who will become leaders in the discipline and profession of architecture.
- Third, the Department of Architecture follows the College of Architecture and Planning's mission of integrative design. The faculty research, teach and practice ways to design environments that are meaningful and beautiful. We plan, shape and interpret those environments in ways that are collaborative, responsible, sustainable, enabling and integrative. Promoting and acknowledging diversity in subject matter, method and orientation are essential to this integrative approach.

The faculty teach by integrating different design theories and practices into a curriculum that emphasizes their connectedness, crossdisciplinary interdependence, research orientation and real-world relevance. The department collaborates to produce new knowledge while adding to the understanding of the role and identity of design and research in each architectural project. In this collaborative process, each project asks a critical question, then answers it using an appropriate method. These questions stress environmental, economic, social, cultural, aesthetic and ethical concerns. In this knowledge-based matrix, our understanding of how integrative design shapes environments and settings constantly evolves and changes.

Degrees

The College of Architecture and Planning offers a preprofessional bachelor of environmental design (BEnvd) on the Boulder campus. The Department of Architecture offers a graduate degree on the Denver campus: the master of architecture (MArch). The following statement from the National Architectural Accrediting Board (NAAB), which is responsible for accrediting all architecture programs in the United States, should help a student choose the appropriate degree program:

"In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the bachelor of architecture, the master of architecture and the doctor of architecture. A

program may be granted a 6-year, 3-year or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

“Master’s degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.”

- The preprofessional degree offered by the College of Architecture and Planning is the bachelor of environmental design (BEnvd). The professional degree offered by the college is the master of architecture (MArch), which is fully accredited by the NAAB for a six-year term.
- The master of architecture, the college’s accredited professional degree for students intending to seek licensure as architects, is offered to students who have completed the college’s BEnvd or any other preprofessional NAAB-accredited architecture degree, as well as to students who have completed an unrelated undergraduate or graduate degree or to students who hold professional architecture degrees from other countries but who seek to obtain an NAAB-accredited architecture degree. Students holding a preprofessional degree from a NAAB-accredited program or professional architecture degree from a foreign institution will be evaluated individually for advanced standing in the MArch program, commensurate with their previous educational experiences.

Master of Architecture

Architecture MArch

The MArch is the college's accredited professional degree for students intending to seek licensure as architects. It is a three-and-one-half-year plan of study on the Denver campus that has been fully accredited by the National Architectural Accrediting Board (NAAB).

Prerequisites

- Students must complete the prerequisites of college-level trigonometry and physics before enrolling in ARCH 5310, Introduction to Building Technology. Since this class should be taken in the first semester in order to stay on track for graduation, students are strongly encouraged to complete the trigonometry and physics requirements before beginning the MArch program.

- ARCH 5000, Math and Physics for Architects, is offered in the summer on a pass/fail basis. This class meets the prerequisite requirements. This class does not count toward the number of credits required for the MArch degree.
- A graphics workshop is recommended for students who do not have a background in architectural drawing and model building. This class is offered each year before the beginning of the fall semester.
- Students are also expected to have achieved a basic level of computer literacy and should be familiar with PC or Mac operating systems.

Program Requirements

Students with a bachelor's or master's degree unrelated to architecture must complete a seven- or eight-semester sequence of course work and accumulate a minimum of 114 semester hours of credit. Students who have completed the University of Colorado at Boulder's BEnvd or other preprofessional NAAB-accredited architecture degree, or non-NAAB-accredited professional architecture degree in another country, will be evaluated individually for advanced standing. These students will be advised and provided with an individualized plan of study commensurate with their previous degrees and experience, and will have to complete at least 60 semester hours of credit in residence within the College of Architecture and Planning.

Course Sequence

The MArch program is divided into five major components:

- studio design studies, 45 semester hours
- cultural studies, 12 semester hours
- technology studies, 18 semester hours
- professional studies, 6 semester hours
- electives, 33 semester hours

A wide array of electives in these areas allows students to tailor their graduate studies to their own interests.

First Year

Fall

- ARCH 5110 - Design Studio I **gtPATHWAYS:**
- ARCH 5111 - Introduction to Drawing **gtPATHWAYS:**
- ARCH 5210 - Introduction to Architecture **gtPATHWAYS:**
- ARCH 5310 - Introduction to Building Technology **gtPATHWAYS:**

Total: 15 Hours

Spring

- ARCH 5120 - Design Studio II **gtPATHWAYS:**
- ARCH 5121 - Design Seminar II **gtPATHWAYS:**
- ARCH 5220 - History of Architecture I **gtPATHWAYS:**
- ARCH 5320 - Building Construction and Methods **gtPATHWAYS:**
- LDAR 6632 - Site Planning **gtPATHWAYS:**
  Elective* (3 semester hours)

Total: 18 Hours

Second Year

Fall

- ARCH 5130 - Design Studio III **gtPATHWAYS:**
- ARCH 5131 - Design Seminar III **gtPATHWAYS:**
- ARCH 5230 - History of Architecture II **gtPATHWAYS:**
- ARCH 5240 - Human Factors in Design **gtPATHWAYS:**
- ARCH 5330 - Environmental Control Systems I **gtPATHWAYS:**
  Elective* (3 semester hours)

Total: 18 Hours

Spring

- ARCH 5140 - Design Studio IV **gtPATHWAYS:**
- ARCH 5141 - Design Seminar IV **gtPATHWAYS:**
- ARCH 5340 - Environmental Control Systems II **gtPATHWAYS:**
- ARCH 5350 - Structures I **gtPATHWAYS:**
  Electives* (6 semester hours)

Total: 18 Hours

Summer

- ARCH 6150 - Comprehensive Design Studio **gtPATHWAYS:**
- ARCH 6151 - Comprehensive Design Seminar **gtPATHWAYS:**
  Electives* (6 semester hours)

Total: 12 Hours

Third Year

Fall

- ARCH 5360 - Structures II **gtPATHWAYS:**
- ARCH 5410 - Professional Practice **gtPATHWAYS:**
- ARCH 6170 - Advanced Design Studio **gtPATHWAYS:**
- ARCH 6171 - Advanced Design Seminar **gtPATHWAYS:**
  Electives* (9 semester hours) or
- ARCH 6950 - Thesis Preparation **gtPATHWAYS:** and
  Electives (3 semester hours)

Total: 18 Hours

Spring

- ARCH 6170 - Advanced Design Studio **gtPATHWAYS:**
- ARCH 6171 - Advanced Design Seminar **gtPATHWAYS:**
  Electives* (9 semester hours) or
- ARCH 6951 - Architecture Thesis **gtPATHWAYS:**
  Electives* (9 semester hours)

Total: 15 Hours

* Students must take 9 elective semester hours in cultural studies, 9 elective semester hours in professional studies (3 semester hours of which must emphasize the computer), 6 elective semester hours in technology studies and 9 elective semester hours in any architecturally related electives on campus.

Landscape Architecture

Chair: Ann Komara
Associate Chair: Lori Catalano, 303-352-3613
Office: CU Denver Building 330
Telephone: 303-556-3382
Fax: 303-556-3687

Faculty

Professor:

Lois A. Brink, MLA, University of Pennsylvania

Associate Professor:

*Ann Komara, MLA, M Arch Hist, University of Virginia

Assistant Professor:

Joern Langhorst, Diploma, University of Hannover

Senior Instructors:

Lori Catalano, MLA, University of Pennsylvania

*Charles Chase, MA, University of Colorado

*David Kahn, MLA, MArch, University of California, Berkeley

Anthony R. Mazzeo, MLA, University of Pennsylvania

Instructors:

*Brian Cook, MLA, University of Colorado Denver

Emmanuel Didier, MArch, MLA, University of Virginia

*Kathleen Kambic, MArch, MLA, University of Virginia

*John Lanterman, MLA, University of Colorado

Heath Mizer, MLA, Harvard University

Leila Tolderlund, MLA, University of Colorado

Additional information about faculty in this department is available online here.

*Teach in the undergraduate Landscape Studies program.

Mission

The master of landscape architecture (MLA) program examines relationships among the landscape, people and culture, and promotes integrated responses to the design challenges presented through this inquiry. In developing design responses, students not only acknowledge the current practice of landscape architecture, they question, invent, create, test and advance their knowledge to engage the profession and address new challenges. The goal of this program is superior education, scholarly research and meaningful service in the discipline and practice of landscape architecture in a rapidly evolving global context.

The program's "laboratories" are diverse. The "local laboratory," found in the urban, suburban, rural and wilderness landscapes mainly associated with the Mountain, Front Range, High Prairie and Western Slope regions of Colorado is partnered with "site-based laboratories" in urban and rural centers outside of the state. Both contexts present diverse cultural and environmental situations and opportunities, which shape regionally responsive landscape design and planning. Imperatives within the public and private realms of these landscapes fuel the academic and research agenda. The knowledge and experience derived in these settings apply globally to multiple scales and cultures.

Sample topics include explorations of:

- Planning and design leading to the making of healthy, sustainable cities and regenerative communities
- Challenges associated with urban and suburban growth and development
- The role and production of civic infrastructure
- The use and conservation of land and water resources
- Reclamation and reinvention of disturbed or marginalized sites and communities
- The preservation of historic landscapes and their role in cultural identity
- The recognition of cultural values of the region and their expression in built form

Within this context, CU Denver's Department of Landscape Architecture links theory with practice, history with change, technology with invention and designers with their constituents.

Program Objectives

The department has developed four broad program objectives in support of our mission. These objectives describe what students should know and be able to do by the time they graduate and are linked to a series of measurable student learning outcomes. The four specific educational objectives are:

- **Design:** Students will be able to formulate questions and arguments about landscape and its role as a significant cultural medium, and determine processes

and practices that lead to transformative actions based on ethical, communicative and content knowledge criteria.

- **Communication and Representation:** Students will be able to speak, write, create and employ appropriate representational media to effectively convey ideas on subject matter contained in the professional curriculum to a variety of audiences.
- **Professional Ethics:** Students will be able to critically evaluate local and global ramifications of social issues, diverse cultures, economic and ecological systems and professional practice as guiding principles for design thinking and implementation.
- **Content Knowledge:** Students will be able to develop a critical understanding, and application, of the histories, theories and practices of landscape architecture and its role in reflecting and shaping culture and environments.

Master of Landscape Architecture

Landscape Architecture MLA

Prerequisites

Students are expected to have achieved a basic level of computer literacy and are required to have their own computer.

Program Requirements

The landscape architecture program offers professional and advanced professional graduate degree curricula leading to the degree master of landscape architecture (MLA).

- The first-professional degree program, requiring a six-semester sequence of course work totaling 90 semester hours, is fully accredited by the Landscape Architecture Accreditation Board (LAAB) and recognized by the Council of Educators in Landscape Architecture (CELA).
- Students completing the college's bachelor of environmental design on the Boulder campus—or completing an undergraduate design degree at another institution—may be given advanced standing in the three-year program. Advanced standing will be based on prior academic accomplishment.
- The advanced professional degree program for qualified students having already earned a first professional degree in landscape architecture (BLA) or related discipline requires 48 semester hours. Advanced standing will be based on prior academic accomplishment.

Course Sequence

(90-semester-hour MLA for students without a professional degree in landscape architecture or related profession)

The curriculum consists of core and elective course work. Core courses are grouped into five components:

	Semester hours
Design Studios	36
History and Theory	12
Site Works	15
Media	6
Ethics	3
Total core courses	72
Electives	18
Total courses	90

Typical 90-semester-hour program of study in required courses for the first professional MLA degree

First Year

Fall

- LDAR 5501 - Landscape Architecture Design Studio 1 **gtPATHWAYS:**
- LDAR 5510 - Graphic Media in Landscape Architecture **gtPATHWAYS:**
- LDAR 5521 - History of Landscape Architecture **gtPATHWAYS:**
- LDAR 5572 - Landscape Ecology **gtPATHWAYS:**

Total: 15 Hours

Spring

- LDAR 5502 - Landscape Architecture Design Studio 2 **gtPATHWAYS:**
- LDAR 5532 - Landform Manipulation **gtPATHWAYS:**
- LDAR 6632 - Site Planning **gtPATHWAYS:**
- LDAR 6641 - Computer Applications in Landscape Architecture **gtPATHWAYS:**

Total: 15 Hours

Second Year

Fall

- LDAR 5503 - Landscape Architecture Design Studio 3 **gtPATHWAYS:**
- LDAR 6631 - Landscape Construction Materials and Methods **gtPATHWAYS:**
- LDAR 6670 - Plants in Design **gtPATHWAYS:**
  One Elective. **Semester hours**: 3

Total: 15 Hours

Spring

- LDAR 6604 - Landscape Architecture Design Studio 4 **gtPATHWAYS:**
- LDAR 6605 - Landscape Architecture Design Studio 5 **gtPATHWAYS:**
- LDAR 6620 - Landscape Architecture Theory and Criticism **gtPATHWAYS:**
- LDAR 6721 - Regionalism **gtPATHWAYS:** or alternative approved by chair
  One Elective. **Semester hours**: 3

Total: 15 Hours

Third Year

Fall

- LDAR 6606 - Landscape Architecture Design Studio 6 **gtPATHWAYS:**
  Three Electives. **Semester hours**: 9

Total: 15 Hours

Spring

- LDAR 6607 - Landscape Architecture Design Studio 7 **gtPATHWAYS:**
- LDAR 6608 - Landscape Architecture Design Studio 8 **gtPATHWAYS:**
- LDAR 6750 - Professional Practice **gtPATHWAYS:**
  Two Electives. **Semester hours**: 6

Total: 15 Hours

Course Sequence

(48-semester-hour MLA for students with a professional degree in landscape architecture or related disciplines)

This route requires 48 semester hours and typically two years of full-time study. The core curriculum consists of two groups:

	Semester Hours
Design	24
History and Theory	12
Total core courses	36
Electives	12
Total courses	48

The department chair will advise each student engaged in this program of study.

Thesis

The graduate thesis in landscape architecture provides an opportunity for students to conduct independent research and design investigations that demonstrate their capacity for rigorous original thinking. The thesis is not required for graduation and not all students are approved to write a thesis. Choosing to pursue a thesis project constitutes a significant commitment to the endeavor; the topic must be chosen with care and thoughtfully and critically developed. Topics can explore material that has been previously unstudied, reinterpret existing material in a new light, or engage research and design practices in ways that strengthen and define the final project. For all theses, the research and products must meet the highest standards of academic excellence and contribute significantly to the discipline and/or profession.

Pursuing a thesis requires students to enroll in a three-course sequence for a maximum total of 12 semester hours. Students are required to formulate their research proposals two full semesters prior to their enrollment for the 6-semester-hour thesis, typically taken in lieu of the final studio. To proceed through the sequence, students must have completed and passed the research tools and methods class (LA6940) and have secured departmental approval of the thesis proposal. The completion of the thesis is dependent on acceptance of the student's work by the faculty member acting as the thesis chair and by the committee. For work to be accepted it must meet the standards established by the University of Colorado Denver for graduate thesis projects.

Dual Degree Options

Students may enroll in a dual degree program with architecture (MArch), with urban design (MUD) or with urban and regional planning (MURP).

Urban and Regional Planning

Chair: Brian Muller
Office: CU Denver Building 330
Telephone: 303-315-2421
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Faculty

Professors:

*Louise Chawla, PhD, City University of New York

Thomas A. Clark, PhD, University of Iowa

Yuk Lee, PhD, Ohio State University

*Fahriye Hazer Sancar, PhD, Pennsylvania State University

*Willem K.T. Van Vliet, PhD, University of Toronto

Associate Professors:

Bruce Goldstein, PhD, University of California, Berkeley

Kevin Krizek, PhD, University of Washington

*Raymond McCall Jr., PhD, University of California, Berkeley

*Brian Muller, PhD, University of California, Berkeley

Assistant Professor:

Jeremy Németh, PhD, Rutgers University

Instructors:

*John T. Barbour, MURP, University of Colorado Denver

Jennifer Steffel Johnson, PhD, University of Colorado Denver

Additional information about faculty in this department is available online here.

*Teach in the undergraduate Planning and Design Studies program.

Mission

Urban and regional planners in the United States and other countries seek to identify social needs and environmental capacities, anticipate change and its impact on communities and shape the pattern of human settlements. Studies in planning focus on making a positive and lasting impact on the lives of people, both in Colorado and around the globe. Every society throughout history has addressed the same fundamental questions, which urban and regional planners have the ability to help answer:

- Where should settlements be located?
- What economic, social and political activities fit what places and spaces?
- By what measures should the performance of cities and regions be judged — equity? efficiency? sustainability? diversity? beauty? utility?
- How do urban places and rural regions connect with the wider spaces and more expansive networks that compose the global space-economy?

The Department of Planning and Design, along with the college's other departments — architecture and landscape architecture —offers a four-year bachelor of environmental design (BEnvd) degree on the CU Boulder campus. The Department of Planning and Design offers the master of urban and regional planning (MURP) graduate degree on the Denver campus. The MURP program is a fully accredited two-year graduate professional degree program that has maintained this standing over many periodic reviews conducted by the Planning Accreditation Board (PAB). It is a "national" program,

drawing students from many states and abroad, and sending its graduates on to serve an equally vast geography.

Objectives

Planning's mission is to identify the root causes of urban and regional problems; to fashion strategies that deploy policies, plans, resources and regulatory approaches to create urban and regional environments suited to human and ecological needs; and to develop methods for evaluating the human and environmental consequences of urban problems, programs, policies and plans.

Through research our faculty members have emerged as national, even global, leaders in addressing some of the most vexing problems of the field, regionally, nationally and internationally. Through study students will gain firsthand experience with real-world challenges while addressing essential theories and state-of-the-art methodologies of the field.

Graduates have the ability to advance to positions of great responsibility in Colorado, across the nation and abroad, in both the public and private sectors, in planning per se, and in related fields. University of Colorado Denver graduates continue to maintain a very high pass rate on the national examination administered for entry into the American Institute of Certified Planners (AICP).

The essential tasks of planning require a high order of ability to:

- Amass and manipulate information
- Represent and model essential phenomena and processes
- Stimulate alternative futures and judge outcomes having diverse dimensions
- Portray and communicate key concepts
- Harness knowledge about all the key actors on the scene in order to elicit their input and to understand their needs

Succinctly put, the education of planners can only begin in the university. It must be a life-long pursuit, and planning programs are becoming increasingly supportive of the continuing education needs of professionals. It is the intellectual excitement of this ongoing pursuit of knowledge that draws many to the field —this, and the opportunity to change the world.

Master of Urban and Regional Planning

Urban and Regional Planning MURP

Overview of the Curriculum

The requirements for the master of urban and regional planning degree fall into three categories:

1. core courses required of all students (27 semester hours)
2. concentration courses (15 semester hours)
3. planning related elective courses (9 semester hours)

Completion of at least 51 semester hours is required for graduation, less transfers and other waivers approved during the first semester of study. Students are encouraged to focus primarily on core courses during their first year of study, except Studio II, which would normally be taken in the second year. Studio II serves as a capstone experience. It is offered every semester.

Beyond the core, the graduate planning program offers three 15-semester-hour concentrations around which students normally organize course selections: economic and community development planning, land use and environmental planning and urban place making. These have been carefully constructed to cover the broad terrain of the profession. Students may also, with an advisor's approval, craft their own unique concentrations. The remaining 9 semester hours of the 51-semester-hour MURP requirement are generally used either to deepen expertise within the concentration field or to enable lateral coverage of allied or distinct fields. Those in the MURP-MPA, MURP-MBA, MURP-JD, MURP-MLA and MURP-MArch dual degree programs will find that the core of each serves as the elective base of the other, leaving few free electives. In no instances may remedial study needed to secure course or program prerequisites apply to the basic degree requirement.

The concentration is meant to insure synergy among courses elected and to lay the foundation for a satisfying and productive career and extended learning on the job. Students should bear in mind that planning is a diverse and evolving profession and that personal interests and career options often change after graduation. Moreover, the mix of courses elected normally allows some breadth in the subsequent definition of one's expertise as new graduates attempt to match their qualifications with employer requirements. Highly focused studies sometimes elevate the marketability of expertise in certain niches in the market for entry level planners, but may limit access to others. Excessive breadth may limit claims of specialized expertise; however, many positions do indeed require competent generalists.

Prerequisites

Students are expected to have achieved a basic level of computer literacy prior to enrollment, and should be familiar with PC or Apple operating systems. Acquiring some prior familiarity with digital visualization techniques is recommended for students who do not have a background in graphic communication. A higher level of proficiency is desirable for those seeking to emphasize the design elements of professional practice, most in evidence in our urban place-making concentration. Some assistance in attaining

these skills may be provided in advance of the fall semester. Applicants are annually welcomed from virtually every field of prior study.

Advanced Standing

- Entering students who earned the college's bachelor of environmental design (BEnvd) degree offered on the CU Boulder campus, within five years prior to enrollment, and who have maintained a GPA of at least 3.0, will be admitted to the MURP with advanced standing. Those who graduated still earlier may receive advanced standing at the discretion of the department chair, in consultation with the program faculty.
- These students can earn the MURP degree after completing a minimum of 42 semester hours, which will include the core courses (less any waived due to prior study), an approved concentration and additional electives required to meet the overall credit requirement of 42.
- Students holding the college's BEnvd degree who also have completed, in this study, the undergraduate planning option with a GPA of at least 3.0 (and with a grade of at least 3.0 in ENVD 4320, Planning Studio III) will, in addition, receive a waiver with credit for URPL 6630, Planning Studio I. These students will earn the MURP degree upon completion of a minimum of 36 semester hours, including 21 semester hours of core courses and an additional 15 semester hours in an approved concentration.

Program Requirements

The master of urban and regional planning is the college's accredited degree for students intending to pursue careers in planning and in related fields across a wide spectrum of employment niches both within and outside government.

- With no advanced standing, candidates for the MURP degree must complete a minimum of 51 semester hours of graduate work, including all core courses (27 semester hours), a concentration (15 semester hours minimum) and additional electives (9 semester hours).Concentrations currently include: land use and environmental planning, economic and community development planning and urban place making. Students may also devise their own individual concentrations with an advisor's approval.
- Entering students who have engaged in the study or practice of planning elsewhere may petition the faculty prior or during their initial semester to determine whether any credit will be awarded or degree requirements relaxed as a result of these prior activities. A maximum of 9 semester hours of course work can be applied for advanced standing when such work was pursued at other institutions and meets prescribed level, content and quality thresholds. Graduates of the college's own BEnvd program are eligible for up to 15 semester hours of advanced standing.

Advising

Students should, early in their course of study, secure a program advisor. When that advisor also happens to serve as the concentration coordinator for the specific official concentration that the student wishes to pursue, then the faculty member should continue in both capacities. If the student wishes to pursue an official or self-devised concentration that is outside the program advisor's prime field of expertise, the student may either consult with the concentration coordinator while retaining the original program advisor, or switch all advising duties to the concentration coordinator. It will be important for the concentration coordinator to know of and approve course work in the context of the concentration itself. Monitoring student involvement in each concentration will also help the faculty to gauge demand, adjust offerings and facilitate activities outside the classroom such as visiting speakers and field trips, and to provide related services such as data bases, software libraries and job placement information. Maintaining an active roster of interested students will also help to sustain contacts among students and with graduates in order to build career networks and engage area professionals.

Internships

Internships are encouraged though they are generally not accepted in meeting concentration requirements. Exceptions must be approved in writing by the concentration coordinator prior to commencement of the internship. No more than three credits of internship work may be applied to the 51-semester-hour degree requirement. Any student wishing to undertake an internship must comply with the procedures established in the internship materials available in the program office.

Independent Study, Thesis and Special Topic Courses

To engage in an independent study course, the student must provide the instructor with an outline of the topic, and a time schedule for its completion. The instructor may require additional supporting materials before agreeing to work with the student. Independent study courses (URPL 6840) and thesis work (URPL 6950 and URPL 6951) may meet concentration requirements, depending on the topic, upon the program advisor's approval. Special topics courses (URPL 6686) will be acceptable in at least one of the categories in the three official concentrations. A completed thesis may substitute for Studio II. Students considering thesis work must secure a thesis advisor drawn from our regular faculty, assemble a committee, secure approval of the thesis proposal before work commences, comply with the official campus form guidelines, make a final presentation, win the approval of the committee and file a bound copy in the Auraria Library.

MURP Program Planning Form

Each student should have a copy of the Program Planning Form and use it to keep an up-to-date record of his/her program plan and progress. In addition, a copy of this form should be submitted to the program office and retained in the student's file. If you have any questions about how to use the form, contact your program advisor. No student will be certified for graduation by the department chair until a fully updated Program Planning Form is placed in the student's official file.

Core Curriculum

The core curriculum is composed of the courses listed below. Students are encouraged to focus primarily on core courses during the first year of study, except Studio II, which would normally be taken in the second year. Studio II serves as a capstone experience and is offered every semester. We aspire to offer a diversity of Studio II options befitting the three official concentrations.

- URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**
- URPL 5510 - Planning Methods I **gtPATHWAYS:**
- URPL 5511 - Planning Methods II **gtPATHWAYS:**
- URPL 5520 - Urban Spatial Analysis **gtPATHWAYS:**
- URPL 5530 - Planning Law **gtPATHWAYS:**
- URPL 6630 - Planning Studio I **gtPATHWAYS:**
- URPL 6631 - Planning Studio II **gtPATHWAYS:**

Areas of Concentration

The concentration is meant to insure synergy among courses elected, and to lay the foundation for a satisfying and productive career and extended learning on the job. Students should bear in mind that planning is a diverse and evolving profession and that personal interests and career options often change after graduation. Moreover, the mix of courses elected normally allows some breadth in the subsequent definition of one's expertise as students attempt to match qualifications with employer requirements.

Highly focused studies will sometimes elevate marketability in certain niches for an entry level planner, but may limit access to others. Excessive breadth may limit claims of specialized expertise, however, many positions do indeed require competent generalists.

The program supports three official concentrations:

Economic and Community Development Planning

This concentration focuses on:

- The marriage of community development and urban economic development. Communities, regions and nations suffering economic insufficiency, stagnation or decline—evidenced in under or unemployment, poverty, diminished opportunity, environmental decline or fiscal decay—often seek remedies for these shortcomings through strategic economic development planning.
- In this concentration, considerable attention will be given to means for assessing economic impact and apportioning growth's gains across people, places and sectors.

Land Use and Environmental Planning

This concentration focuses on:

- Practices and innovations in land use regulation and public investment
- Analytical methods including transportation modeling, land market evaluation, environmental impact analysis and use of decision support systems
- Administration of policies and plans
- Management of collaborative processes across diverse interest groups
- Planning politics and governance

Urban Place Making

This concentration focuses on responding effectively to the following recent trends and demands on the profession:

- Stronger residential real estate markets in urban centers, especially in the Front Range communities
- Planning for mixed-use and high density neighborhoods
- Necessity for understanding of urban form and the interactions between uses, facilities and services within complex urban contexts
- Higher levels of public participation
- Wider scope of in design review and increased level of discretion that necessitates design creativity in review processes.

A set of foundation courses is identified in each concentration, plus additional supporting electives.

Course Sequence

Applicants may be admitted for both the fall and spring semesters. The schedule below posits a fall onset. If study is commenced in the spring the student may not encounter Planning Methods I until the following fall, so Planning Methods would be deferred to the third semester of study since we now encourage students to take these in the numeric sequence. Planning Issues and Processes is currently offered only in the fall and is the usual “door of entry” to the program. It is possible however that we will move to offer

sections of this course during both semesters. Students may take more than 12 semester hours of study and so may progress faster than the template below would indicate. Generally taking more than 15 hours is ill-advised. Under some circumstances—and on a space-available basis—Studio I may be taken during the first semester of study. Both Studio I and II are offered every semester, and additional sections will be added as demand warrants to preserve an acceptable class size. We offer numerous courses beyond the core, and also designate additional options in other departments, elsewhere within our college and across the campus.

First Year

Fall

- URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**
- URPL 5510 - Planning Methods I **gtPATHWAYS:**
- URPL 5530 - Planning Law **gtPATHWAYS:**
  Elective course (3 semester hours)

Total: 12 Hours

Spring

- URPL 5511 - Planning Methods II **gtPATHWAYS:**
- URPL 5520 - Urban Spatial Analysis **gtPATHWAYS:**
- URPL 6630 - Planning Studio I **gtPATHWAYS:** *

Total: 12 Hours

Second Year

Fall

Concentration Courses (9 semester hours)
Electives (6 semester hours)

Total: 12 Hours

Spring

- URPL 6631 - Planning Studio II **gtPATHWAYS:** *
  Concentration Courses (6 semester hours)

Total: 12 Hours

* Both studios are offered in the fall and spring semesters.

Dual Degree Options

Students may enroll in dual degree programs with public administration (MURP+MPA), law (MURP+JD) and business (MURP+MBA). In addition, dual degree options are also available combining the MURP with landscape architecture (MLA) and architecture (MArch). A new dual degree combining planning and public health (MURP+MPH) is under development combining strengths on both CU Denver and the CU Anschutz Medical Campus. The dual degree with law combines study on the Denver campus and in the CU Boulder Law School. Interested students should consult the college website for additional information regarding these options. Overall, applicants to any dual option must apply to and gain separate admission to each degree program. Once admitted the student can graduate from neither until the work is completed for both degrees. Synergies enable a significant reduction in both the time and credit required to complete these pairings than would be needed if each were separately pursued. If the student should opt to drop either member of the dual set, he/she must then fulfill the stand-alone requirements of the remaining degree.

Certificate Programs

The college offers official certificate programs in design build, geospatial information science and historic preservation. Consult our website for details on each of these. The first is more attuned to the requirements of architectural students, whereas the latter two could suffice—with the approval of the department chair—as a basis for a concentration satisfying the MURP concentration requirement. Some students may wish to augment their 51-semester-hour MURP with additional course work in order to complete any one of these certificate programs.

College of Arts & Media

Dean: David Dynak

Associate Dean: Joann Brennan

Assistant Dean: Clark Strickland

Contact

Dean's Office

Office of Advising and Student Services

Physical Location:

Arts Building, Suite 177
1150 10th Street
303-556-2279
Fax: 303-556-2335

Mailing Address:
College of Arts & Media
Campus Box 162
P.O. Box 173364
Denver, CO 80217-3364

"Art Changing Lives"

Mission: The College of Arts & Media (CAM) exists at the intersection of art, technology and commerce, and as such, faculty and students use powerful art making, expansive teaching/learning and strategic service to connect deeply with the arts disciplines and the culture industry —as these currently exist and as they might become.

At the College of Arts & Media, we view the arts as central in enabling people to express and know themselves and understand the world around them. We attract students from the Denver area as well as from across the country and around the world. Our students pursue individualized goals, such as seeking a first degree, making a career change or enriching personal growth. Our faculty bring real-world professional experience and artistic excellence to the classroom. Through connections and workshops with arts professionals and internships, CAM students are able to explore their chosen professions. CAM develops and maintains cooperative relationships with civic groups, regional arts agencies, museums, galleries, performance venues, public schools, community colleges, professional societies and the business community. The College of Arts & Media is developing an international presence.

College Goals

1. The College of Arts & Media instills, inspires and models creativity founded upon the accumulated knowledge of human civilization.
2. The college operates at the intersection of art, technology and commerce.

3. The college develops artists committed to social responsibility and citizens who will advocate for the role of the artist in society.
4. The college is a center of cross-cultural exchange and understanding.
5. The college enriches the quality of life in the larger community, fosters community partnerships and encourages mentorship.
6. The college integrates interdisciplinary modes of learning and creating.
7. The college adapts to meet future needs of diverse student constituencies.

College Values

Experimentation and Innovation
Excellence and Professionalism
Community
Creative Research and Scholarship
Leadership
Entrepreneurship
Technological Innovation
Critical Thinking
Diversity, Accessibility and Equity
Intellectual Freedom and Artistic Integrity
Sustainability
Civic Engagement
Experiential Learning
Social Responsibility

Programs

The College of Arts & Media (CAM) offers MS, BS, BFA and BA degrees in a wide range of arts disciplines in three departments: Theatre, Film and Video Production (TFVP), Visual Arts (VA) and Music and Entertainment Industry Studies (MEIS). Our vision, mission and values guide our teaching and learning, creative research and scholarly discovery, as well as our engagement with the university, the creative industries and professional fields.

Faculty in CAM design their courses with explicit learning outcomes that define knowledge (what students will know), skills (what students will be able to do) and dispositions (how students will change). Sequentially-designed courses enable CAM graduates to engage in art-making of consequence, creative innovations, integration of new technologies and building connections to creative industries. We infuse real-world knowledge in the classroom and create opportunities for students to develop an understanding of how their own art-making and scholarly pursuits impact others. Working sessions with arts professionals, lectures and workshops by visiting artists, internships with entertainment companies and other challenging opportunities let students connect their learning to careers in the creative industries. CAM has also established cooperative relationships with civic groups, regional arts agencies,

museums, galleries, performance venues, public schools and community colleges, professional societies and the business community.

Application Deadlines

Music and Entertainment Industry Studies (MEIS) Department:

Undergraduate: fall admittance only
February 15, 2011 - April 14, 2011 - Priority Application Review

April 1, 2011 - CU Denver Application Deadline

April 15, 2011 - Final MEIS Application Deadline

April 16, 2011 - April 30, 2011 - Final MEIS Review and Notification of Admission Status

Graduate: Master of Science in Recording Arts: February 15 (fall admittance only)

Visual Arts Department

Digital Design and Scientific Media Design Programs only:

Spring admittance only: November 1 - Portfolio Review

Digital Animation Program only:

Fall admittance only: Application deadline to be announced in early (preceeding) spring

Theatre, Film and Video Production Department, as well as other programs in Visual Arts:

Priority Deadlines:
Fall - April 1
Spring - October 1
Summer - March 1

Facilities

CAM is committed to both traditional and new technology areas and celebrates the dynamic synergy between the two. CAM students can take advantage of superb studios, laboratories, equipment, galleries and performance spaces on campus. Students across all three CAM departments create work in computer labs where equipment and software are upgraded regularly. Most CAM studios are open for use by enrolled CAM majors, minors and graduate students when classes are not scheduled.

Music Facilities

- Five recording studios with analog, digital and hybrid technology
- Pro Tools in every studio
- Computer lab for music composition and recording arts
- Three sound reinforcement systems
- Mastering studio
- Audio/video forensics labs at the National Center for Media Forensics
- Teaching and practice studios for solo and ensemble performers

Visual Arts Facilities

- Photography labs with black-and-white, non-silver, digital imaging and color capabilities, and large-format color and black and white printing
- Sculpture lab with wood shop, metal shops and a foundry
- Drawing and painting studios with natural light
- Digital animation center computer labs and motion capture studio
- Printmaking and visual arts foundations studios
- Auraria Visual Resources Center digital collection of contemporary and historical images, music and video
- Emmanuel Gallery, a tri-institutional arts space for student and faculty exhibitions and special exhibition events
- Partnership Gallery in the Downtown Denver Courtyard by Marriott for rotating exhibitions of faculty and student work

Theatre and Film Facilities

- Two "black box" production studios
- Scene shop and paint frame
- Costume shop
- Full cage of video production equipment, including cameras, lighting, sound and grip
- Computer labs equipped with digital editing facilities
- A multi-screen complex with year-round screenings and programs and a location of the annual Starz Denver Film Festival

- Auraria Media Center, with two 3-camera TV studios with full control rooms, isolation booth and lighting control

King Academic and Performing Arts Center

- 520-seat Concert Hall
- 350-seat Eugenia Rawls Courtyard Theatre
- 200-seat Recital Hall
- Fully wheelchair accessible production facilities, including catwalks

Scholarship Opportunities

The university and CAM provide access to a variety of scholarships, studio and lab work opportunities and other financial support for students. Students are encouraged to review scholarship opportunities provided by CAM and the university through the university's Scholarship/Resource Office (303-352-3608).

Undergraduate Programs

Theatre, Film and Video Production

Bachelor of Arts (BA) in Theatre, Film and Television

Bachelor of Fine Arts (BFA) in Theatre, Film and Television

with emphases in:

Writing/Directing
Film & Theatre Production

Theatre, Film and Television minor

Music and Entertainment Industry Studies

Bachelor of Science (BS) in Music

Performance Emphasis

Recording Arts emphasis

Audition Track - Recording Arts

Music Industry Studies Track - Recording Arts

Music Business emphasis

Audition Track - Music Business

Music Industry Studies Track - Music Business

Visual Arts

Bachelor of Arts (BA) in Fine Arts

Art History emphasis

Studio Art emphasis

Bachelor of Fine Arts (BFA) in Fine Arts

with emphases in

3-D Graphics and Animation
Digital Design
Drawing
Painting
Photography
Scientific Media Design
Sculpture
Transmedia

Minors

Art History Minor

Digital Design Minor

Studio Photography Minor

Sculpture Minor

Studio Arts

Declaring a Major/Minor

All undergraduate degrees offered through the College of Arts & Media comprise 120 semester hours. Students must choose a major to graduate. Minors are optional.

Some majors require students to select a degree plan (BA, BS or BFA) and/or an emphasis (see above links). More information about specific majors and emphases is also available on the CAM Web site, under "departments."

Students may choose to pursue a double degree, double major, double emphases or minor. Each of these options may require more than 120 semester hours to graduate. Please consult a CAM advisor for additional information.

Minors

Departments in the college have developed a variety of minors. A minimum of 12 semester hours in residence is required for each. Please click the above links for specific minor requirements.

Students are not required to have a minor to graduate. Students may choose to declare a minor in CAM or through another college/school in the university. Students wishing to declare a minor in CAM should consult with a CAM advisor for details. More than 120 semester hours may be required to complete both a major and minor.

Double Emphases

Students may graduate with more than one emphasis in their degrees and majors by completing all requirements for each emphasis (e.g., BFA in fine arts with emphases in sculpture and photography). Completing these requirements will likely require more than 120 semester hours. Double emphases apply only to students completing two programs' requirements, both in the same CAM department.

Double Majors

Students may graduate with more than one major in CAM by completing all requirements for each major within a single degree (e.g., a BA with a major in fine arts, art history emphasis AND a second major in theatre, film and television). Completing these requirements will likely require more than 120 semester hours. Double majors apply to students completing two program areas in two different CAM departments.

Double Degrees

Students may earn two degrees in the College of Arts & Media (e.g., BFA in fine arts and BA in theatre, film and television) or from two different schools or colleges in the university (e.g., BS in music and a BS in physics) simultaneously by fulfilling all requirements for both degrees. Students must complete a minimum of 150 semester hours applied toward the two degrees.

Second Degrees

Students who have been awarded a bachelor's degree may be granted a second bachelor's degree provided that (a) all general requirements for that degree have been met; (b) the degree plan for the second bachelor's degree is different from the major for the first; and (c) the college and major department residence requirements are satisfied. A second degree from the college requires a minimum of 30 additional semester hours of credit.

General Degree Requirements

The following requirements apply to all undergraduates earning a degree in CAM. Please refer to the specific department and emphasis pages in this catalog for additional information.

- Minimum of 120 semester hours passed
- Fulfillment of major degree requirements
- Fulfillment of CAM General Course Requirements
- For BA and BFA degrees: a minimum of 45 semester hours of upper division (3000/4000-level) course work passed
- A cumulative GPA of 2.0 in all University of Colorado course work
- A minimum of C (2.0) for each course applied toward the major
- A minimum of 30 semester hours of resident credit

Requirements for Undergraduate Admission to the College of Arts & Media

A student wishing to matriculate in the College of Arts & Media (CAM) must be admitted at three levels: (1) as a student of CU Denver, (2) as a student in CAM and (3) as a student in a CAM major, degree and emphasis. Acceptance to majors, degrees and emphases in CAM is selective based on a variety of factors, which may include:

- Careful evaluation of secondary school records, which may include recommendations from guidance counselors, advisors, teachers and professionals
- Scores on standardized tests
- Creative review in the form of an audition, portfolio review or other evaluation

Formal acceptance into specific degree programs or emphases may be contingent on successful academic and creative work, assessed following completion of foundation courses in the major.

Overview

- Students may enter the college as undecided CAM students or may indicate intended area(s) of study.
- CAM recommends that undeclared students seeking entry into areas that do not identify a review process for entry into the major identify their areas of study quickly since programs are designed sequentially and many courses are offered in the fall or spring only. CAM recommends that students begin their major sequence of courses in the fall, as many spring-only courses require fall courses as prerequisites.
- Students may be accepted on a provisional basis for specific programs, with full acceptance pending satisfactory completion of foundation course work and successful review by departmental faculty.
- The application is based on two parts: academic and creative/artistic.
    1. The CU Denver Office of Admissions evaluates the academic component.
    2. Undergraduate programs at CAM may require an incoming artistic/creative assessment such as an audition, portfolio review or an entrance interview.
- Artistic/creative review is conducted by the appropriate department or program (see specific programs for details). Both the academic application and the artistic/creative materials are evaluated as a whole to determine admission and must be completed before an admissions decision can be made. Creative material, if required, should be mailed directly to the specific department or program.
- Some departments/emphases require sophomore reviews prior to students declaring specific emphases. Please read through the departmental pages of the catalog for additional information.

New freshmen and new transfers must meet the university entrance requirements as outlined in the Information for Undergraduate Students section of the catalog, in addition to appropriate artistic reviews/assessments, outlined in the CAM section of this catalog.

Admission to the MEIS Department

Acceptance into the CU Denver Department of Music and Entertainment Industry Studies (MEIS) is determined on a competitive basis with specific entrance evaluation requirements for both freshman and transfer students. All applicants will be placed in an enrollment pool, and admissions decisions will be based on several factors, including an indexed composite score of cumulative GPA, music aptitude exam score and an audition (if applicable). Application materials must be received by the deadline—no late applications will be considered. No admissions decision will be made for the MEIS program until the candidate's file is complete and the department has forwarded artistic/creative review results to the Office of Admissions.

Prospective students should refer to the MEIS Web site for current requirements, deadlines and procedures.

Notes:

- Please be aware that neither the university nor CAM returns creative materials and will not assume any liability or responsibility for original materials submitted by an applicant that are lost or damaged while in its possession.
- Candidates are urged to complete and file their applications as soon as possible. Applicants will be notified promptly if additional information is required. No admission decision will be made without complete information.
- Courses reach maximum enrollment quickly; students are encouraged to apply early.

Admission into the Visual Arts Department Digital Design Emphasis or minor, Scientific Media Design Emphasis and 3-D Graphics and Animation Emphasis

Admission into the BFA digital design emphasis or minor, scientific media design emphasis, and 3D graphics and animation emphasis or the digtial design minor is competitive with specific entrance evaluation requirements. Please see the Fine Arts BFA and Digital Design Minor pages in this catalog for details.

Additional Program-Specific Admission Requirements

Music Major Entrance and Sophomore Review Requirements

All entering freshmen and transfer students applying for admission to the BS in music must submit additional materials. Students wishing to pursue an audition track (i.e., performance, music business or recording arts) must successfully complete a music audition at the time of application to the university. Students applying for the music industry studies track must complete an audition deferment form. Audition information and the audition deferment form are available on the department Web site.

The BS in Music with an emphasis in recording arts (audition track or music industry studies track) permits provisional program acceptance only, pending completion of sophomore-level review, including foundation course work, entrance examination, formal application and acceptance by departmental faculty. Students will not be allowed to take upper-division recording arts courses until they have been formally accepted into the program/focus. Please visit the department Web site or contact CAMadvising@ucdenver.edu for more information.

Students who wish to pursue the BS in music with an emphasis in performance must pass a sophomore proficiency recital on their primary instruments prior to continuing the program and taking advanced level music courses.

Theatre, Film and Television BFA

All entering freshmen and transfer students planning to pursue the BFA in theatre, film and television are initially admitted under the BA program. Those desiring to pursue the BFA may then apply in the spring semester for admission to the BFA program for the following fall, provided they have completed at least one year of college course work (including 12 semester hours at CU Denver and specific major requirements). Please see the Theatre, Film and Television BFA page in this catalog for more information.

Intra-University Transfer

Students who want to transfer to the College of Arts & Media from another college or school within the university must formally apply to the College of Arts & Media and pass appropriate reviews/assessments as outlined on this page of the catalog. To be considered for admission, students must have a minimum 2.0 cumulative University of Colorado GPA.

Transfer of Major within the College of Arts & Media

Undergraduate students who wish to transfer from one department to another within the college must currently be in good academic standing, pass appropriate reviews/assessments as outlined on this page of the catalog and notify the CAM Advising Office by submitting a change of major form.

Undergraduate Academic Advising

Office of Advising and Student Services

Location: Arts Building, Suite 177
Telephone: 303-556-2279
Fax: 303-556-2335
E-mail: CAMadvising@ucdenver.edu
Web site: http://cam.ucdenver.edu/advising

The college's Office of Advising and Student Services is the main information center for CAM. Advisors assist students in tracking their academic progress, discussing remaining requirements and course sequencing, and in offering appropriate referrals to faculty and other university programs (e.g., Career Center). The office also coordinates student notifications (e.g., Dean's List, probation/suspension, scholarship opportunities) and college academic events (e.g., Open House, commencement, orientation) as well as maintaining advising-related materials. Academic advising is a service provided to students; students are ultimately responsible for their own academic progress.

Academic advising may be mandated or suggested prior to registration depending on the student's status. All new freshmen and transfer students are required to meet with an

academic advisor prior to registering for their first semester of courses. Students can view registration holds in the Student Center of their UCDAccess accounts.

New Freshmen

All new freshmen are encouraged to attend new student orientation where they will:

- Learn about the university
- Attend the CAM session to discuss academic programs, services and career opportunities in the creative industries

Information about new student orientation will be mailed to students and is available by calling 303-352-3520. Students are encouraged to register for the earliest orientation they are able to attend.

CAM also recommends that new freshmen entering fall semester take a First Year Seminar course, offered through the Office of Undergraduate Experiences.

Second-Semester Freshmen and Undecided Students

CAM freshmen with declared majors and undeclared arts and media students are assigned to the Academic Success and Advising Center. ASAC introduces students to university and college policies and explains core and basic degree requirements. These students are required to meet with an advisor prior to registering each semester. Students are encouraged to bring sample schedules to their advising appointments.

Academic Success and Advising Center
Location: North Classroom, Suite 2024
Telephone: 303-352-3520
E-mail: ASAC@ucdenver.edu
Web site: www.ucdenver.edu/life/services/asac/Pages/default.aspx

New Transfers

New transfers follow a two-step process:

1. The Office of Admissions evaluates the student's prior transcript(s) and determines an initial set of courses to be transferred.
2. CAM advisors and faculty determine how these courses fit into the student's degree plan, course by course. Students should set up an appointment with a CAM advisor to complete this process by calling 303-556-2279. Students may be referred to the faculty for review of courses in the major.

If certain courses are not initially accepted by the Office of Admissions, the student and advisor can discuss the petition process for accepting these courses. If the student's

petition is approved, the advising office will request that the Office of Admissions accept the course(s) in transfer.

New transfers are required to receive individual academic advising to become eligible to register for courses their first semester.

Continuing Students

Students with declared majors who have completed at least 30 semester hours are assigned to the college's Office of Advising and Student Services. Please see above for contact information and location. Students are encouraged to meet with an advisor at least once per year. We recommend bringing a sample schedule to each advising appointment.

Periodically, students may find a hold placed on their registrations by the Office of Advising and Student Services, requiring them to meet with a CAM advisor prior to registering. Students can view registration holds in the Student Center of their UCDAccess accounts. As other offices may also place a hold on a student's registration, students are encouraged to resolve any registration holds through the appropriate offices prior to their registration date/time.

Students approaching their junior and senior years are encouraged to meet with a faculty mentor in their area of study to discuss internships, career/employment opportunities, graduate school, professional organizations and other post graduation information. Faculty contact information is available on the CAM Web site. Students also may contact the Office of Advising and Student Services for suggested faculty referrals by interest.

CAM Undergraduate Academic Policies

Please see the Registration and Records and theUniversity Policies pages of this catalog for academic policies that apply to all undergraduate students at the university. The policies that follow apply specifically to undergraduates in the College of Arts & Media.

Dean's List

CU Denver uses a fixed criterion across all colleges for determining eligibility for the Dean's List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete nine (9) graded hours in the semester. These courses can be both within and outside of the college. Metropolitan State College of Denver pooled courses will not be included in the

GPA calculation nor will they count toward the 9 hours required for consideration. The GPA for inclusion in the Dean's List is 3.75.

In the summer semester, students must complete six (6) graded hours. Course inclusion will be the same as in fall and spring semesters. The GPA for Dean's List in summer is also 3.75.

Scholarships tied to Dean's Lists may have additional requirements.

The Registrar's Office calculates the semester GPAs that are the basis for determining the Dean's List. Incompletes will not be considered in the calcuation of minimum number of hours. The Dean's List will not be recalculated to include completed incompletes.

Graduating with Academic Honors

Academic honors are awarded at the time of graduation, based on cumulative University of Colorado undergraduate GPA. To be eligible for honors, a student must have completed a minimum of 30 semester hours at the University of Colorado (on any CU campus). A cumulative CU GPA of 3.65-3.749 earns *cum laude*, a 3.75-3.849 earns *magna cum laude* and 3.85 or above earns s*umma cum laude* honors designations on a degree.

Good Academic Standing

Students at the university are expected to maintain progress in their degree program, as defined by being in “good academic standing.” Good academic standing requires a minimal cumulative GPA of 2.0 on all University of Colorado course work.

Academic Probation and Academic Suspension

Academic Probation

- Academic Probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.
- Students are placed on Academic Probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via university-assigned e-mail and postal letter) of their academic probation status.
- Students on Academic Probation will be required to complete the Academic Success Plan during their first semester on Academic Probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed Academic Success Plan before they will be allowed to register for the subsequent term.

- Students on Academic Probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on Academic Probation before they will be allowed to register.
- Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing.
- Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on Academic Suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from Academic Probation and notified via university-assigned e-mail that s/he is in Academic Good Standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students are informed in writing (via university-assigned e-mail and postal letter) of Restricted Academic Probation status.
- Students on Restricted Academic Probation will be allowed to enroll for a maximum of 6 credits/2 classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on Restricted Academic Probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.
- Students on Restricted Academic Probation will not be able to register online; they will need to register for courses using a Schedule Adjustment Form, which must be submitted to the Student Service Center (North Classroom, Room 1003) for processing.
- Restricted Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Students must achieve a minimum 2.0 cumulative CU GPA to return to good academic standing and to meet graduation requirements.
- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours on Academic Probation and Restricted Academic Probation will be placed on Academic Suspension.

Academic Suspension

- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.

- Students are informed in writing via certified/registered letter of their Academic Suspension status.
- The minimum duration of Academic Suspension is for a period of one year (three semesters, including summer term). Students placed on Academic Suspension will be unable to take courses from any CU campus during this time.
- Should a student be placed on Academic Suspension while registered for the next semester, s/he will be administratively dropped from their courses by the university.
- A student's Academic Suspension status is permanently indicated on his/her official University of Colorado transcript.
- During the one-year Academic Suspension period, students who wish to return to the university should consider one (or both) of the following actions:
    - Attend another regionally accredited college/university.
        - Students who choose to attend another institution while on Academic Suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work.
        - Students should consult their academic advisor to discuss appropriate course work.
    - Use the time off to directly address and resolve the factors that contributed to the academic difficulty.
- After the one-year suspension period has elapsed, a student must petition the appellate committee of the school or college he/she wishes to enter for readmission and meet and document must meet at least one of the following criteria:
    - Attendance at another regionally accredited college/university where he/she earned a minimum cumulative GPA of 2.75 in transferable credit.
    - Explanation of their previous academic difficulty, demonstration of what has changed, and how this will allow he/she to now achieve and maintain Good Academic Standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0). Students who choose to petition their college's appellate committee for readmission must submit their petitions by the following deadlines:
        - For fall admission: June 1
        - For spring admission: December 1
        - For Maymester/summer admission: April 1
- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be readmitted on Restricted Academic Probation. These students must meet the condition of Restricted Academic Probation every semester until his/her cumulative CU GPA is at least a 2.0.

Second Academic Suspension

- Students who are readmitted after their first Academic Suspension and fail to meet the conditions of Restricted Academic Probation for a second time are placed on a second suspension for an indefinite period of time.
- Students on a second suspension may be readmitted to the university only by petition to the college's appellate committee.
- Students will not be considered for readmission unless they have demonstrated significant improvement in academic performance at the college/university level and/or considerable and positive change in personal circumstances.

Leaves of Absence/Returning Students

Students who have not attended the university for more than one calendar year should refer to the "Readmission Requirements for Former Students" in the Information for Undergraduate Students chapter of this catalog. Due to the dynamic nature of the CAM programs, returning students who have not attended in more than five years must complete their programs based on the current curriculum and policies. For assistance with your specific situation, please consult a CAM advisor.

Independent Study

The College of Arts & Media has very specific policies concerning eligibility and registration for independent studies. Students should consult the CAM advisor or their faculty mentors for specific eligibility criteria and registration procedures. The number of credits to be earned for an independent study project shall be determined at the time of registration. The college and academic programs have specific policies on how independent study credits may apply to the bachelor's degree. A maximum of 12 semester hours of independent study may apply toward the bachelor's degree and cannot be used to replace existing and available courses. Please contact CAMadvising@ucdenver.edu for additional information and appropriate paperwork. Independent study should be added by the census date (add/drop deadline) as noted on the academic calendar.

Internships

Internships provide important educational and professional experience. A maximum of 3 hours of internship credit per semester and 9 hours overall is allowed. Internship credit may not be awarded retroactively or after the student begins internship hours. Students should consult with an academic advisor about the counting of internship credits in their degree plans.

The college requires that students have the following to qualify for an internship:

- 60 completed semester hours
- Minimum of a 2.75 cumulative University of Colorado GPA

Specific academic programs may have additional eligibility requirements for an internship. Students seeking an internship should consult with the CAM Office of Advising and Student Services and the Experiential Learning Center. Additional information is available contacting CAMadvising@ucdenver.edu. Occasionally opportunities arise mid-semester; in such cases, students must file a Special Proccessing Form to add the course and, depending on the date, may be required to petition the advising office and/or the associate dean for approval to add an internship.

Graduate Programs

The Department of Music and Entertainment Industry Studies (MEIS) offers a master of science in recording arts (MSRA) with emphases in recording arts and media forensics. For details on program requirements, admissions and policies, please see the MSRA page or the Media Forensics page in this catalog.

CAM General Academic Policies

Please see the Registration and Records and the University Policies pages of this catalog for academic policies that apply to all students at the university. The policies that follow apply specifically to both undergraduate and graduate students in the College of Arts & Media.

Incompletes

The College of Arts & Media has very strict guidelines for granting incomplete grades. They include but are not limited to the following:

- Reason for incomplete must be a verified, compelling and extraordinary circumstance beyond student's control that made completion of the course impossible
- The majority of course requirements (75 percent) must have been completed with a passing grade to be eligible for incomplete (C [2.0] for major/minor courses and select general education courses; D- [0.7] for most general education and general elective courses; and B [3.0] for courses toward a graduate degree)
- CAM course completion agreement must be signed by both the instructor and student, with final approval by the associate dean
- All course work must be completed within one calendar year of the end of the original course
- Requests for a retroactive change from a letter grade to an incomplete will not be considered

The student is responsible for requesting an incomplete grade and submitting all of the appropriate paperwork and obtaining approvals. Please contact CAMadvising@ucdenver.edu for additional information.

Curricular Changes and Course Substitutions

Undergraduate students are required to complete the CAM General Course Requirements that were in effect when they began as a degree-seeking student at CU Denver, and major requirements as outlined when they declared their degree, major and emphasis and were admitted to the program. Similarly, graduate students fall under the degree requirements that were in place when they first enrolled in their programs. If a program revises its curriculum, students have the option of following their original degree requirements. Occasionally, courses under the original requirements may no longer be taught or may not be available for a set duration. In this case, the department will approve course substitutions.

Course substitutions in the major must be approved by the designated area head in the specific program area, the department chair and/or possibly the associate dean. Course substitutions in the CAM General Course Requirements must be approved by the Academic Policies Committee through a petition process. Please contact CAMadvising@ucdenver.edu for additional information.

Students who switch majors (e.g., BS in music to BA in theatre, film and television) are required to complete the major curriculum in place when they declare their new degree or major. Students who switch degrees within the same major (e.g., BFA in fine arts to BA in fine arts) will be required to complete the degree curriculum that is in place when they declare their new degree. Students who switch emphases within a degree and major may use either the curriculum that was in place when they were accepted into the major or the current requirements.

Applying to Graduate

Students expecting to graduate are required to fill out the online intent to graduate form (find information at www.ucdenver.edu > Graduation > Plan for Graduation > Intent to Graduate Form) by the published deadlines. Late applications will not be accepted, therefore late students will need to apply for the following semester.

Applications will be accepted from the first day of the student's registration for the semester in which the student plans to graduate through Census Date (the drop/add deadline) of the semester. Applications are due by 5 p.m. on census date of the semester in which the student is applying to graduate as noted in the academic calendar. Students are encouraged to meet with a CAM advisor the semester before they intend to graduate to review graduation procedures and degree requirements.

Students who have not attended the university in more than one calendar year must gain readmission to the university prior to applying for graduation. It is the student's responsibility to apply with enough time for the readmission process to be finalized by the census date.

Academic Policies Committee

The CAM Academic Policies Committee is the appellate committee for all student-related academic petitions, issues and appeals. The committee is responsible for the evaluation and interpretation of the approved academic policies of the college. Questions about interpretation of policies may be directed to the Office of Advising and Student Services. Procedures and petition guidelines are available at the CAM Web site or by emailing CAMadvising@ucdenver.edu.

Business School

Dean: Sueann Ambron
Associate Dean of Faculty and Programs: Clifford E. Young
Associate Dean of Operations: Jean-Claude Bosch
Assistant Dean Programs: Linda J. Brooker
Assistant Dean Budget: M. Judy Chavez

Contacts

Dean's Office
CU-Denver Building
1250 14th Street, 2nd Floor
303-315-8000
Fax: 303-315-8040
www.business.ucdenver.edu

Mailing Address
The Business School
Campus Box 165
P.O. Box 173364
Denver, CO 80217-3364

Website: http://business.ucdenver.edu

Admissions/Advising
Undergraduate: 303-315-8100
Graduate: 303-315-8200

Application Deadlines

Undergraduate
Fall—August 1
Spring—December 1
Summer—May 1

Graduate
Fall—April 1
Spring—October 1
Summer—February 1

Executive MBA
Fall—June 1

11-Month MBA
Fall—June 15

Located in the heart of the Rocky Mountain business community, the Business School at the University of Colorado Denver prepares students with the knowledge and skills necessary to become effective, responsible business professionals. We're able to achieve a standard of excellence by bringing together nationally recognized faculty and highly motivated, mature students in an intellectually challenging academic environment. UC Denver's Business School is a research institution. Because our faculty are nationally recognized for scholarly research as well as for their teaching skills, our students have the opportunity to be on the leading edge of business management theory and practice. Our class schedules and curriculum offer flexibility to meet your needs whether you plan to attend full or part time, day or evening. Whether you're an experienced working professional seeking an advanced degree or preparing for a new career in the business world, you'll gain the knowledge and perspective necessary to succeed in today's challenging business environment.

Educational Goals

The Business School is committed to superb teaching, connecting theory to practice that focuses on:

- current and relevant knowledge and skills necessary for success in the highly competitive global business environment
- experience in cooperative and team-based work skills
- integrated professional and functional expertise
- sensitivity to cultural and ethnic diversity

Our graduate programs serve both traditional and nontraditional students who have extensive work experience. The MBA serves the needs of students who desire a general business education. The professionally oriented MS degrees serve the needs of

students who desire greater specialization, particularly students who have already obtained an undergraduate business degree. Large numbers of our graduate students will be drawn from national and international locales.

Our undergraduate program, which serves both traditional and nontraditional students, leads to a baccalaureate degree in business with a substantial liberal arts component. The program is closely linked, through articulation agreements, to lower-division programs offered by Colorado's four-year and community colleges.

Key elements of our academic programs are the provision of top-quality career advising and placement services, as well as flexible schedules and programs to meet a wide range of student needs. We are committed to assisting our students' efforts to pursue rewarding careers.

Faculty

Our nationally recognized faculty is vigorous and enthusiastic about its teaching and research. Faculty members hold degrees from the nation's leading business schools, including Berkeley, Harvard, Stanford, University of Chicago, University of Pennsylvania, UCLA and Yale. Many of them also bring years of valuable experience in private industry. Their interdisciplinary expertise, academic achievements, scholarly research and business experience provide students with a dynamic learning environment.

Scholarships and Financial Aid

Many programs for financial aid are administered by the Office of Financial Aid. Call 303-556-2886 for detailed information.

Thanks to the generous support of the Colorado business community and others, the Business School has a significant number of scholarships to offer its students. Scholarships are awarded on the basis of merit and/or financial need. The amount of the award and the number of awards available vary.

Thirty different scholarships are available to eligible Business School students, with multiple awards from most scholarships. Go to www.business.ucdenver.edu for more details.

- *Undergraduate* scholarships include the Board of Advisors, the Business School Undergraduate Excellence, the Carolyn Lee Henderson, the Robert E. Moore Memorial, the Business School Sustaining Student, the Dean's Community Scholarships, the Scholarship for International Study and the Dean's Scholarship for Continuing Undergraduate Business Students.
- The MBA Outstanding Scholar Award, the MBA Opportunity Scholarship and the MBA Faculty's Scholarship are given to qualifying MBA students.

- *Accounting* scholarships for both graduate and undergraduate accounting students include the Deloitte & Touche and Accounting Program Scholarship, as well as the Price water house Coopers Scholarship for undergraduate junior accounting majors only.
- *MS finance* scholarships are the MS Finance Fellows, open to graduate students in the finance program, and the Carolyn Lee Henderson Scholarship, designated for students in the finance program.
- *MS health administration* scholarships include the Abbott Fellows, AUPHA/McGaw, CU Denver MS Health Administration, Eugenie D. Sontag, Leland R. Kaiser, Medical Group Management and the MS Health Administration Alumni Scholarships.
- *MS information systems* students may apply for the Dean's Scholarship in Information Systems.
- The *MS international business* Merit Scholarship is open to students in the CU Denver MS international business program.
- *MS management or human resources management* students may apply for the Excellence in Management or the Excellence in Human Resource Management Scholarship.
- *MS marketing* students may apply for the MS Marketing Sustaining Student, MS in Marketing Fellows and Robert E. Moore Memorial Scholarships (also open to undergraduate marketing students).
- Four scholarships are available to students who take courses in entrepreneurial studies at the Richard H. and Pamela S. Bard Center for Entrepreneurship Development. These are the Coulter Foundation Scholarships in Entrepreneurial Studies and Business, and the Dean's Pursuit of Excellence, Mehalchin and Trueblood Scholarships.

Further information about these scholarships, including eligibility criteria and application forms, may be obtained by visiting the Scholarship Resource Office website at or by calling 303-252-3608.

Study Abroad

Transfer credit from study abroad programs requires prior written approval from the undergraduate or graduate program director. Students must meet with a business staff advisor to determine course acceptability prior to the semester in which they intend to study abroad. Information on the various programs is available at the Office of International Affairs.

Institute for International Business

The Institute for International Business (IIB) was created in 1988 by the Board of Regents of the University of Colorado to serve as a center for the advanced study and teaching of international business. In 1993, the institute was designated a Center for

International Business Education and Research by the U.S. Department of Education, one of only 25 such centers of excellence in the United States. Through the CIBER and other funding sources, the institute strives to help the faculties of the Business School and other university departments to internationalize curriculum, programs, certificates or other student-oriented endeavors. The IIB works in other ways to support faculty in their teaching, research and development activities. In addition, the institute designs and facilitates customized international programs and training for business, cooperates with other organizations to offer seminars and conferences and publishes a quarterly newsletter to familiarize the Denver and regional communities with international business issues. Such initiatives help faculty, students and the business community to acquire the skills and expertise needed to be successful in our increasingly global economy. The institute also conducts and promotes research on the global economic aspects of competitiveness. Call 303-315-8436 for information.

Internships

Internships are included in the experiential learning requirement of the undergraduate business program. To be eligible to enroll in an internship for experiential learning credit, the undergraduate student must meet the following grade and course work requirements:

- the student must be in good standing with a cumulative GPA of at least 2.0, and a GPA in the area of emphasis of at least 2.0
- the student must have completed (a) all required lower-division course work and (b) at least 21 semester hours of the business core courses

Graduate students must be admitted to the Business School, be in good standing with at least a 3.0 GPA and have completed 15 semester hours of graduate work at the Denver Campus.

Interested students should contact the Experiential Learning Center (303-556-6656) for further details about the program.

General Academic Policies

Academic policies that apply to all students at CU Denver are described on the Office of the Registrar website and in the University Policies section of the catalog. The policies outlined on the following pages are relevant for both undergraduate and graduate students in the Business School. Individual policies appropriate only to undergraduate or graduate students are described under separate headings. Each student is responsible for knowing and complying with the academic policies and regulations established for the school. The school cannot assume responsibility for problems resulting from a student's failure to follow the policies stated in this catalog. Similarly, students are responsible for all deadlines, rules and regulations stated on the student portal.

Academic Ethics

Students are expected to conduct themselves in accordance with the highest standards of honesty and integrity. Cheating, plagiarism, illegitimate possession and disposition of examinations, alteration, forgery, falsification of official records and similar acts or any attempt to engage in such acts are grounds for suspension or expulsion from the university. In particular, students are advised that plagiarism consists of any act involving the offering of the work of someone else as the student's own. It is recommended that students consult with the instructors as to the proper preparation of reports, papers, etc., to avoid this and similar offenses. Also, actions that disrupt the administrative process, such as misrepresentation of credentials or academic status, other forms of deception or verbal abuse of university staff are grounds for suspension or probation. All discovered acts of dishonesty must be referred to the Business School's Internal Affairs Committee.

Admission to Business Classes

Enrollment in business classes is limited to students who have been admitted to business degree programs and to other students as described in the separate undergraduate and graduate policy sections. The course registration criteria are designed to meet a number of objectives:

- to assure access to business courses for students seeking a business degree
- to serve students in other colleges who have business-related education objectives or requirements
- to serve nondegree students who have specific career or education goals

Refer to the student portal each term for course availability and prerequisites.

Attendance Regulations

Students are required to attend classes, including online classes, on a regular basis. Absences must be arranged with the instructor and must conform with university and instructor policies on attendance.

Prerequisites

Students are expected to know and fulfill all prerequisites when registering. Prerequisites are in place for the benefit of the student. The Business School wants our students to have the best experience in their courses, and having the prerequisites for a course ensures that you are ready for the material that will be covered. See course listings for relevant prerequisites as many are strictly enforced. The Business School reserves the right to administratively drop students who enroll without the correct prerequisites. This action may result in the loss of tuition.

Course Numbering

The course numbering system used at CU Denver identifies the class standing required for enrollment. Students are expected to take 1000-level courses in their freshman year, 2000-level courses in their sophomore year, 3000-level courses in their junior year and 4000-level courses in their senior year. Courses at the 5000 and 6000 level are restricted to master's-level business students, and courses at the 7000 level are restricted to PhD students.

Adding Courses

Students may add courses to their original schedule through the census date (first 12 days of the fall or spring semester, first eight days of summer session). Instructor approval may be required to add a course after the first week of classes. In some cases, failure to attend the first week of classes may result in an administrative drop from that course.

Dropping Courses

Students may drop a course through the census date and it will not appear on the transcript. After census, a student who wishes to drop must obtain written approval from both the instructor and academic dean or designate. The course and a grade of *W* will appear on the transcript. In order to drop beyond the 10th week, it will also be necessary to document circumstances beyond a student's control. Any student who is failing a class will not be allowed to drop simply because of the grade, and an *F* will be recorded on the transcript. See the academic calendar for deadlines and costs involved.

Withdrawal

See the Office of the Registrar website for universitywide withdrawal policies. Note that the Business School normally requires instructors' signatures on withdrawal forms before the academic dean's approval is granted. If a student is dropping all classes in a particiular semester, the student must complete part III of the Schedule Adjustment Form and submit to the academic dean and financial aid (if receiving financial aid) for signatures.

Administrative Drop

The school reserves the right to administratively drop students who are incorrectly enrolled in business courses. Instructors also may recommend that students who fail to meet expected course attendance or course prerequisites be dropped from the course. Generally, students who are administratively dropped will not receive tuition refunds.

In some cases, failure to attend the first week of classes may result in an administrative drop from that course.

Note that students who never attend class are not automatically dropped from the course. The student is responsible for dropping courses and failure to do so will result in a tuition charge for the class and an "F" grade.

Appeal Procedure

Students should contact a staff advisor in the Business School's programs office (undergraduates call 303-315-8100; graduate students call 303-315-8200) for appeal and petition procedures pertaining to rules and regulations of the school. For grade appeals, contact the Business School dean's office at 303-315-8000.

General Grading Policies

Plus/Minus Grading. Faculty have the option to use plus/minus grading.

Incomplete Grades. The only incomplete grade given in the school is *I*. An *I* grade is assigned only when documented circumstances clearly beyond the student's control prevent completion of course requirements (exams, papers, etc.). Students must sign a contract outlining how they will make up the missing work with the instructor giving the *I*. Students need not register for the course a second time. All *I* grades must be made up within the contract period (which may not exceed one year), or the *I* will automatically be changed to the grade of *F*.

Also, *I* grades must be completed and recorded at the Office of the Registrar no later than four weeks prior to graduation. The student is responsible for contacting the instructor to schedule the completion of the coursework.

Grade Changes. Grades as reported by instructors are final. Grade changes will be considered only in cases of documented clerical errors or when a student is making up an incomplete grade (*I*). All changes must be made within one year after the course has been taken, unless highly unusual circumstances can be documented and the change has been approved by the school. Normally, grade changes will not be considered under any circumstances after three years.

Pass-Fail or No Credit (Audit). With the exception of internships, experiential learning and travel study courses, the Business School does not permit election of pass-fail grading for any business course required for the student's degree. Students are not allowed to audit business courses.

Academic Programs

A carefully designed curriculum to prepare students for success in business administration is available for the student seeking either an undergraduate or graduate degree. The school offers courses leading to the bachelor of science in business administration (BS), master of business administration (MBA), the master of science (MS) and doctor of philosophy (PhD) degrees. www.business.ucdenver.edu

It is possible to pursue two degrees simultaneously, such as an MBA and an MS, or two MS degrees, through our dual degree programs. In addition to the programs in the Business School itself, we partner with other university departments to offer dual programs in MS finance/economics and the MBA in combination with graduate programs in architecture, economics, urban planning and the MD. We also have a joint MBA/MS in international management degree with the Thunderbird School of Global Management in Glendale, Arizona.

Undergraduate Degree Programs

Associate Dean: Clifford E. Young**Academic Director:** Ronald Ramirez
Director Advising and Admissions: Nancy A. Reed
E-mail: nancy.reed@ucdenver.edu

The undergraduate curriculum leading to the bachelor of science (business administration) degree is intended to help the student achieve the following general objectives:

- an understanding of the activities that constitute a business enterprise and the principles underlying administration of those activities
- the ability to think logically and analytically about the kind of complex problems encountered by management
- facility in the arts of communication
- a comprehension of human relationships involved in an organization
- awareness of the social and ethical responsibilities of those in administrative positions
- skill in the art of learning that will help the student continue self-education after leaving the campus

Undergraduate Admissions

Telephone: 303-315-8100
Fax: 303-315-8199

Admission of Freshman Students

Freshman applicants must have completed the college preparatory curriculum in high school, graduated in the top 25 percent of their high school class and achieved a score of at least 26 on the ACT or 1100 on the SAT. See Information for Undergraduate Students for further information on freshman admission.

Admission of Transfer Students

Applicants who have completed work at other collegiate institutions should review the information for transfer students in Information for Undergraduate Students. In addition

to general university transfer policies, the Business School evaluates course work to determine its appropriateness for the degree bachelor of science (business administration). Students who have completed more than 24 semester hours of transferable course work are evaluated for admission on the basis of their college GPA without regard to their high school performance. Transfer applicants with fewer than 24 transferable hours will be evaluated on the basis of both high school and college work.

Applicants are evaluated only on course work that applies to the business degree program. Generally, this will exclude course work of a technical or vocational nature and courses in activity PE and remedial subjects. For information about specific policies on transfer of credit, consult the undergraduate business program coordinator.

For admission to the Business School, a transfer applicant must have a minimum 3.0 GPA for all work applicable to the bachelor of science (business administration) degree and a 2.0 GPA in business courses. Applicants with less than an overall 3.0 GPA may be evaluated and admitted on a space available basis.

Intra-University Transfer

Students who want to transfer to the Business School from another college or school of the University of Colorado Denver must formally apply to the Business School. To apply for an intra-university transfer, students must submit an intra-university transfer (IUT) form and transcripts from University of Colorado to the business program coordinator. Transfer forms are available at the Office of Admissions or the Business School Advising Office; transcript request forms are available at the Office of the Registrar. The transcript must include the student's most recent semester at the university. Students with previous course work from other institutions are also required to submit a copy of their transfer credit evaluations (advanced standings). Transfer deadlines are August 1 for fall semester, December 1 for spring semester and May 1 for the summer session. In general, the admission standards for intra-university transfer are the same as for transfer from other institutions as listed above.

Former Students

A University of Colorado student from another campus, or a Denver campus student who has not registered for three consecutive semesters (summers included), is considered a former student and must reapply for admission. Former Denver campus business degree students will be automatically readmitted to the school for up to three years from the semester they last attended if they are in good standing (not on probation or suspension) in the school. Students who have not attended for more than three years, or who have completed the equivalent of 12 or more semester hours at another institution of higher education, must meet the admission and degree requirements applicable at the time they reapply.

Old Work Policy

For students newly admitted to the Business School and former business students readmitted to the school after an absence of three semesters, applicable credits up to five years old will be counted toward business degree requirements. Courses more than five years old will be evaluated individually for their current relevance to the degree program. Students may be required to update their knowledge by taking additional courses when past courses are outdated; in such cases, credit will be given for both courses. Generally, business courses more than 10 years old will not apply toward degree credit.

Second Undergraduate Degree

Students may apply to the Business School to earn a second undergraduate degree, provided the first undergraduate degree is in a field other than business. Persons who have already earned an undergraduate degree in business may not apply for a second undergraduate degree in business. Applications are available through the Office of Admissions.

If a student has an academic record that justifies consideration for a graduate program, that student is encouraged to apply for one of the Business School's master's degree programs. Call 303-315-8200 for information or refer to the graduate business section of the catalog.

Students who are accepted for the second undergraduate degree will be required to pursue courses in the sequence normally required for a business degree. For example, if a student registered for a second degree has not had the required mathematics or general education courses, these must be taken before the student will be eligible to register for business courses. Further, the basic business courses (core courses) must be taken before a student begins to pursue the major field.

Double Degree Programs

Numerous career opportunities exist for persons trained in both a specialized field and management. For this reason, students may be interested in combined programs of study leading to completion of degree requirements concurrently in two fields. For additional information, contact an undergraduate business staff advisor at 303-315-8100.

Undergraduate Advising and Academic Planning

Admissions Advising

Persons not yet admitted to the Business School can receive advising on course selection, admission requirements and other matters from an undergraduate staff advisor. To make an appointment, call 303-315-8100.

Admitted Students

Upon admission to the school, students execute a degree plan that identifies the courses required to graduate. This plan contains all the information needed to select courses and monitor progress toward completion of requirements for the bachelor of science (business administration). Business students are expected to assume responsibility for their own advising. This includes scheduling courses each term, meeting prerequisite requirements, being familiar with all the policies and procedures of the college and otherwise managing their own academic careers. Staff advisors are available to answer questions about unusual situations.

Career advising is available from the Career Center, 303-556-2250.

Undergraduate Core Curriculum—University of Colorado Denver

The faculty of the Business School, College of Engineering and Applied Science and the College of Liberal Arts and Sciences have established a core curriculum for undergraduate students. All undergraduate students are required to complete the undergraduate core curriculum in dependent of their college or major.

The undergraduate core curriculum for the Denver campus is outlined here; the core requirements for business students are specified in the section labeled “Business Program Requirements.”

The undergraduate core curriculum seeks to provide all baccalaureate students with basic intellectual competencies in English, mathematics, biological and physical sciences, behavioral sciences, social sciences, humanities and arts. Furthermore, the core curriculum promotes an awareness of cultural diversity and international perspective. The majority of the core curriculum is designed to be completed during a student’s freshman and sophomore years in order to provide the foundation for specific training in a student’s major discipline.

Graduation Requirements

The bachelor of science (business administration) degree requires the following:

Total Credits. A total of 120 semester hours.

A minimal level of proficiency must be demonstrated in one foreign language or in regional expertise. Students may satisfy the proficiency requirement by taking courses as described below.

Area of Emphasis. Completion of at least 9–21 semester hours of approved courses in the area of emphasis.

Residence. At least 30 semester hours of business courses (including the business area of emphasis) must be completed after a student's admission to the Business School. The 30 hours for residence must include MGMT 4500 and 27 hours in other 4000-level business courses (including area of emphasis courses).

GPA Requirement. To graduate, a student must maintain a minimum cumulative scholastic GPA of 2.0 for all courses attempted at the university acceptable toward the BS (business administration) degree, 2.0 for all business courses and 2.0 for courses in the student's area of emphasis.

Undergraduate Honors. Upon recommendation of the faculty, students who demonstrate superior scholarship are given special recognition at graduation. Students must achieve an overall University of Colorado GPA of 3.3 and a GPA of 3.5 in all business courses taken at the University of Colorado to be considered for *cum laude*. Those who achieve an overall University of Colorado GPA of 3.5 and a GPA of 3.7 in all business courses taken at the University of Colorado will be considered for *magna cum laude*. Those who achieve a 3.7 overall GPA and a 3.85 GPA in all business courses will be considered for *summa cum laude*.

Filing for Graduation. A senior audit is completed on all students who have completed 90 or more semester hours. Students must file an undergraduate candidacy form and diploma card and request a graduation evaluation prior to registering for their final semester. Failure to do so will delay graduation. Also, students desiring to change their area of emphasis after filing for graduation must have the change approved by the graduation coordinator prior to registering for their final semester. Changes after that time will delay graduation.

Undergraduate Core Curriculum for BS in Business

Intellectual Competencies

English, 6 semester hours
Mathematics, 3 semester hours

Knowledge Areas, 6-7 semester hours total

Biological and Physical Sciences, 3 semester hours
Humanities, 3 semester hours
Arts, 3 semester hours
Behavioral Sciences, 3 semester hours
Social Sciences, 3 semester hours

Cultural Diversity, 3 semester hours total

International Perspectives, 3 semester hours total

34 semester hours total

Business Program Requirements

Satisfaction of all the following:

Program Requirements

School proficiencies or other courses, 0-10 semester hours
CU Denver Downtown Campus core, 34 semester hours
Business School specific graduation requirements - see Business School policy, 12 semester hours
Business core, 33 semester hours
International studies, 3 semester hours
Experiential learning, 3 semester hours
Area of emphasis and other courses, 21 semester hours
Other business and nonbusiness courses, 4 semester hours

120 semester hours total

Detailed descriptions of degree course plans that satisfy program requirements follow:

Business School Foreign Language Hours Proficiency

The Business School's foreign language requirement or regional expertise for the 2008–2009 academic year requires that students demonstrate a minimum level of proficiency in one foreign language.

This requirement is met through completion of one of the following:

- a second-year (Level II) high school course with a minimum grade of C (2.0)*
- a second-semester-level college course (1020) with a minimum grade of C (2.0)
- satisfactory proficiency testing, including taking and passing a proficiency exam

***High school courses will not apply toward degree credit; however, they will waive the specific requirement from having to be done at the college level.**

Student's choosing the regional expertise requirement with one year of high school foreign language or one semester of college level work can satisfy the requirement by completing a minimum of 6 semester hours of course work from an approved list that relates to the politics, arts, history, culture or economy of any region of the world other than North America.

Courses used in the expertise area must meet the Business School guidelines and can be chosen from the list specified by the Business School. Students should contact their business advisor to outline their program, 303-556-5800.

Students who must meet all the proficiency requirements through course work at CU Denver may find it necessary to complete more than 120 semester hours to earn the BS in business administration. The proficiency requirement must be completed during the first three terms in attendance at the Denver campus.

Academic Policies for Selecting Courses

Registration

For registration, go online to www.ucdenver.edu/registrar.

Maximum Units per Term

The normal scholastic load of an undergraduate business student is 15 semester hours, with a maximum of 18 hours allowed during the fall/spring semesters and 12 hours allowed during the summer session. Hours carried concurrently in the Division of Continuing Education, University of Colorado Boulder, or the CU Denver Extended Studies Programs, whether in classes or through correspondence, are included in the student's term load.

Repeating Courses

A failed course (grade of *F*) may be repeated; however, the *F* will be included in the GPA and will appear on the transcript. Students must earn at least a *C* grade in required business core courses. Core business courses must be repeated if the student earns less than a *C* grade.

Courses from Other Institutions

Business students must have the written approval of the business program director to register for courses (excluding MSCD pooled courses) offered by other institutions, including other University of Colorado locations. Credit will not be given for courses taken without approval. Grades of *C* or better must be earned to receive business degree credit. Generally, only nonbusiness electives or lower-division, nonbusiness requirements are acceptable for transfer from other institutions once a student has been admitted to the Business School. Students who, after admission to the college, take more than 12 semester hours from another institution, must reapply for admission to the college as transfer students and must meet the current admission requirements.

Metropolitan State College of Denver Courses

Business students may select their nonbusiness required and elective courses from those offered by MSCD. Grades of *C* or better must be earned to receive business degree credit; however, the grade is not computed in the University of Colorado GPA and is treated like other transfer credits. MSCD business courses may not be taken for CU Denver business degree credit.

Graduate-Level Courses

With prior written approval of the business program coordinator, students may take a maximum of 6 semester hours of graduate-level nonbusiness elective credits. Students must earn grades of *B* or better in graduate courses to apply the credits toward business degree requirements.

Pass/Fail

Only internships, independent studies and nonbusiness elective courses may be taken pass/fail. Required business and nonbusiness courses (including the campus core) may *not* be taken pass/fail. A maximum of 6 hours pass/fail credit may be applied toward the business degree. Courses taken in excess of the maximum will not be applied toward degree credit. Pass/fail determination must be made within the posted deadlines (at census dates) and may not be rescinded (unless approved by the undergraduate committee).

Correspondence Courses

Only 6 semester hours of credit taken through correspondence study (from regionally accredited institutions) will be applied toward the business degree. Business courses may not be taken by correspondence. All correspondence courses must be evaluated by the business program coordinator to determine their acceptability toward degree requirements, and the program coordinator's written approval is required *prior to* the student's registering for courses. Students may contact the Division of Continuing Education, University of Colorado Boulder, for correspondence course offerings and registration procedures.

Independent Study

Junior or senior business students desiring to work beyond regular course coverage may take variable credit courses (1–3 semester hours) as nonbusiness electives under the direction of an instructor who approves the project, but the student must have the appropriate approval before registering. A maximum of 3 semester hours of independent

study course work may be taken in any one semester; a maximum of 6 semester hours may be applied toward degree requirements. An independent study request form must be signed by the student, the instructor, the program director and the director of advising and admissions.

Academic Policies for Suspension and Probation

To be in good standing, students must maintain an overall University of Colorado GPA of 2.0 (*C* = 2.0) or better for *all course work attempted and* a 2.0 GPA or better for *all business courses attempted*. PE activity courses, remedial course work, MSCD courses and repeated courses not approved by a business advisor are not included in this average. When semester grades become available, students falling below the 2.0 GPA will be notified of (1) probationary status or (2) suspension. Students are responsible for being aware of their academic status at all times; late grades and/or late grade notification does not waive this responsibility. School rules governing probation and suspension are as follows:

1. Any student whose overall GPA or business course GPA is less than 2.0 will be placed on probation immediately. A student may be removed from probation when the overall GPA and business GPA have been raised to 2.0.
2. A student may remain on probation as long as he/she maintains normal degree progress each semester as determined by the school *and* each term, while on probation, obtains an overall term GPA of 2.5 and term business course GPA of 2.5, with no grade below a C. Failure to meet probationary provisions will result in suspension. Probationary status may continue only until the student has completed a maximum of 12 semester hours or four terms, whichever comes first; summer is considered a term. The student will be suspended if the GPA deficiency is not cleared within this time.
3. Suspended students may not attend any campus of the University of Colorado or any division of the university (including continuing education or extended studies credit classes).
4. Students on suspension may petition for readmission to the school after waiting a minimum of one year from the term in which they were suspended. Generally, petitions are granted only in unusual circumstances. Any suspended student re-admitted to the school will be under contract and placed on a continued probation status until the GPA deficiency has been cleared. Such students will be automatically suspended if, at any time, their overall GPA or business GPA again falls below 2.0.
5. Students earning all failing grades for a semester will have a dean’s stop placed on their record and will not be permitted to register without a business advisor’s approval.
6. Combined degree students are required to maintain the same standards of performance as Business School students in order to be continued in a combined program.

Undergraduate Areas of Emphasis

Business students must choose an area of emphasis and complete the requirements for the area. The area of emphasis provides specialization beyond the general background that is provided by the undergraduate core and the business core, both of which are required to be fulfilled prior to completing the area of emphasis courses. Areas of emphasis within the BS in business administration program include:

- Accounting (financial, managerial, accounting/information systems)
- Financial Management (financial management/information systems)
- Human Resources Management
- Information Systems
- International Business
- Management (management/information systems)
- Marketing (marketing/information systems)

Graduate Business Programs (MBA/MS/PhD)

Associate Dean: Clifford E. Young
Assistant Dean: Linda J. Brooker
Telephone: 303-315-8200
Fax: 303-315-8199
E-mail: grad.business@ucdenver.edu

The Business School offers programs leading to a doctor of philosophy, the master of business administration and the master of science in specific fields of business and health administration. In addition, the master of business administration for executives (executive MBA) is offered as a multi campus program of the University of Colorado business schools, and the executive program in health administration (executive MBA/HA) is offered through the executive health network.

The PhD, MBA, executive MBA, MS and BS degrees in business are accredited by AACSB International, the Association to Advance Collegiate Schools of Business. The health administration MBA and MS degrees are also accredited by the Commission on Accreditation of Healthcare Management Education (CAHME). The accounting programs have earned a seperate AACSB International accreditation.

For a list of graduate business programs, see Program Curricula below.

Requirements for Admission to the MBA and MS Programs

Admissions/Advising

Persons contemplating graduate study are encouraged to learn about admission and program requirements by scheduling an appointment with a graduate advisor or

attending one of the regularly scheduled prospective student information meetings. Call 303-315-8200 to schedule an appointment.

Admission to the graduate programs in business is granted only to students showing high promise of success in graduate business study. Admission is based on the following indicators of the candidate's likelihood to succeed in the program.

Academic Record

The bachelor's degree must be earned from a regionally accredited university. The total academic record is considered, including the GPA, the course of study, and the quality of the program.

Required Testing

The GMAT or GRE is required for admission consideration for any applicant who does not have a previously awarded master's degree. The GMAT or GRE is administered at numerous centers throughout the world. For information and to register for the test, write to: GMAT/GRE, Educational Testing Service, CN 6103, Princeton, NJ 08541; or phone 1-800-GMATNOW; or visit www.mba.com. The code numbers for CU Denver's graduate business programs are as follows:

MBA: MPB-OG-78
11-Month MBA: MPB-0G-65
MS: MPB-OG-75
PhD: MPB-OG-29

GMAT is required for the 11-Month MBA and preferred for the MS in finance degree. Students may petition to have a GRE score reviewed for the MS finance degree, but the decision is on a case by case basis. No waivers of the GMAT will be accepted for the MS in accounting degree.

Work Experience

A record of appropriate employment at increasing levels of responsibility is considered a positive indicator of the likelihood of successful completion of graduate work. A resume must be submitted with the application materials.

Background Requirements

Students applying for graduate programs in business do not need an undergraduate degree in business. The MBA program is specifically designed so that the required courses cover the material needed for completion of the degree. There are no prerequisites needed to start the MBA program. Students with non-business

backgrounds have completed the program successfully. Applicants for the MS degrees, however, may be required to take background or common body of knowledge courses, depending on the individual's academic background. For more detailed information, phone the graduate programs office to schedule an appointment with a graduate academic advisor, 303-315-8200.

It is expected that students have an adequate level of personal computer proficiency in a word processing and spreadsheet software, as well as a good working knowledge of basic algebra and English grammar.

The Admission Process

Mailing address for applications:

Graduate Admissions
The Business School
University of Colorado Denver
Campus Box 165, P.O. Box 173364
Denver, CO 80217-3364

Students seeking admission to the 11-Month MBA, MBA with an emphasis in health administration, MS in health administration or executive programs should consult with the relevant catalog sections for additional application criteria or requirements.

Domestic Application Requirements

- Complete parts I and II of the application for graduate admission and the four essay questions.
- Have required GMAT or GRE scores sent directly to the graduate business admissions office from the Educational Testing Service. The code for CU Denver's graduate business programs are as follows:

MBA: MPB-OG-78
11-Month MBA: MPB-0G-65
MS: MPB-OG-75
PhD: MPB-OG-29

- Have two official transcripts (not student copies) mailed directly from each school, college, and university ever attended past high school. Transcripts must be sent even if credit course work completed was not part of a degree program or was taken after an undergraduate degree was earned.
- Resumé
- Enclose a check for $50 for the MBA, MS or PhD programs, or $80 for the dual MBA/MS or dual MS/MS, made payable to the University of Colorado. Personal interviews are not required, except for the 11-month MBA and the MBA and MS in health administration.

Deadlines. To be considered for admission, applicants for graduate programs must submit all materials prior to the following dates:

February 1 for summer session admission
April 1 for fall semester admission
October 1 for spring semester admission

The 11-Month MBA option only admits students each fall. The application deadline for the 11-Month MBA is June 15.

Early applications are encouraged because, if admitted, the student receives priority for registration time assignment. Applications received after published deadlines with complete supporting documentation, scores, fees and transcripts will be considered, but do not receive priority handling. In some cases, course availability is limited for the later applicants.

International Application Requirements

See Information for International Students.

Academic Policies for Graduate Students

Advising

As soon as possible after being admitted, students should schedule an appointment with a graduate advisor to discuss general degree requirements and determine if any background course work may be required and/or what common body of knowledge courses or prerequisites might be waived for the MS degrees.

Degree Plan

All students are encouraged to meet with a graduate advisor during their first semester to review their degree plan. Students are encouraged to meet with a graduate advisor throughout their program to ensure the correct sequencing of courses. An advising hold will be placed on students beginning an MS in accounting, an MS in health administration and an MBA in health administration.

Course Load

The normal course load for full-time graduate students is 9–15 semester hours. However, because many students are also pursuing a career, it is possible to attend classes on a part-time basis by enrolling in 3–6 semester hours. For financial aid purposes, 6 semester hours of graduate study is considered full time during the fall and

spring terms and 3 semester hours for the summer term. Graduate courses are scheduled primarily in the evening or online to accommodate work schedules.

Transfer of Credit

Upon approval of the program director, a maximum of 12 semester hours of graduate business course work may be transferred to the MBA and 9 semester hours for the MS degrees (9 semester hours for each the MBA and MS degree if under a dual program). Courses must have been taken from another AACSB accredited graduate school of business and completed within the last five years with a grade of at least B (not B-). No transfer courses will be accepted if they have been used to satisfy degree requirements of a previously awarded degree. Graduate business courses taken at other University of Colorado campuses are considered transfer hours and are included in the transfer limit. Transfer of quarter hours of graduate business credit may satisfy a course requirement, but may not satisfy the total number of hours requirement. One quarter hour equals .667 semester hours.

Time Limits

Master's students are required to complete all degree requirements within five years and one semester (seven years and one semester to earn dual MBA/MS or MS/MS degrees, or a PhD).Courses completed outside of these time limits will not be accepted toward the degree without petition. Time-limit extensions are given only for external situations that restrict a student's ability to complete the program in a timely manner. If you do not take graduate business courses for more than three consecutive semesters, you will need to reapply for admission and meet the admission standards for the application term.

Former Students

Any Denver campus student who has not been enrolled in his or her admitted program of study for three consecutive semesters (summers included) is considered a former student and must reapply for admission to the program by submitting part I of the application for graduate admission, in-state tuition classification form, along with the applicable fee. Readmitted students must conform to degree requirements in effect during the term in which they are readmitted. If the new requirements differ significantly from the former degree plan, a petition may be submitted requesting exceptions.

Graduation

Students must complete the online intent to graduate form on the registrar's website (www.ucdenver.edu/registrar) when they register for their last semester. Contact the graduate advising office to confirm receipt at grad.advising@ucdenver.edu.

Grade Point Average Requirements

A minimum cumulative GPA of 3.0 must be achieved and maintained for courses taken toward a graduate business degree. All CU Denver graduate business courses are computed in the graduate business GPA. Transfer hours and grades from other institutions, including University of Colorado courses taken at the Boulder, Anschutz Medical Campus, and Colorado Springs Campuses are not computed in the business GPA, although degree credit may be awarded through a petition process.

Probation and Suspension

If after completing 9 semester hours a student's cumulative graduate business GPA falls below 3.0, the student will be placed on academic probation and given three semesters (one calendar year) or 9 semester hours of graduate business course work (whichever occurs first) in which to achieve the required 3.0 cumulative average. Failure to achieve the required GPA within the allotted time period will result in suspension for one year. Suspended students may not attend any campus of the University of Colorado including continuing education/extended studies. Students on suspension may petition for readmission to the school after waiting a minimum of one year from the term in which they were suspended. If a student cannot mathematically achieve the required 3.0 cummulative GPA with the remaining required courses, the petition to return will not be approved. A petition form plus a new graduate application part I and in-state tuition classification form must be submitted along with the appropriate fee. Generally, petitions are granted only on rare occasions. Any suspended student readmitted to the school will be placed on a continued probation status until the GPA deficiency has been cleared. They will again have three semesters or 9 semester hours to reach the required 3.0 GPA. Failure to do so will resut in a permanent suspension.

Passing Grades

Any grade below a *C* (2.0) is a failing grade for graduate students. Graduate students must repeat a required course for which they have received a grade below a *C*. Both the original grade and the grade for the repeated course count in the computation of the business GPA.

Repeating Graduate Business Courses

A failed course (any grade below a *C*) must be repeated if it is a required course. Both the original and the repeated grade will be included in the cummulative GPA and will appear on the transcript. A course in which a grade of *C* or better is obtained may not be repeated without written approval from the assistant dean. Those petitions are granted only on rare occasions. Both grades will remain on the student's transcript and both grades will be cacluated into the students cummulative GPA. Graduate business

courses repeated without approval may not be used in the graduate business GPA calculation.

Drop/Withdrawal

Classes dropped prior to census date will not appear on the transcript. Thereafter, to drop with a grade of W, a student must be earning a grade of *C* or better; otherwise, an *F* will appear on the transcript. Students will not be permitted to drop a course or withdraw from all courses after the 10th week of the semester, unless circumstances outside the student's control are documented. The late request to drop or withdraw must be approved by the assistant dean and the course instructor(s).

Registration for Graduate Business Courses

Students admitted to graduate degree programs have priority for graduate business courses. Nondegree students and graduate students from other University of Colorado schools or colleges may be permitted to attend on a space-available basis by meeting the qualifications and submitting a nondegree application form. Some graduate-level (6000-level) courses may be offered simultaneously with undergraduate 4000-level courses. However most 6000-level courses are reserved exclusively for graduate students.

Master of Business Administration Programs

The master of business administration (MBA) program provides a general background in management and administration. This background enables the student to have the breadth of exposure and depth of knowledge required for an advanced-level management career. The program is devoted to developing the concepts, analytical tools and communication skills required for competent and responsible administration of an enterprise viewed in its entirety, within its social, political and economic environment.

The professional MBA program allows the scheduling of classes with maximum flexibility so students can progress through the program at their own pace, by taking as little as one class per semester or as many as five classes per semester, at times that are convenient to their work schedule. The program can be completed in as little as 16 months or as long as five years plus one semester.

Online courses add additional flexibility. Students may complete all degree requirements online, or combine online and campus courses to broaden the choice of electives or to fit a business travel schedule or personal learning style. All the core courses are offered online in the fall and spring terms, but your choice of online electives is limited.

The MBA program is also available in different configurations: 11-month (full time, see relevant section), health administration and the executive MBA (see relevant section). All MBAs have the same curriculum requirements; they differ only in their focus, the

flexibility of course scheduling and the time required to complete the program. The 11-month and executive MBAs are lockstep programs (no open electives, no specialized tracks), where all the students complete all program requirements together. No course transfers, waivers or substitutions are permitted in the lockstep programs.

For a list of MBA programs, see Program Curricula below.

Master of Science Programs

Master of science degrees (MS) are offered in the fields of accounting, decision sciences, finance, global energy management, health administration, information systems, international business, management and marketing.

The MS degree affords the opportunity for specialization and depth of training within a particular field. The specialization and expertise developed within the MS program prepares the student for more specialized staff positions in industry, the nonprofit sector and government.

The course requirements for the MS degree in each of the fields are divided into two components—common body of knowledge (CBK) and graduate core requirements. The common body of knowledge requires business courses to develop general breadth and competence in the fields of business administration. These requirements differ among degree programs. Some common body of knowledge requirements may be waived if evidence of equivalent undergraduate or graduate-level coursework is shown and the course work is no more than 10 years old. An undergraduate degree in business administration earned from an AACSB or regionally accredited university will meet most of the CBK requirements. The graduate core requires at least 30 semester hours of graduate-level courses. BUSN courses lower than 6800 may not be used as free electives in the MS programs. Contact a graduate staff advisor for any exceptions.

No comprehensive exams are required.

For a list of graduate MS programs, see Program Curricula below.

Dual Degree Programs

Dual degree program options within the Business School include:

- MBA/MS
- MS/MS
- MBA/MIM
- MBA/MD
- MBA/MURP (Urban and Regional Planning)

Please be aware that admission into one of our programs does not guarantee admission into another program. If adding a dual, you must meet the admission requirements for both programs. All programs have their own unique admissions requirements.

PhD CSIS Program

Program co-directors: Gita Alaghband and Mike Mannino
Telephone: 303-556-4314 (Alaghband), 303-315-8427 (Mannino)

The computer science and engineering (CSE) department in the College of Engineering and Applied Science and the Business School offer a joint doctor of philosophy degree program in computer science and information systems (CSIS). The program targets students who have a master's-level education in either computer science or information systems and who seek research training that combines CS and IS along with strong industry interaction. The joint PhD program provides training for academic positions, industrial research positions and senior consulting positions. The specific goals of the program complement these general goals:

- create a pool of graduates with CSIS research training who are qualified for academic and non-academic careers
- meet student demand for advanced training in CSIS with accommodations for full-time and part-time students
- promote interdisciplinary research between the computer science and engineering department and the Business School
- enhance technology transfer between CSIS academic units and front range technology businesses through joint research, student internships, faculty externships and committee participation

Admission

Prospective students apply to either the Department of Computer Science and Engineering or the Business School. Applicants who pass the initial screening are reviewed by a joint committee consisting of the two co-directors of the program for the final admittance decision.

Admission criteria include GPA (undergraduate and graduate), standardized test scores (GMAT or GRE), letters of recommendation, prior achievements in academia and industry and the application portfolio essay describing an applicant's motivation and an initial plan for doctoral study. The application portfolio is important to gauge an applicant's motivation for research training.

Because of the program's goals, preference is given to students with a master's degree in either computer science or information systems. Students without a master's degree in either area will need to take additional course work depending on the student's background.

Program Organization

Supervision of the PhD Program

The PhD program is supervised by co-directors from the Business School and the CSE department. The duties of the co-directors include scheduling of doctoral courses, setting program policies subject to approval of the Business School and the CSE faculty, working with advisors and doctoral committee chairs to ensure compliance with the program guidelines, resolving disputes, measuring performance of the program over time and providing the final decision on admittance of students.

Advisor

Upon entering the program, each student chooses an advisor who will provide mentoring and guidance in the course of the entire program. The advisor will work with the student to prepare a program of study in the course work part of the program. The advisor will also work with the student in the preparation of the first- and second-year papers. Requests to change the advisor must be approved by the co-directors of the PhD program.

Dissertation Committee

The advisor and four other members form a dissertation committee. To foster interdisciplinary work, you may have your dissertation research co-advised by two faculty members. At least one co-advisor must be a full-time current graduate faculty member in the CSE department or the Business School. The committee must contain at least one faculty member from the CSE department and at least one from the Business School. At least one committee member is from outside of the CSE department and the information systems faculty.

Executive Programs

Executive MBA

Faculty and Resources

The faculty are senior faculty of the Business Schools from three of the university's campuses. The executive MBA program is offered jointly by the Graduate Schools of Business Administration in Boulder and Colorado Springs and the Business School in Denver. Faculty are nationally recognized, and all possess both practical managerial experience and a demonstrated ability to work effectively with executive-level students.

Admission Requirements

The executive MBA program is designed for men and women who have eight to 10 years experience in a decision-making position. In the selection process, significant attention will be given to the depth and breadth of the candidate's experience,

progression in job responsibility, total work experience and the ability to benefit from this integrative classroom/work environment. The admissions committee will base its decision on the application, former academic record, relevant test scores, the employer's nominating letter, other letters of recommendation and a personal interview.

For application and additional information, write to:

Executive MBA Program
University of Colorado Denver
P.O. Box 480006
Denver, CO 80248-0006

Executive MBA in Health Administration

Program Manager: Pete Taffe
Telephone: 303-623-1888 or 1-800-228-5778

Program Sponsors

The executive program in health administration is a cooperative program of CU Denver and the Network for Healthcare Management.

The University of Colorado Denver serves as the degree-granting institution for the executive program. The graduate program in health administration is located in the Business School.

The Network for Healthcare Management is an educational consortium representing healthcare executives and academic faculty from major health administration graduate programs in the United States and Canada, including Arizona State University, Northwestern University, Ohio State University, San Diego State University, the University of California at Berkeley, the University of California at Los Angeles, the University of Colorado Denver, the University of Michigan, the University of Missouri, the University of North Carolina, the University of Southern California, the University of Toronto, the University of Washington and Virginia Commonwealth University.

Program Curricula

Bachelor of Science in Business Administration

Accounting Emphasis BS in Business Administration

Program Director: Michael Roberts
Telephone: 303-556-5884
E-mail: Michael.Roberts@ucdenver.edu

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

Auditing
Financial Accounting
Financial Management
Management Control Systems
Managerial Accounting
Tax Accounting
Teaching and Research

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable. A grade of *C* must be earned in all accounting courses to qualify for graduation.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

Required Courses

- ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
- ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**
- ACCT 3230 - Intermediate Financial Accounting II **gtPATHWAYS:**
- ACCT 3320 - Intermediate Cost Accounting **gtPATHWAYS:**
- ACCT 4410 - Income Tax Accounting **gtPATHWAYS:**
- ACCT 4620 - Auditing **gtPATHWAYS:**

ACCT free elective (4000 level) (3 semester hours) choose one course from the following:

- ACCT 4240 - Advanced Financial Accounting **gtPATHWAYS:**
- ACCT 4070 - Management Accounting **gtPATHWAYS:**
- ACCT 4330 - Managerial Accounting Problems and Cases **gtPATHWAYS:**
- ACCT 4370 - International Accounting **gtPATHWAYS:**
- ACCT 4520 - Oil and Gas Accounting **gtPATHWAYS:**
- ACCT 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**
- ACCT 4800 - Accounting for Government and Nonprofit Organizations **gtPATHWAYS:**

- ACCT 4840 - Independent Study **gtPATHWAYS:**
- ACCT 4915 - Accounting for the Public Interest **gtPATHWAYS:**
- ACCT 4950 - Special Topics **gtPATHWAYS:**

Total: 21 Hours

Students planning to pursue accounting as a career may take more than the above required hours. Many students complete a total of 30 hours of accounting, often taking two accounting courses each semester in their junior and senior years. Students should work closely with the accounting faculty and business advisors in planning their accounting programs.

The accounting program offers several 4000/6000-level courses. Students with credit for a 4000-level course cannot receive credit for the corresponding 6000-level course. Graduate students should take 6000-level courses.

Accounting students often specialize in a particular topical area of accounting.

Financial Accounting

Recommended Electives

- ACCT 4240 - Advanced Financial Accounting **gtPATHWAYS:**
- ACCT 4800 - Accounting for Government and Nonprofit Organizations **gtPATHWAYS:**

Managerial Accounting

Recommended Electives

- ACCT 4330 - Managerial Accounting Problems and Cases **gtPATHWAYS:**
- ACCT 4800 - Accounting for Government and Nonprofit Organizations **gtPATHWAYS:**

Accounting and Information Systems (ACIS)

Within the accounting curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Courses

- ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
- ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**

- ACCT 3230 - Intermediate Financial Accounting II **gtPATHWAYS:**
- ACCT 3320 - Intermediate Cost Accounting **gtPATHWAYS:**
- ACCT 4410 - Income Tax Accounting **gtPATHWAYS:**
- ACCT 4620 - Auditing **gtPATHWAYS:**
- ACCT 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:** or
- ISMG 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**

ISMG Electives

Choose two:

- ISMG 4500 - Database Management and Applications **gtPATHWAYS:**
- ISMG 4600 - Systems Analysis and Design **gtPATHWAYS:**
- ISMG 4900 - Project Management and Practice **gtPATHWAYS:**

Total: 27 Hours

To further specialize, consider a graduate accounting program. Graduate study in accounting is receiving increasing emphasis by professional organizations and employers. Students meeting admission requirements should consider continuing their education at the graduate level. Qualified undergraduates may petition for permission to take one or two graduate accounting courses as electives (e.g. ACCT 6800, Special Topics).

Business Administration Core Requirements BS

Undergraduate Core Requirements For BS In Business Administration

Intellectual Competencies

English

- ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01
- ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02

Total: 6 Hours

Math

Choose one:

- MATH 1070 - Algebra for Social Sciences and Business **gtPATHWAYS:** GT-MA1
- MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1

Total: 3 Hours

Knowledge Areas

Biological and Physical Sciences

Choose two; one course with a laboratory is required:

- ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1
- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1
- BIOL 1560 - Basic Biology: From Cells to Organisms **gtPATHWAYS:** GT-SC1
- BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1 and
- BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
- BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1 and
- BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
- CHEM 1474 - Core Chemistry: Chemistry For the Consumer **gtPATHWAYS:** GT-SC1
- CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1 and
- CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
- CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1 and
- CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
- ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1
- GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
- GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1
- GEOL 1082 - Physical Geology: Internal Processes **gtPATHWAYS:** GT-SC1
- PHYS 1052 - General Astronomy I **gtPATHWAYS:** GT-SC1
- PHYS 1100 - Foundations of Physics **gtPATHWAYS:** GT-SC2
- PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1 and
- PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
- PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1 and
- PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1
- PSYC 2220 - Biological Basis of Behavior **gtPATHWAYS:** GT-SC2

Total: 7-8 Hours

Humanities

Choose one:

- CHIN 1000 - China and the Chinese **gtPATHWAYS:** GT-AH1
- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film **gtPATHWAYS:** GT-AH2
- ENGL 2600 - Great Works in British and American Literature **gtPATHWAYS:** GT-AH2
- ETST 2155 - African American History **gtPATHWAYS:** GT-HI1
- FREN 1000 - Introduction to Cultures of the French- Speaking World **gtPATHWAYS:** GT-AH1
- GRMN 1000 - Germany and the Germans **gtPATHWAYS:** GT-AH1
- HIST 1361 - U.S. History to 1876 **gtPATHWAYS:** GT-HI1
- HIST 1362 - U.S. History Since 1876 **gtPATHWAYS:** GT-HI1
- HIST 1381 - Paths to the Present I **gtPATHWAYS:** GT-HI1
- HIST 1382 - Getting Here: Paths to the Present II **gtPATHWAYS:** GT-HI1
- PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World **gtPATHWAYS:** GT-AH3
- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community **gtPATHWAYS:** GT-AH3
- PHIL 2441 - Logic and Language **gtPATHWAYS:** GT-AH3
- RLST 1610 - Introduction to Religious Studies **gtPATHWAYS:** GT-AH3
- RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3
- SPAN 1000 - Introduction to Cultures of the Spanish Speaking World **gtPATHWAYS:** GT-AH4

Total: 3 Hours

Arts

Choose one:

- FINE 1001 - Introduction to Art **gtPATHWAYS:** GT-AH1
- PMUS 1001 - Music Appreciation **gtPATHWAYS:** GT-AH1
- THTR 1001 - Introduction to Theatre **gtPATHWAYS:** GT-AH1

Total: 3 Hours

Behavioral Sciences

Choose one:

- ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3
- ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
- COMM 1011 - Fundamentals of Communication **gtPATHWAYS:** GT-SS3
- COMM 1021 - Fundamentals of Mass Communication **gtPATHWAYS:** GT-SS3
- PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3
- PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3

Total: 3 Hours

Social Sciences

- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1

Total: 3 Hours

Cultural Diversity

Choose one:

- ANTH 3142 - Cultural Diversity in the Modern World **gtPATHWAYS:**
- COMM 3271 - Communication and Diversity **gtPATHWAYS:**
- ECON 3100 - Economics of Race and Gender **gtPATHWAYS:**
- ENGR 3400 - Technology and Culture **gtPATHWAYS:**
- ETST 3704 - Culture, Racism and Alienation **gtPATHWAYS:**
- ETST 3794 - Ethnic Diversity in American Literature **gtPATHWAYS:**
- HIST 3345 - Immigration and Ethnicity in American History **gtPATHWAYS:**
- MGMT 4100 - Managing Cultural Diversity **gtPATHWAYS:**
- PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
- PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
- PSCI 3035 - Political Movements: Race and Gender **gtPATHWAYS:**
- PSYC 4485 - Psychology of Cultural Diversity **gtPATHWAYS:**
- SOCY 3020 - Race and Ethnicity in the U.S. **gtPATHWAYS:**
- RLST 4000 - Religion and Cultural Diversity **gtPATHWAYS:**
- THTR 3611 - Drama of Diversity **gtPATHWAYS:**

Total: 3 Hours

International Perspectives

Choose one:

- ENGR 3600 - International Dimensions of Technology and Culture **gtPATHWAYS:**

- PSCI 3022 - Introduction to Comparative Politics **gtPATHWAYS:**
- PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**

Total: 3 Hours

Core Total: 34-35 Hours

Business School Specific Graduation Requirements

- COMM 2050 - Business and Professional Speaking **gtPATHWAYS:**
- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
- ENGL 3170 - Business Writing **gtPATHWAYS:** [1]
- MATH 1080 - Polynomial Calculus **gtPATHWAYS:** GT-MA1 [2,3]
  A grade of 'C' or better must be earned to fulfill this requirement.
  Experiential Learning - Can be satisfied by: Internship, Project based course, Study Abroad

Notes:

1. Students are strongly encouraged to take ENGL 2030 from the university core requirements before completing ENGL 3170.
2. The required sequence of MATH 1070 or MATH 1110 from the university core requirements and MATH 1080 may be satisfied by a 6-semester-hour calculus sequence instead. A grade of *C-* or better in any of these courses is required to fulfill this requirement.
3. MATH 1080 grade must be a *C* or better to fulfill this requirement.

Business Core

Students should complete the business core in the order listed below:

- DSCI 2010 - Business Statistics **gtPATHWAYS:**
- ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
- ACCT 2220 - Managerial Accounting and Professional Issues **gtPATHWAYS:**
- ISMG 2050 - Introduction to Business Problem Solving **gtPATHWAYS:**
- BLAW 3000 - Legal and Ethical Environments of Business I **gtPATHWAYS:**
- MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**
- MKTG 3000 - Principles of Marketing **gtPATHWAYS:**
- FNCE 3000 - Principles of Finance **gtPATHWAYS:**
- ISMG 3000 - Principles of Information Systems **gtPATHWAYS:**
- DSCI 3000 - Operations Management **gtPATHWAYS:**
- MGMT 4500 - Business Policy and Strategic Management **gtPATHWAYS:**

Total: 33 Hours

A grade C or better must be earned in each of the business core courses in order to (a) enroll in a course for which it is a prerequisite and (b) graduate.

International Studies

International Business

Choose one:

- FNCE 4370 - International Financial Management **gtPATHWAYS:**
- MGMT 4400 - Environments of International Business **gtPATHWAYS:**
- MKTG 4200 - International Marketing **gtPATHWAYS:**
- MKTG 4220 - Asian Business Development and Marketing **gtPATHWAYS:**
- MKTG 4580 - International Transportation **gtPATHWAYS:**

Total: 3 Hours

Other courses in international business may be offered periodically that satisfy the international studies requirement.

Area Of Emphasis

Business majors must complete the prescribed courses in an area of emphasis comprising a minimum of 15 semester hours taken at UC Denver. Business students are advised to select an area of emphasis prior to completing the business core, and are required to declare a major area of emphasis by the time they have accumulated 60 to 75 semester hours. The courses in the area of emphasis are completed in the junior and senior years after completing the business core. A minimum GPA of 2.0 is required for courses in the area of emphasis.

The areas of emphasis include accounting, financial management, human resources management, information systems, international business, management or marketing. The specific requirements for these areas of emphasis are described in subsequent sections.

Experiential Learning

Business students must earn 3 semester hours of credit in an approved experiential learning course. Experiences that may qualify for experiential credit include internships, project-based courses, business courses taken at a foreign university, study abroad

programs, service learning that serves the community and student projects for which the student petitions for approval.

Experiential learning is a graduation requirement for students beginning their bachelor degree program at any institution in summer 2007 or later. Students beginning their bachelor degree program prior to summer 2007 are not required to meet the experiential learning requirement. Students may petition to waive the experiential learning requirement based on hardship or substantial work experience.

Other Courses

Students may choose other courses freely, subject to the following general rules:

- only nonremedial (college-level, as determined by the Business School) courses will count toward the BS degree
- all students receiving the BS degree in business must take at least 48 upper-division semester hours, of which 42 semester hours must be upper-division business credit (excluding the economics core courses)
- at most, 60 semester hours in business (excluding the economics core courses) may be counted toward the 120 semester hours required for the BS degree in business
- students must complete 30 hours of actual business course work, including the area of emphasis, after acceptance to the Business School
- at least 50 percent of the business credits applied to the degree must be taken at the Downtown Campus

Guidelines for Elective Credits. Elective credits should be selected carefully because not all classes are acceptable. Generally, to be acceptable, electives must be taught by regular University of Colorado faculty, must have a form of assessment, such as a term paper and/or examinations, and must be regular classroom-type classes. Course coverage must be college level, not repetitious of other work applied toward the degree, must be academic as opposed to vocational or technical and must be part of the regular university offerings.

Specifically, the school *will* accept:

- a maximum of 6 semester hours of the theory of physical education, theory of recreation and/or theory of dance
- a maximum of 6 semester hours of approved independent study, internships, experimental studies, choir, band and/or music lessons, art lessons
- a maximum of 12 semester hours of advanced ROTC, providing the student is enrolled in the program and completes the total program

The school will *not* accept: activity physical education classes, recreation, workshops, orientations, dance, teaching methods, practicums and courses reviewing basic skills in computers, English composition, mathematics and chemistry.

Finance Emphasis - BS in Business Administration

The principal areas of study in finance are financial management in small and large businesses, investments, financial institutions, and international finance. The study of finance is intended to provide an understanding of fundamental theory and practice pertaining to finance, to make sound financial decisions. Students are taught to think logically about financial problems, so that they can formulate and implement value maximizing decisions and policies for the business. For this purpose, it is necessary to understand the importance of finance in the economy and the functions and purposes of monetary systems, credit, prices, money markets and financial institutions. Emphasis is placed on financial policy, management, control, analysis, and decision making.

The finance emphasis provides the students with the skills to succeed in all areas of finance. Numerous job opportunities exist in the field of business finance and with financial institutions, mutual funds, securities firms, personal wealth management firms, and financial planning firms including positions involving an understanding and sale of securities.

For this area of emphasis, students are required to take the following complement of courses, in addition to the undergraduate business core:

FNCE 3500 - Management of Business Capital
FNCE 3600 - Financial Markets and Institutions
FNCE 3700 - Investment and Portfolio Management
FNCE 4370 - International Financial Management*
FNCE 4500 - Corporate Financial Decisions
Upper division business electives (12 semester hours)

Total: 27 semester hours

Risk Management and Insurance Concentration

The risk management and insurance (RMI) concentration in the finance area of emphasis provides students with the fundamental knowledge needed to accurately measure and manage risk.

Recent crisis situations suggest that understanding risk and how to manage it, and ultimately, how risk management can be used to increase firm value, is essential in the current business environment. The RMI specialty will provide an overall perspective on

risk, with a specific focus on insurance products and their use in mitigating risk in business and personal situations. The insurance industry recognizes many high-level certifications as a sign of expertise, and the RMI course work will provide the knowledge base so that students can proceed to acquire certification in their specific choice of insurance specialty.

Potential job opportunities include positions in the insurance industry and those that require a thorough understanding of risk, such as corporate risk officer or risk manager. In addition, students who choose to work in the insurance industry can make a seamless transition into underwriting, ratemaking, and policy approval. The program will be supported by unique internship and special project opportunities in the insurance industry, and is the first program of its kind in the region.

The following course work will be required, in addition to the undergraduate business core:

FNCE 3500 - Management of Business Capital
FNCE 3700 - Investment and Portfolio Management
FNCE 3809 - Introduction to Risk Management
FNCE 3949 - Experiential Learning with Risk Management Industry
FNCE 4129 - Legal and Ethical Implications of Risk
FNCE 4500 - Corporate Financial Decisions
FNCE 4809 - Insurance Principles and Applications
FNCE 4909 - Corporate Risk Management
International elective (3 semester hours)

Total: 27 semester hours

NOTES:

FNCE 3949 will be a specialized offering in lieu of FNCE 3939. The internship or individualized study will be with specific providers of risk management services (including insurance companies), and will be monitored for content and performance.

Students should note that all FNCE courses are not offered every semester. Students should take ACCT 2200, ACCT 2220 and FNCE 3000 courses as early as possible to avoid future problems in their schedules.

For 2010-11, the RMI concentration, comprising of five new courses will be offered with a fixed tuition of $900 per course (in-state) and $2,400 per course (nonresident). The courses will not be eligible for COF.

Financial Management and Information Systems Emphasis—BS in Business Administration

The financial management and information systems emphasis provides students with skills that they need to succeed in careers that bridge the fields of finance and information systems.

The financial management and information systems specialty incorporates knowledge of financial management and markets, accounting and information systems and technology. This specialization provides the manager with knowledge of financial information systems, databases, risk management and accounting systems.

Job opportunities include positions that require knowledge of both financial management and business information systems and databases. The specialization provides a solid accounting/finance and information systems background for other finance specialist and business analyst positions as well.

Required Courses

Finance

- FNCE 3500 - Management of Business Capital **gtPATHWAYS:**
- FNCE 3700 - Investment and Portfolio Management **gtPATHWAYS:**
- FNCE 3600 - Financial Markets and Institutions **gtPATHWAYS:**
- FNCE 4500 - Corporate Financial Decisions **gtPATHWAYS:**

FNCE

Accounting

- ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
- ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**
- ACCT 3320 - Intermediate Cost Accounting **gtPATHWAYS:**
- ACCT 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:** or
- ISMG 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**

ISMG

- ISMG 4500 - Database Management and Applications **gtPATHWAYS:**
- ISMG 4600 - Systems Analysis and Design **gtPATHWAYS:**
- ISMG 4900 - Project Management and Practice **gtPATHWAYS:**

Total: 33 Hours

In addition, students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

Financial Management Emphasis—BS in Business Administration

The financial management emphasis provides students with the skills needed to succeed in careers in financial management. The business community has affirmed that students need skills in both the accounting and finance areas. The financial management specialty incorporates knowledge of corporate financial management, financial institutions and markets, investments, financial accounting and managerial accounting, accounting information systems and information technology. Career opportunities include corporate financial management, finance/accounting positions with financial institutions and accounting positions that are not CPA-track. The specialization provides a solid finance and accounting background for other business positions as well.

Required Courses

- FNCE 3500 - Management of Business Capital **gtPATHWAYS:**
- FNCE 3600 - Financial Markets and Institutions **gtPATHWAYS:**
- FNCE 3700 - Investment and Portfolio Management **gtPATHWAYS:**
- FNCE 3809 - Introduction to Risk Management **gtPATHWAYS:**
- FNCE 4500 - Corporate Financial Decisions **gtPATHWAYS:**
- ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
- ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**
- ACCT 3320 - Intermediate Cost Accounting **gtPATHWAYS:**

Total: 24 Hours

In addition, financial management students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

* Students should note that all finance and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as

possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

Human Resources Management Emphasis—BS in Business Administration

Human resources management offers opportunities for students to develop professional competence in the areas of personnel administration and development. Students acquire an understanding of, and skills in, developing and implementing human resources systems, including recruitment, selection, evaluation, training, motivation and compensation.

Required Course

- MGMT 3010 - Managing People for a Competitive Advantage **gtPATHWAYS:**

Electives

Choose two:

- MGMT 4420 - Human Resources Management: Staffing **gtPATHWAYS:**
- MGMT 4430 - Human Resources Management: Training **gtPATHWAYS:**
- MGMT 4440 - Human Resource Management: Performance Management **gtPATHWAYS:**
- MGMT 4450 - Human Resources Management: Compensation **gtPATHWAYS:**

Management Electives

Choose three:

Any MGMT Course (3 semester hours)

- BLAW 4120 - Legal Issues for Entrepreneurs **gtPATHWAYS:**
- ENTP 3000 - Principles of Entrepreneurship **gtPATHWAYS:**

Total: 18 Hours

Information Systems Emphasis—BS in Business Administration

The information systems program at the University of Colorado Denver is a nationally accredited program for students who want to design and implement effective solutions to meet organizational and management needs for information, control and decision making.

An information systems (ISMG) emphasis draws on a diverse set of skills and strengths requiring creative and innovative thinking at the intersections of disciplinary knowledge and practice. Information systems students learn how information technology, effective teamwork and leadership and sound project management combine to enable innovation and change, to improve organizational agility and to add competive value. Courses require extensive hands-on projects, teamwork and use of high-end technology. A combination of technical skills gained in class work with broad based business process knowledge enables our graduates to be ideally situated to take leading roles in shaping the technology-based future of employers in the Rocky Mountain region and the nation.

Undergraduate options

The Business School at the University of Colorado Denver offers a bachelor of science in business administration where you may choose information systems as your primary core specialty:

- Information Systems, Bachelor of Science in Business Administration degree

Or you may choose to add an information systems speciality to another business discipline.

- Accounting and Information Systems emphasis
- Financial Management Systems emphasis
- Management and Information Systems emphasis
- Marketing and Information Systems emphasis

Career Opportunities

Careers in information systems continue to be one of the highest growth markets in the business world. A student completing the information systems program curriculum will be prepared for challenging careers as business analyst, database analyst, Web content manager, project manager, IT consultant and information auditing and compliance specialist. Employment possibilities include financial operations, health care, management consulting, service operations, transportation and logistics and government.

Information systems is becoming the foundation of all business activities, and a solid understanding of the role of information systems in business and in the national and global economy is now critical for every business student. The information systems emphasis focuses on effective use of information technology in business. You are equipped with logical and analytical thinking in all areas of business and a strong basis for continued career growth in a variety of growing professions. You will develop the technical skills, business know-how and administrative insights required for acquisition, deployment and management of IT resources and services development, operation and evolution os IS infrastructure for use in accounting, finance, marketing, management and other business processes.

Curriculum

The courses emphasize both team and individual work, allowing students to gain critical thinking skills, knowledge and experience to analyze, design, program, implement and use information.

Requirements for the Information Systems emphasis

Lower Division

- ISMG 2050 - Introduction to Business Problem Solving **gtPATHWAYS:** (fall or spring)
- ISMG 2800 - Designing for the Web **gtPATHWAYS:** (spring)

Upper Division: Junior Year

- ISMG 3000 - Principles of Information Systems **gtPATHWAYS:**
- ISMG 3500 - Enterprise Data and Content Management **gtPATHWAYS:** (fall)
- ISMG 3600 - System Strategy, Architecture and Design **gtPATHWAYS:** (spring)

Upper Division: Senior Year

- ISMG 4200 - Building Business Applications **gtPATHWAYS:** (fall)
- ISMG 4700 - Business Data Communications and Networking **gtPATHWAYS:** (spring)
- ISMG 4900 - Project Management and Practice **gtPATHWAYS:** (fall or spring)

Important note

It is particularly important to take the required courses in the proper squence to fulfill the prerequisites and ensure you can complete your degree within four years. Please refer to the sample degree plan for the recommended course sequence.

Information Systems Electives

- ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
- CSCI 2312 - Intermediate Programming **gtPATHWAYS:**
- CSCI 2421 - Data Structures and Program Design **gtPATHWAYS:**
- ISMG 4300 - Information Security and Compliance **gtPATHWAYS:**
- ISMG 4750 - Business Intelligence and Financial Modeling **gtPATHWAYS:**
- ISMG 4760 - Customer Relationship Management **gtPATHWAYS:**

Specialization in a minor area

You may also choose a secondary business minor area to support your career objectives.

Accounting

Choose two from the following:

- ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
- ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**
- ACCT 3230 - Intermediate Financial Accounting II **gtPATHWAYS:**
- ACCT 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**

Finance

Choose two from the following:

- FNCE 3500 - Management of Business Capital **gtPATHWAYS:**
- FNCE 3700 - Investment and Portfolio Management **gtPATHWAYS:**
- FNCE 3600 - Financial Markets and Institutions **gtPATHWAYS:**
- FNCE 4750 - Business Intelligence and Financial Modeling **gtPATHWAYS:**

Human Resource Management

Choose two from the following:

- MGMT 3010 - Managing People for a Competitive Advantage **gtPATHWAYS:**
- MGMT 4420 - Human Resources Management: Staffing **gtPATHWAYS:**
- MGMT 4430 - Human Resources Management: Training **gtPATHWAYS:**
- MGMT 4450 - Human Resources Management: Compensation **gtPATHWAYS:**
- MGMT 4770 - Human Resource Information Systems **gtPATHWAYS:**

Management

Choose two from the following:

- MGMT 4350 - Leading Organizational Change **gtPATHWAYS:**
- MGMT 4370 - Organization Design **gtPATHWAYS:**
- MGMT 4400 - Environments of International Business **gtPATHWAYS:**

Marketing

Choose two from the following:

- MKTG 3100 - Marketing Research **gtPATHWAYS:**
- MKTG 3200 - Buyer Behavior **gtPATHWAYS:**
- MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**
- MKTG 4760 - Customer Relationship Management **gtPATHWAYS:**

NOTE:

All information systems courses are not offered every semester.

International Business Emphasis—BS in Business Administration

Increasingly, businesses are reorienting their thinking, planning and operations to capitalize on opportunities that exist in the world marketplace. Every phase of business is affected by this reorientation. For individuals with the appropriate skills, training and interest, international business provides excellent career opportunities.

The international business curriculum is designed to enhance and build on thorough training in basic business skills and to provide students with additional skills and knowledge appropriate to international business.

Required Foundation Courses

- MGMT 4370 - Organization Design **gtPATHWAYS:**
- MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**

Required Emphasis Courses

- FNCE 4370 - International Financial Management **gtPATHWAYS:**

- MGMT 4400 - Environments of International Business **gtPATHWAYS:**
- MGMT 4410 - Operations of International Business **gtPATHWAYS:**
- MKTG 4200 - International Marketing **gtPATHWAYS:**

Total: 18 Hours

A second area of emphasis in business is highly recommended. In addition, serious consideration should be given to advanced study of a foreign language and to either a minor or a certificate in international affairs, offered by the College of Liberal Arts and Sciences.

Elective Business Emphasis Courses (9 semester hours)

- Three business courses (3000 or 4000 level), 3 semester hours each

Students are strongly recommended to take courses within the same business discipline, including internationally-oriented courses within the discipline such as MKTG 4220 - Asian Business Development and Marketing and ACCT 4370 - International Accounting.

Management Emphasis—BS in Business Administration

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management.

Required Foundation Courses

- MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**

Required Emphasis Courses

- MGMT 3010 - Managing People for a Competitive Advantage **gtPATHWAYS:**
- MGMT 4350 - Leading Organizational Change **gtPATHWAYS:**
- MGMT 4370 - Organization Design **gtPATHWAYS:**

Choose two:

Any upper-division MGMT course (3 semester hours)
- BLAW 4120 - Legal Issues for Entrepreneurs **gtPATHWAYS:**
- ENTP 3000 - Principles of Entrepreneurship **gtPATHWAYS:**

Total: 18 Hours

These 6 hours must be in addition to MGMT courses that were used to satisfy the international business or diversity requirements.

Management/Information Systems (MGIS)

Within the management curriculum students can choose to add additional courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Information System courses

- ISMG 4500 - Database Management and Applications **gtPATHWAYS:**
- ISMG 4600 - Systems Analysis and Design **gtPATHWAYS:**
- ISMG 4900 - Project Management and Practice **gtPATHWAYS:**

Total: 9 Hours

Marketing Emphasis—BS in Business Administration

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the development of specific products or services, planning and implementing ways to take products or services to the market, securing the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.

Required Foundation Courses

- BLAW 4120 - Legal Issues for Entrepreneurs **gtPATHWAYS:**
- MGMT 4370 - Organization Design **gtPATHWAYS:**

Required Emphasis Courses

- MKTG 3100 - Marketing Research **gtPATHWAYS:**
- MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**
  MKTG required 3 courses (9 semester hours): CHOOSE FROM:

Electives

Choose three:

- MKTG 3200 - Buyer Behavior **gtPATHWAYS:**
- MKTG 4000 - Advertising **gtPATHWAYS:**
- MKTG 4200 - International Marketing **gtPATHWAYS:**
- MKTG 4220 - Asian Business Development and Marketing **gtPATHWAYS:**
- MKTG 4580 - International Transportation **gtPATHWAYS:**
- MKTG 4700 - Personal Selling and Sales Management **gtPATHWAYS:**
- MKTG 4950 - Special Topics **gtPATHWAYS:**

Total: 21 Hours

In addition to the three required courses beyond the core, students may select marketing electives, business electives and nonbusiness electives that support their particular career orientations. The marketing faculty advisor can assist the student in choosing an appropriate set of electives to fit career objectives.

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

Marketing/Information Systems (MKIS)

Within the marketing curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Information System Courses

- ISMG 4500 - Database Management and Applications **gtPATHWAYS:**
- ISMG 4600 - Systems Analysis and Design **gtPATHWAYS:**
- ISMG 4900 - Project Management and Practice **gtPATHWAYS:**

Required Emphasis Courses

- MKTG 3100 - Marketing Research **gtPATHWAYS:**
- MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**
- ISMG 4760 - Customer Relationship Management **gtPATHWAYS:**
  or
- MKTG 4760 - Customer Relationship Management **gtPATHWAYS:**

Choose two:

- MKTG 3200 - Buyer Behavior **gtPATHWAYS:**
- MKTG 4000 - Advertising **gtPATHWAYS:**
- MKTG 4220 - Asian Business Development and Marketing **gtPATHWAYS:**
- MKTG 4700 - Personal Selling and Sales Management **gtPATHWAYS:**
- MKTG 4720 - Internet Marketing **gtPATHWAYS:**
- MKTG 4950 - Special Topics **gtPATHWAYS:**

Total: 24 Hours

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

Non Degree

Business Administration Minor

Students in other undergraduate schools and colleges at the Denver campus wishing to take a minor in business administration must have a 2.0 GPA to enter as a business minor plus a 2.0 GPA in business courses.

Prerequisites

- ISMG 2050 - Introduction to Business Problem Solving **gtPATHWAYS:**

- MATH 1070 - Algebra for Social Sciences and Business **gtPATHWAYS:** GT-MA1 or
- MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1 and
- MATH 1080 - Polynomial Calculus **gtPATHWAYS:** GT-MA1

- DSCI 2010 - Business Statistics **gtPATHWAYS:** or
  a statistics class approved by the Business School and

- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1

Required Courses

- MGMT 1000 - Introduction to Business **gtPATHWAYS:**
- ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
- BLAW 3000 - Legal and Ethical Environments of Business I **gtPATHWAYS:**
- MKTG 3000 - Principles of Marketing **gtPATHWAYS:**
- FNCE 3000 - Principles of Finance **gtPATHWAYS:**
- MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**
  Twelve of these 18 hours must be taken while in residence at the Denver campus. If the student has already taken the equivalent of one or more of these courses, other higher-level business courses may be substituted with Business School approval. Up to 6 hours of the 18 required business courses may be taken at another institution. Transfer credit will be granted on the same basis that transfer credit is granted for courses taken by business majors.

Master of Business Administration

Business Administration MBA

Program Director: Elizabeth Cooperman
Telephone: 303-315-8422
E-mail: Elizabeth.Cooperman@ucdenver.edu

Faculty

Professors:

Marcelle Arak, PhD, Massachusetts Institute of Technology
Heidi Boerstler, PhD/JD, Yale University/University of Denver
Jean-Claude Bosch, PhD, University of Washington
Peter Bryant, PhD, Stanford University
Wayne Cascio, PhD, University of Rochester
Lawrence Cunningham, DBA, University of Tennessee
E. Woodrow Eckard, PhD, University of California-Los Angeles
Richard Foster, PhD, University of Chicago
James Gerlach, PhD, Purdue University

Jahangir Karimi, PhD, University of Arizona
Susan Keaveney, PhD, University of Colorado
Gary Kochenberger, PhD, University of Colorado
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
James Morris, PhD, University of California-Berkeley
Dennis Murray, PhD, University of Massachusetts-Amherst
Bruce Neumann, PhD, University of Illinois
Edward O'Connor, PhD, University of Akron
John Ruhnka, JD/LLM, Yale School of Law/Cambridge University
Dean Taylor, PhD, University of Chicago
Clifford Young, PhD, University of Utah

Associate Professors:

Ajeyo Banerjee, PhD, University of Massachusetts-Amherst
Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign
Kang Rae Cho, PhD, University of Washington
Gary Colbert, PhD, University of Oregon
Elizabeth Cooperman, PhD, University of Georgia
Murray Cote, PhD, Texas A & M University
Carol Dee, PhD, Louisiana State University
David Forlani, PhD, University of Minnesota
Blair Gifford, PhD, University of Chicago
Dawn Gregg, PhD, Arizona State University
Deborah Kellogg, PhD, University of Southern California
Sarah Koovor-Misra, PhD, University of Southern California
Vick Lane, PhD, University of Washington
Michael Mannino, PhD, University of Arizona
L. Ann Martin, PhD, University of Minnesota
Madhavan Parthasarathy, PhD, University of Nebraska
Michael Roberts, PhD, Georgia State University
Judy Scott, PhD, University of California-Irvine
Manuel Serapio, PhD, University of Illinois
Marlene Smith, PhD, University of Florida
Steven Walczak, PhD, University of Florida

Assistant Professors:

Vinit Desai, PhD, University of California at Berkeley
Stephanie Johnson, PhD, Rice University
George Kiersey, PhD, University of Southern California
Mary Malina, PhD, University of Colorado
Robert Nieschwietz, PhD, Arizona State University

Ronald Ramirez, PhD, University of California-Irvine
Zhiping Walter, PhD, University of Rochester

Senior Instructors:

John Byrd, PhD, University of Oregon
Elizabeth Connor, MS, Colorado State University
Chen Ji, MS, University of Colorado
Michael Harper, PhD, Rensselaer Polytechnic Institute
Robert Hockenbury, MS, University of Houston
Barbara Pelter, PhD, University of California-Davis
Mary Lee Stansifer, PhD, Northwestern University
Eric Thompson, MS, University of Colorado
John Turner, PhD, St. Louis University

Instructors:

Errol Biggs, PhD, Pennsylvania State University
John Daley, PhD, University of Washington
Cindy Fischer, MA, University of Colorado
Linda Fried, JD/LLM, University of Miami
Wendy Guild, PhD, Massachusetts Institute of Technology
Fredrick Hampel, MS, Kansas State University
Barry McConnell, MBA, University of Colorado
Peter Miller, MA, Farleigh Dickenson University
Jeffrey Nystrom, MS, University of Colorado
Ira Selkowitz, JD, University of Denver
Lori Seward, PhD, Virginia Tech
Mary Lee Stansifer, PhD, University of Florida
Cindy Sutfin, MS, University of Colorado
Emily Vera, MS, University of Colorado

The Master of Business Administration (MBA) program provides a general background in management and administration. This background enables the student to have the breadth of exposure and depth of knowledge required for an advanced-level management career. The program is devoted to developing the concepts, analytical tools and communication skills required for competent and responsible administration of an enterprise viewed in its entirety, within its social, political and economic environment.

The professional MBA program allows the scheduling of classes with maximum flexibility so students can progress through the program at their own pace, by taking as little as one class per semester or as many as five classes per semester, at times that are

convenient with their work schedule. The program can be completed in as little as 16 months or as long as five years plus one semester.

Online courses add additional flexibility. Students may complete all degree requirements online, or combine online and campus courses to broaden the choice of electives or to fit a business travel schedule or personal learning style. Choice of online electives is limited.

The MBA program is also available in different configurations: 11-Month (full time, see relevant section), Health Administration and the Executive MBA (see relevant section). All MBAs have the same curriculum requirements; they differ only in their focus, the flexibility of course scheduling, and the time required to complete the program. The 11-Month and Executive MBAs are lockstep programs (no open electives, no specialized tracks), where students form a cohort and complete all program requirements together. No course transfers, waivers or substitutions are permitted.

Program Requirements

Core Requirements

- BUSN 6520 - Managing Individuals and Teams **gtPATHWAYS:**
- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
- BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
- BUSN 6560 - Marketing Management **gtPATHWAYS:**
- BUSN 6610 - Information Systems Management and Strategy **gtPATHWAYS:**
- BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
- BUSN 6630 - Management of Operations **gtPATHWAYS:**
- BUSN 6640 - Financial Management **gtPATHWAYS:**
- BUSN 6710 - Strategic Management **gtPATHWAYS:**

Electives

International Business elective (3 semester hours)
Free electives (15 semester hours)

Total: 48 Hours

Notes and Restrictions:

Core Substitution. Students with extensive and comparable course work in a particular core subject area may petition to substitute a higher-level graduate course on the basis of prior undergraduate or graduate course work taken at a regionally accredited college

or university for the corresponding core class. This does not waive the 48-hour requirement. If a core course is substituted, another graduate level course in the same functional area must be used as a substitute so that the student completes a total of 48 semester hours.

International Elective. One 3-hour course with an international focus must be completed. Contact a graduate advisor or refer to a current MBA degree plan for a complete list of options.

Electives. The professional MBA curriculum allows for 15 semester hours of elective credit, which can be chosen from graduate-level courses offered by the Business School, except BUSN courses numbered below 6800. Additional graduate-level course work completed at the Denver campus outside the Business School may be applied to the MBA degree, but only with prior written approval of the MBA program director.

Note: Electives for the 11-Month and Executive MBA programs are pre-selected for all students.

MBA Specializations

Graduate students will have an opportunity to take specialized tracks within the professional MBA program by completing a pre-specified program of elective courses. The following 19 tracks are available:

Business-to-Business Marketing
Business Intelligence
Business-to-Consumer Marketing
Business Strategy
Change Management
Corporate Financial Management
Decision Sciences
Enterprise Technology Management
Entrepreneurship
Finance
Financial Analysis
Human Resources Management
Information Systems
International Business
Investment Management
Managing for Sustainability
Marketing
Services Management
Sports and Entertainment Management

For additional information about the professional MBA program, contact a graduate advisor at 303-315-8200.

Business Administration: 11–Month MBA

Program Director: Gary Colbert
Administrative Director: Debbie Follenweider
E-mail: 11-monthMBA@ucdenver.edu
Telephone: 303-315.8800
Website: www.business.ucdenver.edu/11-MonthMBA

The 11-month MBA is an accelerated full-time program that brings academically superior students together with select research and teaching faculty. The program enables students to focus their energies in a concentrated, total-immersion program of study earning a nationally accredited, 48-semester-hour MBA degree in just under a year.

The 11-month MBA consists of five eight-week terms, three courses per term, plus a two-week international business course abroad. In addition to a minimum of 18 hours of class time each week, the 11-month MBA students spend an average of 30 hours a week on homework. Students should expect a minimum time commitment of 48 hours per week to successfully complete this program.

Admission and Application Process

The admissions committee considers each candidate's entire record of achievement demonstrated through academic transcripts, GMAT scores, essays, letters of recommendation, personal interviews (if needed, will be scheduled at the discretion of the admission committee), work experience and extracurricular and community activities.

Previous Education

Applicants' complete academic records, including GPAs and previous course work are considered. Undergraduate degrees do not have to be in business, but they must be from regionally accredited colleges or universities.

Testing

The GMAT is a requirement for application to the 11-month MBA program and cannot be substituted with other standardized examinations. If you take the GMAT more than once, we will evaluate your application using the highest GMAT score. The GMAT score for

students admitted into the 11-month MBA program has averaged around 600. Students must score a minimum 500 to be considered for admission to the 11-month MBA program.The GMAT website is www.mba.com.

The 11-month MBA also requires a highly developed proficiency in written and oral English. International applicants whose first language is not English must take the TOEFL or IELTS exam and earn a minimum score of 575/232TOEFL or 7 IELTS to be considered for admission to the 11-month MBA program. Information on taking the TOEFL or IELTS can be obtained by visiting www.ets.org and www.ielts.org.

Work Experience

Students in the 11-month MBA program have an average of six years of work experience. However, experience ranges from the recently graduated to more than 30 years in business. Professional experience strengthens the application, since it adds relevance and depth to the learning process and enables candidates to contribute to and benefit from the knowledge of fellow classmates in the accelerated time frame of the program.

Applications

The following are required for consideration of admission to the program.

- completed application for graduate admission, parts I and II, submitted by published deadlines and fee (domestic or international as appropriate)
- two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence
- GMAT scores taken in the last five years sent directly to the graduate admissions office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-65
- two (2) official transcripts from each school, college or university previously attended past high school, sent directly to the graduate admissions office. A minimum baccalaureate degree is required
- include answers to the four essay questions demonstrating commitment to an accelerated MBA program
- a resumé outlining work experience
- for international students, a minimum official score of 575/232 TOEFL or 7 IELTS is required to apply -- test scores are valid for two years after test date

The priority date for domestic applications is June 15 (May 15 for international students). Applications (for domestic students) and current fee information are available at www.ucdenver.edu/business/11-monthMBA.

All of the required admission materials should be sent to:

University of Colorado Denver
The Business School
Graduate Admissions
Campus Box 165, P.O. Box 173364
Denver, CO 80127-3364

For further information, brochures and application materials, contact the 11-month MBA program at 303-315-8800 or 11-monthMBA@ucdenver.edu.

The 11-month MBA uses a rolling admission system. The committee reviews applications when they are complete in all respects, including transcripts, GMAT scores and letters of recommendation. Candidates are encouraged to submit their application as early in the process as possible. Completed applications are reviewed until early August; applications received after June 15 will be reviewed on a space-available basis. International applicants should have their completed applications in by May 15, to leave them sufficient time for visa and travel arrangements if they are admitted.

A personal interview may also be required for admission to the 11-month MBA.

11-month MBA Scholarships/Loans

General financial assistance is available for qualified students. Students should apply directly to the Denver campus Office of Financial Aid. Call 303-556-2886 for information and forms. In addition, 11-month MBA merit-based scholarships are available only to students in the 11-month MBA. Other Business School scholarships are also available to all MBA students.

Degree Requirements

Students in the 11-month MBA complete 10 MBA core courses, one international business course (conducted abroad) and five special topics courses. All courses require that students work in teams. Due to the program's cohort structure, individual elective options are not available to 11-month MBA students. **No courses may be waived, substituted or transferred into the program.** If a student finds it necessary to leave the accelerated program, credits already earned may be transferred to the professional MBA program on campus.

MBA Core Courses

- BUSN 6520 - Managing Individuals and Teams **gtPATHWAYS:**
- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
- BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
- BUSN 6560 - Marketing Management **gtPATHWAYS:**
- BUSN 6610 - Information Systems Management and Strategy **gtPATHWAYS:**

- BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
- BUSN 6630 - Management of Operations **gtPATHWAYS:**
- BUSN 6640 - Financial Management **gtPATHWAYS:**
- BUSN 6710 - Strategic Management **gtPATHWAYS:**

Total: 30 Hours

International Course Abroad

The international course, which involves travel abroad, is completed as an all-day, two-week intensive course.

Special Topics Courses

The special topics courses, revised each year, are selected to create a broad understanding of the most current business issues. These requirements are subject to change.

Business Administration—Health Administration MBA

Program Director: Errol L. Biggs
Telephone: 303-315-8851
E-mail: errol.biggs@ucdenver.edu

Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver
Peter Bryant, PhD, Stanford University
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
Richard Foster, PhD, University of Chicago
Bruce Neumann, PhD, University of Illinois
Edward O'Connor, PhD, University of Akron

Associate Professors:

Deborah Kellogg, PhD, University of Southern California
Stephen Ross, MD, University of North Carolina

Instructors:

Errol Biggs, PhD, Pennsylvania State University

Admission Process

Requirements for Admission

Selection of students is a multi-step process. When making application to the program for the MBA-HA, candidates should send their applications to:

Graduate Admissions
Graduate School of Business Administration
University of Colorado Denver
Campus Box 165, P.O. Box 173364
Denver, CO 80217-3364

Application Requirements

- complete the application for graduate admission, parts I and II, and submit by published deadlines
- send two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence
- send required GMAT scores directly to the graduate office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-78. GRE scores will also be considered.
- pay the appropriate application fee
- send two (2) official transcripts directly from each school, college or university previously attended past high school. A minimum baccalaureate degree is required.
- include answers to the four essay questions
- document any experience in the field of health services administration (preferred but not required)
- complete a personal interview with the health administration committee

Admission to the MBA-HA degree program is on a competitive basis. Therefore, these admission criteria represent minimum entrance qualifications expected of all students.

For further information, brochures and application materials, contact the Business School's Graduate Program in Health Administration, University of Colorado Denver, 303-315-8200.

Graduate Program in Health Administration

The graduate program in health administration is consistently ranked as a top program in the United States and attracts students with a variety of backgrounds and experience

levels, which further enriches the classroom experience. The HA program is accredited by the Commission on Accreditation of Healthcare Management Education. The program is the only such program in the Rocky Mountain region and was started in 1968. Full-time faculty with distinguished research records and a select group of practicing managers provide students with the latest thinking on the most important health issues.

Degree Requirements

The curriculum of the MBA with an emphasis in Health Administration is a synthesis of management concepts and techniques that are applicable to any economic organization, and tools that can be specifically applied to health services systems. The program emphasizes skills that strengthen basic analytic and decision-making processes used by top level managers in selecting broad strategies and by junior managers in administering sub-units in healthcare organizations.

Students enrolled in the Master of Business Administration with an emphasis in Health Administration must complete a minimum of 51 semester hours of graduate-level course work to receive their degree. The curriculum is based on a series of structured learning sequences. Most of the courses are available in the evening to enable working students to pursue the degree on a part-time basis. The specific course requirements are as follows (recommended sequence):

Year One

- BUSN 6521 - Managing Individuals and Teams (Health Section) **gtPATHWAYS:**
- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
- HLTH 6010 - Health Care Systems **gtPATHWAYS:**
- BUSN 6640 - Financial Management **gtPATHWAYS:**
- BUSN 6541 - Legal and Ethical Environment of Business (Health Section) **gtPATHWAYS:**
- BUSN 6621 - Applied Economics for Managers (Health Section) **gtPATHWAYS:**
  HLTH____ - Health Elective (3 semester hours)
- BUSN 6560 - Marketing Management **gtPATHWAYS:**
  Total: 27 Hours

Year Two

- HLTH 6040 - Health Care Financial Management **gtPATHWAYS:**
- HLTH 6070 - International Health Policy and Management **gtPATHWAYS:**
  HLTH____ - Health Elective (3 semester hours)
- DSCI 6440 - Quality and Process Improvement **gtPATHWAYS:**

- BUSN 6630 - Management of Operations **gtPATHWAYS:**
- BUSN 6711 - Strategic Management (Health Section) **gtPATHWAYS:**
- HLTH 6911 - Health Field Studies **gtPATHWAYS:**
  HLTH____ - Health Information Technology Elective (3 semester hours)
  Total: 24 Hours

Notes and Restrictions

Students admitted into the MBA with an emphasis in Health Administration must meet with a graduate advisor before they register for their first semester. Call 303-315-8200 to schedule an appointment.

Administrative Residency. An administrative residency is optional but recommended for students with limited healthcare experience. The program faculty provide assistance to students in securing the residency, as well as regular consultation during the residency period. The program has been very successful in placing graduates in administrative residencies.

Length of program. A maximum of five years and one semester is allowed to complete the Health Administration program.

Specialized Tracks in the MBA with an Emphasis in Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools at CU Denver, and other University of Colorado campuses.

- International Health Management and Policy Track
- Financial Management Track
- Health Information Technology Management Track

Executive MBA in Health Administration

Distinctive Features of the Executive Program in Health Administration

1. Drawing on the expertise represented by the faculties of a consortium of western universities, the program offers high-quality courses taught by instructors that are typically not available from a single university.
2. The executive program facilitates learning for professionals who have continuing career and family responsibilities. The program is especially tailored for working individuals, allowing students to remain on their jobs while completing their educational program.
3. The program employs innovation in the technology of educational delivery. Learning methods include:
    - computer-assisted instruction and self-paced learning packages
    - computer conferencing and electronic case analyses
    - on-campus sessions

For application and additional information, write to:

Executive Program in Health Administration
The Business School
University of Colorado Denver
P.O. Box 480006
Denver, CO 80248-0006
www.colorado.edu/execed

Master in Business Administration for Executives, MBA

Program Director: W. Scott Guthrie
Telephone: 303-623-1888 or 1-800-228-5778

The executive MBA program provides executive-level students with a broad, rigorous 21-month academic experience leading to the master of business administration degree. The program is designed for persons who hold managerial positions in the private and public sectors. It builds upon the knowledge and experience of these executives with a sophisticated, challenging curriculum that can be pursued simultaneously without career interruption.

The executive MBA program emphasizes strategic leadership; the organization in a complex, international environment; and the applied tools of management. Courses are taught through a variety of methods. Case studies, lectures and computer simulation are combined with research projects and other teaching methods to provide students with tools useful in their present positions and applicable to more advanced responsibilities as they progress in their management careers.

Each new session of the executive MBA program begins the last week of August. Classes meet for a full day, once a week, on alternating Fridays and Saturdays, making it possible for those who live outside the Denver area to participate.

Two courses are taken simultaneously throughout the program. The program is supplemented by an intensive orientation at the beginning and a two-day seminar at the conclusion of the first academic year. A second-year seminar is held at an international business center outside of North America.

Master of Business Administration/Master of Science

Business Administration/Business MBA/MS

The Business School also offers MBA/MS dual degree programs for each function of business. The program consists of a minimum of 66 semester hours of graduate work and leads to both an MBA degree and an MS degree, which must be completed within seven years and one semester. See MS program pages for a list of functional areas. Contact a graduate academic advisor for details, 303.315.8200.

Master of Business Administration/Master of Global Management

Business Administration/Global Management MBA/MGM

This unique combined degree is offered in cooperation with the Thunderbird School of Global Management located in Glendale, Arizona, a suburb of Phoenix. Thunderbird has established eight dual programs with universities in the United States. The student applies independently to both schools and, if admitted, earns the MBA from CU Denver and a Master of Global Management degree from Thunderbird. The student begins the program at CU Denver and, after completing 36 semester hours (12 courses) required for the MBA, transfers to the Thunderbird campus and takes a minimum of 30 semester hours (10 courses) for the MGM. When all dual degree requirements are finished, the student is awarded a diploma from each school. For more information about admission to the MBA on the Denver campus, refer to the appropriate section of this chapter. For specifics about the dual MGM application process, call Felicia Welch, the associate director of academic and international services at Thunderbird, 1-800-848-9084.

Master of Business Administration/Doctor of Medicine

Business Administration/Medicine MBA/MD

The MBA/MD is for medical students at the University of Colorado School of Medicine who wish to pursue a career in administrative medicine or who seek additional training in administration or business. The program is designed to be completed in five years, at which time both the MD and MBA degrees would be awarded. Candidates for the MBA/MD complete 36 semester hours of course work in the business school and all requirements for the MD.

Master of Business Administration/Master of Urban and Regional Planning

Business Administration/Urban and Regional Planning MBA/MURP

This dual degree enables students to obtain both the Master of Urban and Regional Planning offered by the College of Architecture and Planning and the Master of Business Administration offered by the Business School upon completion of 78 semester hours. The dual degree program is composed of the core curricula in each program plus a set of electives jointly approved by the student's advisors.

Master of Science

Accounting MS

Program Director: Michael Roberts
Telephone: 303-315-8460
E-mail: Michael.Roberts@ucdenver.edu

Faculty

Professors:

Bruce Neumann, PhD, University of Illinois

Associate Professors:

Gary Colbert, PhD, University of Oregon
Carol Dee, PhD, Louisiana State University
L. Ann Martin, PhD, University of Minnesota
Michael Roberts, PhD, Georgia State University

Assistant Professors:

Mary Malina, PhD, University of Colorado Boulder
Craig A. Sisneros, PhD, Arizona State University
Willilam R. Strawser, PhD, Texas A&M University

Senior Instructors:

Elizabeth Connor, MS, Colorado State University
Robert Hockenbury, MS, University of Houston

Instructors:

Cindy Fischer, MA, University of Colorado Boulder
Emily Vera, MS, University of Colorado Denver

The master of science in accounting offers three specializations plus a flexible program which allows students to design individualized courses of study.

The program provides students the opportunity to acquire a thorough understanding of financial and managerial accounting, auditing and taxation in preparation for successful careers in public or private accounting, as well as government or nonprofit accounting.

Students completing the MS in accounting will complete:

- 12 semester hours of required accounting core coursework
- 6 semester hours of elective accounting coursework*
- 6 semester hours of accounting capstones
- 6 semester hours of free business electives

*The elective course work can be selected from graduate accounting courses or by selecting one of the three specializations offered within the program. Students who select the accounting and information systems audit and control (AISAAC) specialization have completely different requirements which are listed under that specialization.

A. Background Accounting Courses*

The MS in accounting also requires completion of the following accounting prerequisites. Prerequistes may be completed at the undergraduate or graduate level, with a grades of B- or higher and a cummulative GPA of 3.0. Students with grades below a B may be subject to probation.

Required Courses:

- BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:** undergraduate equivalent: ACCT 2200 and ACCT 2220
- ACCT 6030 - Financial Accounting **gtPATHWAYS:** undergraduate equivalent: ACCT 3220 and ACCT 3230
- ACCT 6070 - Management Accounting **gtPATHWAYS:** undergraduate equivalent: ACCT 3320

Total: 9-15 Hours

*Waived for students with appropriate background.

Accounting courses may be taken by nondegree or non-matriculated students.

B. Common Body of Knowledge (CBK)

Based on prior coursework, students may be required to take up to two background courses. The following are suggested:

- BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**

C. MS Accounting

Accounting Core

(12 semester hours)

Students should not repeat any course successfully completed at the undergraduate level with a grade of B- or higher. An advisor will evaluate prior coursework to determine substitutions.

- BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
- ACCT 6020 - Auditing **gtPATHWAYS:**
- ACCT 6054 - Accounting Systems and Data Processing **gtPATHWAYS:**
- ACCT 6140 - Tax Planning for Managers **gtPATHWAYS:**

Accounting Electives

(6 semester hours)

ACCT courses numbered 6000 or higher excluding ACCT 6030 or ACCT 6070.

Or, courses contributing to **one of the three following specializations may be used to meet this elective requirement.**

D. Accounting Specializations

Students may use a combination of accounting and free electives to complete one of the three following specialization options:

Auditing and Forensic Accounting Specialization

Choose four of the following courses:

- ACCT 6020 - Auditing **gtPATHWAYS:**
- ACCT 6280 - Professional Judgment and Decision Making in Accounting **gtPATHWAYS:**
- ACCT 6340 - Financial Statement Analysis **gtPATHWAYS:**
- ACCT 6360 - Fraud Examination **gtPATHWAYS:**
- ACCT 6370 - International Accounting **gtPATHWAYS:**
- ACCT 6380 - Forensic Accounting **gtPATHWAYS:**
- ACCT 6470 - Internal Auditing **gtPATHWAYS:**
- ACCT 6510 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**
- ACCT 6620 - Advanced Auditing **gtPATHWAYS:**

Financial Accounting Specialization

Choose four of the following courses:

- ACCT 6024 - Advanced Financial Accounting **gtPATHWAYS:**
- ACCT 6080 - Accounting for Government and Nonprofit Organizations **gtPATHWAYS:**
- ACCT 6280 - Professional Judgment and Decision Making in Accounting **gtPATHWAYS:**
- ACCT 6340 - Financial Statement Analysis **gtPATHWAYS:**
- ACCT 6350 - Current Issues in Professional Accounting **gtPATHWAYS:**
- ACCT 6370 - International Accounting **gtPATHWAYS:**

Taxation Specialization

Choose four of the following courses:

- ACCT 6140 - Tax Planning for Managers **gtPATHWAYS:**
- ACCT 6400 - Taxation of Corporations and Shareholders **gtPATHWAYS:**
- ACCT 6410 - Advanced Tax For Individuals **gtPATHWAYS:**
- ACCT 6420 - Taxation of Estates and Gifts **gtPATHWAYS:**
- ACCT 6430 - International Taxation **gtPATHWAYS:**
- ACCT 6440 - Tax Practice and Procedures **gtPATHWAYS:**
- ACCT 6450 - Research Problems In Taxation **gtPATHWAYS:**
- ACCT 6460 - Advance Topics in Taxation **gtPATHWAYS:**
- ACCT 6480 - Partnership Taxation **gtPATHWAYS:**
- ACCT 6500 - Advanced Corporate Taxation **gtPATHWAYS:**

E. Accounting Capstone

(6 semester hours)

- ACCT 6250 - Seminar: Financial Accounting **gtPATHWAYS:**
- ACCT 6260 - Seminar: Managerial Accounting **gtPATHWAYS:**

F. Free Elective

(6 semester hours)

Accounting is increasingly diverse and linked to many business decisions. Accountants may eventually work as systems designers, chief financial officers, cost analysts, budget officers or chief executive officers. Students will be better prepared for their careers if they develop competencies in a related field, which may be chosen from a single discipline such as finance, information systems, decision sciences, entrepreneurship, international business, marketing, or management.

Free electives may consist of any course numbered 6800 or higher with BUSN prefix or any course numbered 6000 or higher with a prefix of ACCT, ENTP, FNCE, INTB, ISMG, MGMT, DSCI, or MKTG excluding ACCT 6030 and ACCT 6070

G. Total: 30 Hours

Accounting and Information Systems Audit and Control (AISAAC) Specialization

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities,

since they control the systems that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

As you will notice the complete 30 semester hour requirements for this specialization are listed below.

Accounting Core

(9 semester hours)

- ACCT 6620 - Advanced Auditing **gtPATHWAYS:**
- ACCT 6250 - Seminar: Financial Accounting **gtPATHWAYS:**
- ACCT 6260 - Seminar: Managerial Accounting **gtPATHWAYS:**

AISAAC Common Courses

(12 semester hours)

- ACCT 6020 - Auditing **gtPATHWAYS:**
- ACCT 6510 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**
- ISMG 6040 - Business Process Management **gtPATHWAYS:**
- ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**

Choose three of the following courses:

(9 semester hours)

- ACCT 6340 - Financial Statement Analysis **gtPATHWAYS:**
- ACCT 6360 - Fraud Examination **gtPATHWAYS:**
- ACCT 6800 - Special Topics **gtPATHWAYS:**
- ISMG 6080 - Database Management Systems **gtPATHWAYS:**
- ISMG 6180 - Information Systems Management and Strategy **gtPATHWAYS:**
- ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**
- ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**

Total 30 hours

Decision Sciences MS

Program Director: Marlene A. Smith
Telephone: 303-315-8421
E-mail: Marlene.Smith@ucdenver.edu

Faculty

Professors:
Peter Bryant, PhD, Stanford University
Gary A. Kochenberger, PhD, University of Colorado Boulder

Associate Professors:
Deborah L. Kellogg, PhD, University of Southern California
Marlene A. Smith, PhD, University of Florida

Senior Instructor:
Michael D. Harper, PhD, Rensselaer Polytechnic Institute

Instructor:
Emily Roberts, MA, University of Southern Maine

The MS in Decision Sciences focuses on modeling and applications which prepares you for a career as a decision science specialist in industry or government. Today, companies in every conceivable industry are reaping the benefits of using formal mathematical models to assist them in addressing complex business problems. Decision Science graduates hold positions that bridge the gap between operations research/statistics specialists and management.

Learn to apply quantitative methods to real-world problems using modern methodologies adopted from statistics, operations research, and management science. Although the MS in Decision Sciences is founded in operations research methods, it focuses on applications of these methods in the workplace rather than the development of new operations research techniques. The managerial emphasis of our degree is accomplished through a comprehensive set of elective and required coursework such as data analysis, operations management, forecasting, project management, simulation and supply chain management. A required practicum course provides students with the opportunity (under the direction of faculty) to solve a real, complex workplace problem for a local Denver organization.

Requirements for the MS degree in Decision Sciences are met by the following courses and options:

Prerequisite course work:

Accounting: completion of BUSN 6550 or undergraduate accounting courses in financial and managerial accounting with a grade of B- or better along with useable knowledge of spreadsheets.

Required Courses

- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- BUSN 6630 - Management of Operations **gtPATHWAYS:**
- DSCI 6820 - Project Management **gtPATHWAYS:**
- DSCI 6230 - Business Forecasting **gtPATHWAYS:**
- DSCI 6460 - Decision Analysis **gtPATHWAYS:**
- DSCI 6910 - Decision Sciences Practicum **gtPATHWAYS:**
  DSCI Electives (12 semester hours)

Total: 30 Hours

Notes and Restrictions

Decision Sciences electives must include at least two DSCI courses numbered 6000 or higher. Remaining Decision Sciences electives may be any of the following courses: DSCI 6000 or higher; MKTG 6050, Marketing Research; or FNCE 6480, Financial Modeling.

Students are not required to take a comprehensive examination or complete a thesis in the major field.

Finance MS

Program Director: Ajeyo Banerjee
Telephone: 303.315.8456

Faculty

Professors:
Marcelle Arak, PhD, Massachusetts Institute of Technology
Jean-Claude Bosch, PhD, University of Washington
Elizabeth Cooperman, PhD, University of Georgia
E. Woodrow Eckard, PhD, University of California-Los Angeles
Richard Foster, PhD, University of Chicago

James Morris, PhD, University of California-Berkeley
Dean Taylor, PhD, University of Chicago

Associate Professors:
Ajeyo Banerjee, PhD,University of Massachusetts-Amherst
Jian Yang, PhD, Texas A&M University

Assistant Professors:

Takeshi Nishikawa, PhD, Texas Tech University

Senior Instructors:
John Byrd, PhD, University of Oregon
Chen Ji, MS, University of Colorado
Barbara Pelter, MA, University of Colorado
John Turner, PhD, St. Louis University

Instructors:
John Daley, PhD, University of Washington
Cindy Sutfin, MS, University of Colorado

The master of science in finance provides the necessary depth and specialized expertise to meet the needs of businesses for financial managers, investment analysts and other finance specialists.

The program emphasizes a familiarity with the institutions in our financial system, an understanding of financial markets and instruments, and the analytical skills and tools necessary to make informed decisions about investment and financing.

The program is suited to students from a wide variety of undergraduate backgrounds and is particularly appropriate to students with strong technical and analytical backgrounds. Admission standards for the MS finance program are unique to the program. Therefore, admission to other graduate business programs does not guarantee admission into the MS Finance program.

The MS in finance offers flexibility with on-campus and online courses. The MS finance degree requirements are met by the following courses and options:

Required Courses

- FNCE 6290 - Quantitative Methods for Finance **gtPATHWAYS:**
- BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
- BUSN 6640 - Financial Management **gtPATHWAYS:**
- FNCE 6300 - Macroeconomics and Financial Markets **gtPATHWAYS:**
- FNCE 6330 - Investment Management Analysis **gtPATHWAYS:**
- FNCE 6380 - Futures and Options **gtPATHWAYS:** or

- FNCE 6382 - Survey of Financial Derivatives: Futures, Options and Swaps
  gtPATHWAYS:
  FNCE Electives (12 semester hours)
  Must include at least three FNCE courses numbered 6000 or higher. Remaining Finance Elective may be any of the following courses: FNCE 6000 or higher, ACCT 6340 Financial Statement Analysis, ENTP 6824 Entrepreneurial Financial Management (cannot receive credit for both ENTP 6824 and FNCE 6460 Small Firm Financial Management), ECON 5803 Mathematical Economics, ECON 5813 Econometrics I, or ECON 5823 Econometrics II. ECON courses are recommended for students wishing to later pursue a PhD in finance.

Total: 30 Hours

Prerequisites: BUSN 6550, Analyzing and Interpreting Accounting Information, or the equivalent accounting background. Students are also expected to be knowledgeable in spreadsheet software.

Notes and Restrictions

Finance Electives. Choose three courses in finance from the list of regularly scheduled graduate classes in consultation with an advisor.

Free Elective. Students complete 3 semester hours of graduate business course work (excluding BUSN courses numbered below 6800). Modern finance is heavily mathematical and draws extensively on economics and accounting. Courses in these areas are especially useful. Petitions may be submitted to the program director for special courses that fit a student's individual needs.

Global Energy Management MS

Program Advisor: Sarah Dushame
Telephone: 303-605-6212
E-mail: Sarah.Dushame@ucdenver.edu

Faculty

Professors/Instructors

Timothy Antoniuk, MDes, University of Alberta
William Ascher, PhD, Yale University

Stephen Brown, PhD, University of Maryland
Matthew Clarke, PhD, University of Calgary
William Fox, JD, Catholic University of America
Mean Husein, PhD, McGill University
Merrily Kaut, PhD, University of Colorado Denver
L. Ann Martin, PhD, University of Minnesota

The master of science in global energy management (GEM) prepares individuals for leadership careers in the energy industry. This degree is particularly appropriate for individuals seeking to advance their existing careers in the energy field. Prior work experience within the field is preferred, but not required. The program consists of two components: the core curriculum and the more advanced and specialized elective courses. The MS GEM program requires the completion of the following core classes as well as four elective courses from the selection listed below.

Required Courses

- GEMM 6000 - 21st Century Global Energy Issues and Realities **gtPATHWAYS:**
- GEMM 6100 - Global Energy Economics **gtPATHWAYS:**
- GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry **gtPATHWAYS:**
- GEMM 6300 - Renewable and Alternative Energy: Opportunities & Challenges **gtPATHWAYS:**
- GEMM 6400 - Leadership and Decision Making in the Global Energy Environment **gtPATHWAYS:**
- GEMM 6500 - Financial Accounting in the Global Energy Markets **gtPATHWAYS:**
- GEMM 6600 - Introduction To Financial Management In The Energy Industry **gtPATHWAYS:**
- GEMM 6410 - People Management in the Global Energy Environment **gtPATHWAYS:**

Choose four

Choose four of the following courses. These courses are taken during the last two terms of the program and are offered based on enrollment.

- GEMM 6210 - Land Management and Energy Contracts **gtPATHWAYS:**
- GEMM 6430 - Organizational Behavior in the Energy Industry **gtPATHWAYS:**
- GEMM 6450 - Strategic Management of the Energy Industry **gtPATHWAYS:**

- GEMM 6460 - Integrated Information Management for Energy Firms **gtPATHWAYS:**
- GEMM 6470 - Energy Marketing **gtPATHWAYS:**
- GEMM 6610 - Advanced Financial Management in the Energy Industry **gtPATHWAYS:**
- GEMM 6620 - Energy Assest & Production Management for the Energy Industry **gtPATHWAYS:**
- GEMM 6630 - Renewable Energy Management **gtPATHWAYS:**

Prerequisites

Applicants that do not have a science- or energy-related field undergraduate degree or three-plus years experience in the industry are required to take two prerequisite courses as well as the GMAT.

The prerequisite courses include physical geology and introduction to physical engineering. These courses can be taken at any accredited university, but must be approved by a GEM team staff member before registering. Also the prerequisites may be taken prior or concurrently with GEMM 6000 and GEMM 6100.

Notes and Restrictions

The program is a cohort group, hybrid online, 18-month master of science degree program. As a cohort program, all students start together, progress together and graduate together. Students cannot take time out from the program once it starts and need to plan on remaining in the program for the full 18 months. If it becomes necessary to take a term off, students may not re-enroll until the next cohort group catches up to the point where the student originally dropped out, which is 6 months later. As a hybrid online program, professors and students meet in class face to face for four days (Fridays through Mondays) at the start of each 3-month term with the rest of the term completed online. Please note that the GEM degree program runs on a completely separate schedule from the normal semester terms of the Business School. Please check the Business School Web site for deadlines and dates of each GEM term. All GEMM courses are restricted to those students who have been admitted to the MS GEM program.

Dual Degrees

In order to participate in the dual degree options offered by the Business School, students in the GEM program must first complete their entire GEM degree before they can begin their second degree.

Health Administration MS

Program Director: Errol L. Biggs
Telephone: 303-315-8851
E-mail: errol.biggs@ucdenver.edu

Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Peter Bryant, PhD, Stanford University

C.Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Richard Foster, PhD, University of Chicago

Bruce Neumann, PhD, University of Illinois

Edward O'Connor, PhD, University of Akron

Associate Professors:

Murray Cote, PhD, Texas A & M University

Blair Gifford, PhD, University of Chicago

Deborah Kellogg, PhD, University of Southern California

Stephen Ross, MD, Universtiy of North Carolina

Instructor:

Errol Biggs, PhD, Pennsylvania State University

The goal of the master of science in health administration degree is to prepare men and women who, after appropriate practical experience in responsible managerial positions, are capable of assuming positions as chief executive officers or senior administrators in

complex, multi-service healthcare organizations or in organizations' purchasing health services.

The curriculum is a synthesis of management concepts and techniques that are applicable to any economic organization and tools that can be specifically applied to health and health services systems. The program emphasizes skills that heighten basic analytical and decision-making processes used by top-level managers in selecting broad strategies for the institutions and by junior managers in administering subunits of health care organizations. The faculty guide the students in their mastery of theoretical, conceptual and quantitative topics.

The program has enjoyed continuous accreditation by the Commission on Accreditation of Healthcare Management Education since 1970.

A. Common Body of Knowledge (CBK)

- BUSN 6521 - Managing Individuals and Teams (Health Section) **gtPATHWAYS:**
- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
- BUSN 6560 - Marketing Management **gtPATHWAYS:**
- BUSN 6630 - Management of Operations **gtPATHWAYS:**
- BUSN 6640 - Financial Management **gtPATHWAYS:**

Total: 18 Hours

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree or MBA from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

B. Graduate Core in Health Administration

- HLTH 6010 - Health Care Systems **gtPATHWAYS:**
- HLTH 6040 - Health Care Financial Management **gtPATHWAYS:**
- HLTH 6911 - Health Field Studies **gtPATHWAYS:**
- BUSN 6541 - Legal and Ethical Environment of Business (Health Section) **gtPATHWAYS:**
- BUSN 6621 - Applied Economics for Managers (Health Section) **gtPATHWAYS:**
- DSCI 6440 - Quality and Process Improvement **gtPATHWAYS:**
- BUSN 6711 - Strategic Management (Health Section) **gtPATHWAYS:**
  HLTH Electives (9 semester hours)
  HIT elective (3 semester hours)

Total: 33 Hours

Notes and Restrictions

Health Administration electives. Choose three of the following: HLTH 6055, Transformation Leadership; HLTH 6740, Profiles in Healthcare; MGMT 6803, Visonary Leadership; HLTH 6075, Travel Study; HLTH 6070, International Health Policy & Management.

Health Information Technology elective. Choose one of the following: HLTH 6071, Introduction to Health Information Technology or HLTH 6027, Fundamentals of Helath Information Techology.

Management Residency. A management residency is optional, but recommended for all students, especially those with limited health care experience. The faculty of the program provide assistance to students in securing the residency, as well as regular consultation during the residency period. Information on the full range of local, regional, and national residencies is available in the program office.

Length of Program. The didactic portion of the degree will take at least two academic years, since most HA courses are offered only once each year and many have prerequisites. Part-time study is facilitated by courses being scheduled for late afternoon and evening hours.

Specialized Tracks in MS Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools on the Denver campus, and other University of Colorado campuses.

- International Health Management and Policy track
- Financial Management track
- Health Information Technology Management track

Institute for International Business

The International Health track is affiliated with the Institute for International Business at UC Denver. The Institute for International Business is one of a few university programs to have received the prestigious CIBER grant from U.S. Department of Education. The grant is being used by the institute to provide effective internationally oriented education, research, and outreach activities. Also, the institute is a participant in an international consortium of universities for faculty and student program and course exchanges.

Students in the International Health Management and Policy track will have access to the institute's exchange networks.

International Health Travel/Study Course

Program Director: Blair Gifford
Telephone: 303-315-8400
E-mail: Global-Health@ucdenver.edu

A unique feature of our International Health Management and Policy track is its emphasis on making sure students gain international experience during their education. The travel study course requirement can be met by taking a University of Colorado health travel/study course, or a student can take a course at a partnering university. An example of a health travel/study was a three-week trip to Thailand and Vietnam to visit numerous cultural- and health-related facilities.

Information Systems MS

Program Director: Jahangir Karimi
Telephone: 303-315-8430
E-mail: Jahangir.Karimi@ucdenver.edu
Web site: http://business.ucdenver.edu/Disciplines/InfoSystems/InfoSystemsMS.htm

Faculty

Professors:
James Gerlach, PhD, Purdue University
Jahangir Karimi, PhD, University of Arizona

Associate Professors:
Dawn Gregg, PhD, Arizona State University
Michael Mannino, PhD, University of Arizona
Ronald Ramirez, PhD, University of California-Irvine
Judy Scott, PhD, University of California-Irvine
Steven Walczak, PhD, University of Florida

Assistant Professors:
Zhiping Walter, PhD, University of Rochester

Senior Instructors:
Eric Thompson, MS, University of Colorado

Instructor:
Linda Fried, JD/LLM, University of Miami

The Master of Science in Information Systems (MSIS) program at the Business School meets industry needs by providing specializations. The program prepares students for career paths in systems development and management services, enterprise application services, business intelligence, health information technology, information security audit and control, business consulting and development and consumer products and services. Whether students aim to be systems analysts or designers, software engineers, applications programmers, database administrators, Web developers, systems integrators, project managers, LAN administrators or application and technology consultants, the MSIS program provides the necessary knowledge and skills. This entire MS in Information Systems can be completed online.

The MSIS program offers a wide choice of courses. The course work consists of common body of knowledge courses plus 30 semester hours, which includes a choice of a specialization. Each specialization includes two required courses, 6 courses from a list specific to your chosen specialization and two elective courses. Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

A. Common Body of Knowledge (CBK)

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree or MBA from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

Four of the following courses are required if you do not meet the above waiver policy.

- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
- BUSN 6560 - Marketing Management **gtPATHWAYS:**
- BUSN 6630 - Management of Operations **gtPATHWAYS:**
- BUSN 6640 - Financial Management **gtPATHWAYS:**

Total: 12 Hours for Common Body of Knowledge (CBK)

B. Information Systems Specializations

The five specializations that accompany the MS in Information Systems are designed to provide the fundamental knowledge necessary for a career as an IS professional. Up to 9 semester hours may be transferred from an AACSB international accredited graduate school and applied to the information systems specializations upon approval. The IS specializations provide students with a set of related courses necessary to acquire skills and expertise within a specific area in the development, management and use of information technology applications. Students are required to choose one specialization upon admission to the MSIS.

Accounting and Information Systems Audit and Control (AISAAC) Specialization

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

Prerequisite

- ACCT 6030 - Financial Accounting **gtPATHWAYS:**

Required Courses

- ACCT 6020 - Auditing **gtPATHWAYS:**
- ISMG 6040 - Business Process Management **gtPATHWAYS:**
- ISMG 6060 - Analysis, Modeling and Design **gtPATHWAYS:**
- ISMG 6080 - Database Management Systems **gtPATHWAYS:**
- ISMG 6180 - Information Systems Management and Strategy **gtPATHWAYS:**
- ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**
- ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**
  Either
- ACCT 6510 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**
  OR

- ISMG 6510 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**

Choose two:

- ACCT 6620 - Advanced Auditing **gtPATHWAYS:**
- ACCT 6470 - Internal Auditing **gtPATHWAYS:**
- ACCT 6340 - Financial Statement Analysis **gtPATHWAYS:**
- ACCT 6360 - Fraud Examination **gtPATHWAYS:**
- ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**
- ISMG 6450 - IT Project Management **gtPATHWAYS:**

Business Intelligence Specialization

Business Intelligence (BI) systems combine operational data with analytical tools to present complex and competitive information to planners and decision makers. The objective is to improve the timeliness and quality of inputs to the decision process. BI is used to understand the capabilities available in the firm; the state-of-the-art, trends, and future directions in the markets, the technologies, and the regulatory environment in which the firm competes; and the actions of competitors and the implications of these actions. With this specialization, you get the necessary skills and knowledge in real-time data warehousing, data visualization, data mining, online analytical processing, customer relationships management, dashboards and scorecards, corporate performance management, expert and advanced intelligent systems, and hands-on experience with leading BI tools.

Required Courses

- ISMG 6080 - Database Management Systems **gtPATHWAYS:**
- ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**

Choose six:

- DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**
- ISMG 6180 - Information Systems Management and Strategy **gtPATHWAYS:**
- ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**
- ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**
- ISMG 6480 - Data Warehouse and Administration **gtPATHWAYS:**
- ISMG 6810 - Business Intelligence in Healthcare **gtPATHWAYS: OR**
- ISMG 6820 - Business Intelligence and Financial Modeling **gtPATHWAYS:**
- MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**

Enterprise Technology Management (ETM) Specialization

This specialization focuses on information technology as the prime driver of business strategy. It focuses on the strategic, technological, financial and organizational issues involved with the effective management of information technology within an enterprise. The courses in this specialization cover the emerging technologies and the evolving roles and importance of IT in modern organizations; IT-enabled organizational processes and knowledge management; methods to develop, acquire and implement information systems; implementing and managing complex IT projects; security and privacy issues associated with IT.

Required Courses

- ISMG 6040 - Business Process Management **gtPATHWAYS:**
- ISMG 6180 - Information Systems Management and Strategy **gtPATHWAYS:**

Choose six:

- ISMG 6080 - Database Management Systems **gtPATHWAYS:**
- ISMG 6120 - Internet and Mobile Technologies **gtPATHWAYS:**
- ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**
- ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**
- ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**
- ISMG 6450 - IT Project Management **gtPATHWAYS:**
- ISMG 6460 - Emerging Technologies **gtPATHWAYS:**

Health Information Technology Management Specialization

Recently, the health care industry has shifted its focus from using proprietary and expensive IT solutions to more innovative IT applications in electronic health records (EHR) and other health information technology (HIT) innovations for sharing information effectively to help manage health care crisis. The courses within this specialization cover the evolving roles and importance of IT in the health care industry; the innovative IT applications for delivering health care with reduced cost and increased quality; the management of health care using effective IT systems; and the security and privacy issues associated with health information. These courses will focus on how IT-enabled health care organizations can integrate information from various resources in order to deliver innovative IT solutions to meet unique requirements of health care industry.

Required Courses

- ISMG 6060 - Analysis, Modeling and Design **gtPATHWAYS:**
- ISMG 6080 - Database Management Systems **gtPATHWAYS:**

Choose six:

- HLTH 6071 - Introduction To Health Information Technology **gtPATHWAYS:**
- HLTH 6072 - Fundamentals of Health Information Technology Management **gtPATHWAYS:**
- ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**
- ISMG 6280 - Service Oriented Architecture **gtPATHWAYS:**
- ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**
- ISMG 6460 - Emerging Technologies **gtPATHWAYS:**
- ISMG 6810 - Business Intelligence in Healthcare **gtPATHWAYS:**

Web and Mobile Computing Specialization

This specialization focuses on building and managing large systems using platforms for website development, mobile and wireless applications, and web services and service oriented architectures. The courses provide expertise in .Net programming, business process management, internet and mobile technologies, website development technologies, data warehousing and administration, and service oriented architecture. Project management coursework enables graduates to successfully handle highly, complex systems development projects in the business world.

Required Courses

- ISMG 6060 - Analysis, Modeling and Design **gtPATHWAYS:**
- ISMG 6080 - Database Management Systems **gtPATHWAYS:**

Choose six:

- ISMG 6020 - .Net Programming Fundamentals **gtPATHWAYS:**
- ISMG 6040 - Business Process Management **gtPATHWAYS:**
- ISMG 6120 - Internet and Mobile Technologies **gtPATHWAYS:**
- ISMG 6240 - Website Development Practice and Technologies **gtPATHWAYS:**
- ISMG 6280 - Service Oriented Architecture **gtPATHWAYS:**
- ISMG 6450 - IT Project Management **gtPATHWAYS:**
- ISMG 6480 - Data Warehouse and Administration **gtPATHWAYS:**

Electives

Students fulfill an additional 6 semester hours by completing the following:

Note: If you are pursuing the Accounting and Information Systems Audit and Control specialization, you do not complete these electives. All other students will complete the following electives.

- an elective course from any of the ISMG graduate courses OR an internship **AND**
- a free elective selected from any graduate course offered by the Business School, except BUSN courses numbered below 6800.

Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

Total: 30 hours for MS in Information Systems

Geographic Information Systems (GIS) Option

The Geographic Information Systems option expands upon system development skills through the understanding of geographic information systems workflows, analysis processes, and data models. This option for the Web and Mobile Computing specialization and Business Intelligence specialization addresses how map representations can be abstracted in geo-databases to develop intelligent GIS systems. Learn how GIS can improve efficiencies, decision making, planning, geographic accountability, science-based plans and communication. The GIS option is offered in conjunction with the College of Engineering and Applied Science and a certificate in GIS is awarded by the College of Engineering and Applied Science.

Students must complete all requirements for the MS in Information Systems, as well as the requirements below.

- CVEN 5381 - Introduction to Geographic Information Systems **gtPATHWAYS:**

Choose three:

- CVEN 5382 - GIS Spatial Database Development **gtPATHWAYS:**
- CVEN 5383 - GIS Analysis -- Theory and Practice **gtPATHWAYS:**
- CVEN 5384 - GIS Management and Policies **gtPATHWAYS:**
- CVEN 5385 - GIS Relational Database Systems **gtPATHWAYS:**
- CVEN 5386 - GIS Laboratory **gtPATHWAYS:**

Total: 12 Hours

- GIS courses are offered online and can be completed concurrently with the Information Systems courses.

- Students will be able to register for the classes on the web. There are no special registration requirements.
- Students need to notify the graduate advising office at the Business School, 303-315-8200, prior to graduation if they are planning to complete the GIS option. Students also need to indicate the completion of the coursework when they submit their application for diploma card.

International Business MS

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Faculty

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Senior Instructors:
John Byrd, PhD, University of Oregon
John Turner, PhD, St. Louis University

Instructors:
Chen Ji, MS, University of Colorado
Mary Lee Stansifer, PhD, Northwestern University

The Master of Science in International Business prepares individuals for careers in international business or with international organizations.

The MS program in International Business requires the completion of the following:

A. Common Body of Knowledge (CBK)

Required CBK

- BUSN 6520 - Managing Individuals and Teams **gtPATHWAYS:**
- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
- BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
- BUSN 6560 - Marketing Management **gtPATHWAYS:**
- BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
- BUSN 6640 - Financial Management **gtPATHWAYS:**

Total: 21 Hours

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree or MBA from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

B. Foreign Language Competency

Prior to graduation, students must demonstrate proficiency in a foreign language (other than English). This is accomplished through completion of three semesters of college-level course work in a single foreign language with a grade of C or better in all three terms or by passing a proficiency exam.

C. Graduate Core in International Business

Required Courses

- INTB 6000 - Introduction to International Business **gtPATHWAYS:**
- INTB 6020 - Cross-Cultural Management **gtPATHWAYS:**
- INTB 6200 - International Business Policy **gtPATHWAYS:**
  International Electives (12 semester hours)
  Free Elective (3 semester hours)
  Advanced Study Requirements in International Business (6 semester hours)

Total: 30 Hours

Notes and Restrictions

International Topics Electives. Choose four courses (12 semester hours) from any INTB 6000-level course or higher or any approved international course.

Free Elective. One graduate-level class may be selected from any functional area of business, including international business topics classes, except BUSN courses numbered below 6800. International business majors can petition for transfer of 3 semester hours of relevant nonbusiness graduate courses offered at UC Denver's Downtown Campus.

Advanced Study Requirements. This 6-semester-hour requirement may be fulfilled by a master's thesis, research internship, international field study/study abroad or any INTB 6000-level course or higher or any approved international course.

Management and Organization MS

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Faculty

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Instructors:
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Barry McConnell, MBA, University of Colorado
Jeffrey Nystrom, MS, University of Colorado
Ira Selkowitz, JD, University of Denver

The MS Management program prepares students for significant managerial responsibilities in the private and public sectors. Core course requirements provide students with an advanced understanding of how to manage interpersonal dynamics, effectively design organizations, implement planned change and organizational transformations and develop human resources. Students build on this foundation with any four electives in MGMT, ENTP or INTB, or with the courses that comprise one of 12 career-focused specializations.

The specializations include: business strategy, change and innovation, communications management, enterprise technology management, entrepreneurship and innovation, human resources management, global management, leadership, strategic management, managing for sustainability, quantitative decision methods and sports and entertainment management. These specializations will help students master the tools and knowledge to be successful in each focused competency.

The MS management and organization degree requirements are met by the following:

Management MS Core

Required Management Courses

- BUSN 6520 - Managing Individuals and Teams **gtPATHWAYS:**
- MGMT 6320 - Organizational Development **gtPATHWAYS:**
- MGMT 6360 - Designing Effective Organizations **gtPATHWAYS:**
- MGMT 6380 - Managing People for Competitive Advantage **gtPATHWAYS:**

Total: 12 Hours

Management Emphasis (or elective) courses (12-18 semester hours)

A student may choose to complete the program by taking any four MGMT, INTB or ENTP elective courses.

Choose from one of the following emphasis areas:

- communications management
- enterprise technology management
- entrepreneurship and innovation
- global management
- human resources management
- leadership

- quantitative decision methods
- sports and entertainment management
- strategic management
- sustainability management

Communications Management

For the communications management specialization you must complete six courses from the Business School, five of which must be within the MGMT course curriculum. You are allowed no more than four communications courses (three required and one free elective).

Required Courses

- COMM 5240 - Organizational Communication **gtPATHWAYS:**
- COMM 5250 - Difference Matters and Organizational Communication **gtPATHWAYS:**
- COMM 5405 - Technical Communication: Writing **gtPATHWAYS:**

Choose one:

- MGMT 6800 - Special Topics in Management **gtPATHWAYS:**
- MGMT 6803 - Visionary Leadership **gtPATHWAYS:**
- MGMT 6804 - Bargaining and Negotiation **gtPATHWAYS:**

Total: 12 Hours

Approved COMM Elective Courses

Choose one:

> The following is a list of communication courses that my be used to fulfill a free elective on your degree plan.
> For the communications specialization you must complete six courses from the Business School, of which five must be within the MGMT course curriculum. You are allowed no more than four communications courses.

- COMM 5151 - Group Communication **gtPATHWAYS:**
- COMM 5222 - Professional Communication **gtPATHWAYS:**
- COMM 5245 - Advanced Organizational Communication **gtPATHWAYS:**
- COMM 5260 - Communication and Conflict **gtPATHWAYS:**
- COMM 5262 - Mediation **gtPATHWAYS:**
- COMM 5270 - Intercultural Communication **gtPATHWAYS:**
- COMM 5280 - Communication and Change **gtPATHWAYS:**
- COMM 5500 - Health Communication **gtPATHWAYS:**

- COMM 5505 - Technical Communication: Editing **gtPATHWAYS:**
- COMM 5640 - Advanced Public Relations **gtPATHWAYS:**
- COMM 5760 - Computer-Mediated Communication **gtPATHWAYS:**
- COMM 5830 - Visual Principles in Technical Communication **gtPATHWAYS:**

Enterprise Technology Management

Required Courses

Choose four:

- ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**
- ISMG 6450 - IT Project Management **gtPATHWAYS:**
- ISMG 6460 - Emerging Technologies **gtPATHWAYS:**
- ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**

Total: 12 Hours

Entrepreneurship and Innovation

- ENTP 6000 - Fundamentals of Entrepreneurship **gtPATHWAYS:**
- ENTP 6020 - The Business Plan **gtPATHWAYS:** and
  6000-level ENTP courses (2) or
  6000-level ENTP course (1) and 6000-level MGMT course (1) (6 semester hours)

Total: 12 Hours

Global Management

Required Courses

- INTB 6000 - Introduction to International Business **gtPATHWAYS:**
- INTB 6020 - Cross-Cultural Management **gtPATHWAYS:**
- MGMT 6040 - Managing Global Talent **gtPATHWAYS:** or
- INTB 6040 - Managing Global Talent **gtPATHWAYS:**
  Any travel-study program or
  6000-level INTB course (3 semester hours)

Total: 12 Hours

Leadership

Prerequisite

- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**

Required Courses

- INTB 6000 - Introduction to International Business **gtPATHWAYS:** or
- ENTP 6000 - Fundamentals of Entrepreneurship **gtPATHWAYS:**
- MGMT 6803 - Visionary Leadership **gtPATHWAYS:**
- MGMT 6804 - Bargaining and Negotiation **gtPATHWAYS:**
- MGMT 6800 - Special Topics in Management **gtPATHWAYS:**

Total: 12 Hours

Management of Change

Required Courses

Choose four:

- BUSN 6811 - IT and New Business Paradigms **gtPATHWAYS:**
- BUSN 6830 - Business and the Natural Environment **gtPATHWAYS:**
- ENTP 6820 - Business Consulting **gtPATHWAYS:**
- MGMT 6020 - Leadership in Difficult Times **gtPATHWAYS:**
- MGMT 6730 - Human Resources Management: Performance Management **gtPATHWAYS:**
- MGMT 6803 - Visionary Leadership **gtPATHWAYS:**
- MGMT 6804 - Bargaining and Negotiation **gtPATHWAYS:**
- MGMT 6821 - Managing for Sustainability **gtPATHWAYS:**

Total: 12 Hours

Managing Human Resources

Prerequisites

- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- MGMT 6380 - Managing People for Competitive Advantage **gtPATHWAYS:**
  HR emphasis prerequisite courses are in addition to the 30-hour MS core.

Required Courses

Choose four:

- BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
- MGMT 6040 - Managing Global Talent **gtPATHWAYS:** or

- INTB 6040 - Managing Global Talent **gtPATHWAYS:**
- MGMT 6710 - Human Resources Management: Staffing **gtPATHWAYS:**
- MGMT 6720 - Human Resources Management: Training **gtPATHWAYS:**
- MGMT 6730 - Human Resources Management: Performance Management **gtPATHWAYS:**
- MGMT 6740 - Human Resources Management: Compensation **gtPATHWAYS:**

Total: 12 Hours

Managing for Sustainability

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

Quantitative Decision Methods

Prerequisite

(completion of prerequisite is in addition to the 30-hour MS in management and organization)

- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**

Required Courses

Choose four:

- BUSN 6630 - Management of Operations **gtPATHWAYS:**
- BUSN 6820 - Project Management **gtPATHWAYS:**
  or
- DSCI 6820 - Project Management **gtPATHWAYS:**
- BUSN 6822 - Services Operations **gtPATHWAYS:**
  or
- DSCI 6822 - Services Operations **gtPATHWAYS:**
- BUSN 6824 - Business Forecasting **gtPATHWAYS:**
  or
- DSCI 6230 - Business Forecasting **gtPATHWAYS:**
- BUSN 6826 - Supply Chain Management **gtPATHWAYS:**
- BUSN 6828 - Business Applications of Data Mining **gtPATHWAYS:**
  or
- DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**
- DSCI 6440 - Quality and Process Improvement **gtPATHWAYS:**

Total: 12 Hours

Note: One of two free electives must be aMGMT, ENTP or INTB course.

Sports and Entertainment Management

Required Courses

Choose four:

- BUSN 6860 - Finance in the Sports Entertainment Industries **gtPATHWAYS:**
- MGMT 5939 - Internship **gtPATHWAYS:**
- MGMT 6830 - Sports and Entertainment Management **gtPATHWAYS:**
- MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries **gtPATHWAYS:**
- MKTG 6820 - Sports & Entertainment Marketing **gtPATHWAYS:**

Total: 12 Hours

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

Strategic Management

Students pursuing a dual MBA/MS in organization and management are not eligible for this emphasis.

Prerequisites

- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**

Required Courses

- BUSN 6560 - Marketing Management **gtPATHWAYS:**
- BUSN 6640 - Financial Management **gtPATHWAYS:**
- BUSN 6710 - Strategic Management **gtPATHWAYS:**
- MGMT 6803 - Visionary Leadership **gtPATHWAYS:**

Total: 12 Hours

Free Electives (6 semester hours)

Free electives can be anything in the Business School (graduate level), except BUSN prefix courses below 6800. Any 6000-level or higher ACCT, FNCE, ENTP, MKTG, MGMT, ISMG, INTB or HLTH course can count as your free elective requirement.

*For the **communications emphasis**, the student is allowed to use an approved COMM course as the free elective.

Marketing MS

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Faculty

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Vick Lane, PhD, University of Washington
Madhavan Parthasarathy, PhD, University of Nebraska

Senior Instructor:
Mary Lee Stansifer, PhD, Northwestern University

Instructors:
Peter Miller, MA, Farleigh Dickenson University

The MS in Marketing degree is designed to provide the skill sets necessary for you to succeed in middle (e.g., brand manager, advertising account executive) and upper level (e.g., CMO) positions in marketing and for those who interface with an organization's markets (e.g., customer service or operations).

Your MS in Marketing degree from the University of Colorado Denver consists of 30 hours:

- 18 semester hours of marketing core courses
- 12 semester hours of graduate electives

We highly recommend that one of the electives include a marketing-related internship, especially for those making a career change or without prior experience in marketing. Further, as has been our policy, if you feel that you would benefit by substituting a one or two graduate electives for a marketing elective, the marketing program director will help to work out a plan designed to meet your specific career

needs. You must complete the following 18 hours of marketing core courses and then you can choose from two paths to complete the remaining 12 hours. You can select the “build your own MS marketing degree” option or one of the eight specializations.

Graduate Core in Marketing

Required Courses

- BUSN 6560 - Marketing Management **gtPATHWAYS:**
- MKTG 6010 - Marketing Strategy, Evaluation and Development **gtPATHWAYS:**
- MKTG 6020 - International Marketing **gtPATHWAYS:**
- MKTG 6050 - Marketing Research **gtPATHWAYS:**
- MKTG 6060 - Buyer Behavior **gtPATHWAYS:**
- MKTG 6200 - Marketing Dashboard Metrics **gtPATHWAYS:**

Marketing Electives

Build Your Own MS Marketing Degree with 12 semester hours of MKTG electives

Choose any four MKTG electives, such as:

- MKTG 5939 - Internship **gtPATHWAYS:**
- MKTG 6030 - Sales and Sales Force Management **gtPATHWAYS:**
- MKTG 6040 - Services Marketing **gtPATHWAYS:**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**
- MKTG 6080 - Marketing in Emerging Markets **gtPATHWAYS:**
- MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**
- MKTG 6091 - Strategic Product Marketing **gtPATHWAYS:**
- MKTG 6092 - Internet Marketing **gtPATHWAYS:**
- MKTG 6094 - Marketing Issues in the Chinese Environment **gtPATHWAYS:**
- MKTG 6120 - Non-Profit and Social Marketing **gtPATHWAYS:**
- MKTG 6700 - Marketing Travel Study **gtPATHWAYS:**

Total: 30 Hours

...or complete one of the following marketing specializations (listed alphabetically).

Marketing Specializations

The specializations are areas of focus that will appeal to those who have specific interests or are looking to apply their marketing acumen in particular contexts (e.g., interface with engineering or work in a multinational or nonprofit environment). A 3-semester-hour internship can be substituted for an elective in any area of specialization with the approval of the marketing program director.

Brand Management and Marketing Communications

Are you interested in a career in advertising, promotions or public relations? How about furthering your career in marketing management? Advertising, promotion and public relations managers are creative, highly-motivated individuals who are flexible yet can meet a deadline. They need good verbal and written communication skills and the ability to work well with people. Similar talents are needed by those involved with brand management. This task is central to all marketers, especially those involved with perceptual positioning and the deliverance of positions in a target market (e.g., those working in any phase of market communication and R&D) The U.S. Bureau of Labor Statistics reports that, because of the high visibility of these positions, these managers are often prime candidates for top C-level positions. The job outlook remains promising but competition will be keen, and the best opportunities will go to those with an MS in marketing or an MS marketing /MBA dual degree. (Don't take our word for it, see http://www.bls.gov/oco/ocos020.htm).

Required:

- MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

Choose three of the following courses:

- MKTG 6030 - Sales and Sales Force Management **gtPATHWAYS:**
- MKTG 6040 - Services Marketing **gtPATHWAYS:**
- MKTG 6091 - Strategic Product Marketing **gtPATHWAYS:**
- MKTG 6092 - Internet Marketing **gtPATHWAYS:**
- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- COMM 5635 - Principles of Public Relations **gtPATHWAYS:**
- COMM 5640 - Advanced Public Relations **gtPATHWAYS:**
- ISMG 6240 - Website Development Practice and Technologies **gtPATHWAYS:**

Global Marketing

One of the growing themes of the 21st century economy is the growth of world trade. There is continuing demand for individuals who understand the how to conduct marketing across many different international environments as well as rapidly growing areas such as China and the emerging markets. This specialization prepares you to effectively compete and succeed in this environment.

Required (select one of the following courses):

- MKTG 6080 - Marketing in Emerging Markets **gtPATHWAYS:**

OR

- MKTG 6094 - Marketing Issues in the Chinese Environment **gtPATHWAYS:**

Choose three of the following courses:

- ENTP 6826 - International Entrepreneurship **gtPATHWAYS:**
- INTB 6020 - Cross-Cultural Management **gtPATHWAYS:**
- INTB 6022 - International Business Negotiations **gtPATHWAYS:**
- INTB 6080 - Global Competition **gtPATHWAYS:**
- INTB 6200 - International Business Policy **gtPATHWAYS:**
- MKTG 6700 - Marketing Travel Study **gtPATHWAYS:**

High-Tech/Entrepreneurial Marketing

The American economy was built on a spirit of innovation, hard work and entrepreneurship, and this is surely going to be the path that assures continued American dominance in the technology and business development fields. Most smart innovators know that, in addition to the financial and managerial aspects of a business, it is the marketing function that often makes the difference between success and failure. Whether your interest is in corporate intrapreneurship and the development of high-technology oriented innovations or individual entrepreneurship and the development of a small business with minimal funds, knowing how to create and implement appropriate marketing strategies is fundamental to achieving your goals. This specialization allows you to focus on the type of new business creation path that best suits your aspirations while greatly enhancing your endeavor's probability of success. If you aspire to be the next Bill Gates, this is a "must take" degree path for you.

Required:

- MKTG 6091 - Strategic Product Marketing **gtPATHWAYS:**
- ENTP 6842 - New Concept Development **gtPATHWAYS:**

Choose two of the following courses:

- MKTG 6030 - Sales and Sales Force Management **gtPATHWAYS:**
- MKTG 6040 - Services Marketing **gtPATHWAYS:**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

- MKTG 6092 - Internet Marketing **gtPATHWAYS:**
- COMM 5285 - Communication Processes in Technology Transfer **gtPATHWAYS:**
- ENTP 6000 - Fundamentals of Entrepreneurship **gtPATHWAYS:**
- ENTP 6020 - The Business Plan **gtPATHWAYS:**
- ENTP 6826 - International Entrepreneurship **gtPATHWAYS:**
- ENTP 6860 - Business Planning for Social Entrepreneurs **gtPATHWAYS:**

Internet Marketing

Are you interested in a degree that blends Web development and application strategies with marketing? This, then, is the specialization for you. This specialization covers all aspects of Internet marketing including the functions associated with Web sites for marketing communication and customer support, one-to-one communication to many different receiving devices, marketing via social networks, consumer behavior insights based on offline and online data combination, inventory optimization through CRM-SCM integration, and a focus on ROI and associated performance metrics. With Internet marketing poised to take off globally, especially in developing countries where consumers may not have access to the latest products in local stores, this is indeed the wave of the future.

Required:

- MKTG 6040 - Services Marketing **gtPATHWAYS:**
- MKTG 6092 - Internet Marketing **gtPATHWAYS:**

Choose two of the following courses:

- MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**
- MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**
- BUSN 6828 - Business Applications of Data Mining **gtPATHWAYS:**

or

- DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**
- ISMG 6080 - Database Management Systems **gtPATHWAYS:**
- ISMG 6240 - Website Development Practice and Technologies **gtPATHWAYS:**
- ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**

Marketing and Business Intelligence

A great increase in ERP, CRM, HRMS and SCM applications over the last decade has created a need for specialists who can manage the many sources of information critical for business growth. Further, increased competition due to globalization has made it critical to have effective and faster decision making across all functions, especially the marketing function, where smart analysis and interpretation of enterprise data is often paramount in the formulation of competitive marketing strategy. If you are seeking a fast-growing and fast-paced area of specialization, this may well be the degree path for you.

Required:

- MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**
- ISMG 6080 - Database Management Systems **gtPATHWAYS:**

Choose one of the following courses:

- ISMG 6480 - Data Warehouse and Administration **gtPATHWAYS:**
- BUSN 6828 - Business Applications of Data Mining **gtPATHWAYS:**

or

- DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**

Marketing for Sustainability

The world has changed. More than ever, companies around the globe need to introduce smart, sustainable brands to lead the way into the future. The strong core of MS marketing courses will give you the skills to become an effective marketing manager, while the specialized set of sustainability courses will give you the knowledge to work toward a better tomorrow. The sustainability courses will focus on the triad of economic, environmental and social sustainable development.

Required:

- MKTG 6040 - Services Marketing **gtPATHWAYS:**
- MKTG 6120 - Non-Profit and Social Marketing **gtPATHWAYS:**

Choose two of the following courses:

- BUSN 6830 - Business and the Natural Environment **gtPATHWAYS:**
- BUSN 6850 - Accounting and Finance for Sustainability **gtPATHWAYS:**
- ENTP 6858 - Innovation in the Social Sector **gtPATHWAYS:**
- MGMT 6821 - Managing for Sustainability **gtPATHWAYS:**

- MGMT 6822 - Business Ethics and Corporate Social Responsibility **gtPATHWAYS:**

Marketing in Nonprofit Organizations

Are you someone who would rather help people, communities and the environment rather than focus on turning a profit? Many of our alumni have followed career paths with nonprofit organizations. They tell us that a strong core in marketing combined with specialized knowledge of the unique needs of not-for-profit organizations helped them to succeed.

Required:

- MKTG 6040 - Services Marketing **gtPATHWAYS:**
- MKTG 6120 - Non-Profit and Social Marketing **gtPATHWAYS:**

Choose two of the following courses:

- BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
- BUSN 6822 - Services Operations **gtPATHWAYS:**

or

- DSCI 6822 - Services Operations **gtPATHWAYS:**
- ENTP 6858 - Innovation in the Social Sector **gtPATHWAYS:**
- ENTP 6860 - Business Planning for Social Entrepreneurs **gtPATHWAYS:**
- MGMT 6822 - Business Ethics and Corporate Social Responsibility **gtPATHWAYS:**
- MKTG 6030 - Sales and Sales Force Management **gtPATHWAYS:**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

Marketing Research

Marketing and survey researchers gather information about what people think, measure customer satisfaction and repurchase intentions, help companies decide what goods and services to offer and at what price, and detect up-and-coming trends. Marketing researchers need good quantitative skills, strong analytical skills and a good understanding of marketing and buyer behavior. Many of our alumni got their starts in marketing research positions. According to the U.S. Bureau of Labor Statistics, employment is expected to grow faster than average with the best job opportunities for

those with an MS marketing degree (Don’t just take our word for it; check out http://www.bls.gov/oco/ocos013.htm).

Required:

- MKTG 6040 - Services Marketing **gtPATHWAYS:**
- MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**

Choose two of the following courses:

- BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
- DSCI 6480 - Simulation Modeling **gtPATHWAYS:**
- BUSN 6828 - Business Applications of Data Mining **gtPATHWAYS:**

or

- DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

Sports and Entertainment Marketing

The sports business industry is one of the largest and fastest growing in the United States. Add to that the burgeoning music, film, theater, television, cable and other entertainment industries and you've got virtually limitless choices. Every one of those industries needs good marketers. The strong core of marketing courses in the MS marketing program will give you the skills you need to hit the ground running with the specialized courses to teach you how to tailor your skills to the unique needs of the sports and entertainment industries.

Required:

- MKTG 6040 - Services Marketing **gtPATHWAYS:**
- MKTG 6820 - Sports & Entertainment Marketing **gtPATHWAYS:**

Choose two of the following courses:

- BUSN 6860 - Finance in the Sports Entertainment Industries **gtPATHWAYS:**
- MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries **gtPATHWAYS:**
- MGMT 6830 - Sports and Entertainment Management **gtPATHWAYS:**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

Master of Science/Master of Arts

Finance/Economics MS/MA

Students may concurrently pursue an MA in Economics offered by the College of Liberal Arts and Sciences and the MS in Finance offered by the Business School. Students must complete 27 semester hours of a combination core, 15 semester hours of combination electives and 3 semester hours of a 5000- or 6000-level economics elective. Students apply to each program seperately and admission into one of the programs does not guarantee admissions into the second program.

Master of Science/Master of Science

Business/Business MS/MS

Students may concurrently pursue dual MS degrees in any two fields of business. The program consists of a minimum of 51 semester hours of core course work, which must be completed within a period of seven years and one semester. In addition, candidates for the dual degree must satisfy all common body of knowledge (CBK) and background requirements prescribed for each degree. Waivers may be approved for some of the CBK or background upon transcript evidence of equivalent undergraduate or graduate course work. For more information contact a graduate academic advisor, 303-315-8200.

Doctor of Philosophy

CSIS-Business PhD

Program Components

Plan of Study

A list of course work and other requirements for the degree should be prepared with the advisor and submitted to the program co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for reapproval to the co-directors.

Preliminary Exam

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the CSIS program website.

Comprehensive Exam

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

Dissertation Proposal

As the first phase of the dissertation, each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

University-Level Instructional Training

During the program, each student will obtain training for university-level instruction. This requirement can be fulfilled by working with a faculty member as a teaching assistant, attending university-level teacher training or teaching a university-level class. Students who plan a university career will be encouraged to teach one or more courses and participate in training. When teaching or working as a teaching assistant, a student will be compensated according to standard university salaries.

Dissertation Completion

Following completion of the approval of the dissertation proposal, each student prepares and then submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense of the dissertation.

Graduation

Upon completion of all degree requirements, including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through the CSE receive the PhD from the College of Engineering and Applied Science, while students applying through the information systems program receive the PhD from the Business School.

School of Education & Human Development

Dean
Deanna Sands

Associate Deans
Honorine Nocon

Assistant Dean
Christine Feagins

Contact

Admissions
Student Services Center
1380 Lawrence Street Center, Suite 701
303-315-6300

education@ucdenver.edu
www.ucdenver.edu/education

Mailing Address
School of Education & Human Development
P.O. Box 173364, Campus Box 106
Denver, CO 80217-3364

Application Deadlines

Vary by program. Visit www.ucdenver.edu/education/apply

Overview

The School of Education & Human Development prepares and inspires education and mental health leaders to have a profound impact in fostering student opportunity,

achievement and success in urban and diverse communities. Areas of study include programs for new teachers, experienced teachers, school administrators, counselors, school psychologists, school librarians as well as technology and research professionals.

Mission

We prepare and inspire education and mental health leaders to have a profound impact in fostering student opportunity, achievement and success in urban and diverse communities.

Our Role in the Community

At the school, we're affecting the future. We attract a large proportion of mid-career students armed with broad experiences and perspectives, who go on to infuse Colorado's classrooms and mental health organizations with diversity and wisdom.

Professionals as Students

Our program and class schedules offer flexibility to meet the needs of professionals who balance graduate education with the demands of work, families and other interests.

Accreditation

The School of Education & Human Development is fully accredited by the Colorado Department of Education (CDE), the Council for the Accreditation of Educator Preparation (CAEP) and the Council for Accreditation of Counseling and Related Education Programs (CACREP) in Agency Counseling, School Counseling and Marriage and Family Therapy, and the National Association of School Psychologists (NASP) in School Psychology.

Programs Leading to Degrees and Licenses

The School of Education & Human Development offers two doctoral programs, two educational specialist degrees, master’s degrees in seven program areas as well as undergraduate degrees with teacher licensure through the College of Liberal Arts and Sciences. Students in these degree programs may pursue a variety of state licenses for teaching and school administration or may elect to earn these licenses without pursuing a graduate degree.

The school’s degree programs and the associated state licenses are listed in the following table that also provides contact information. The school’s urban community teacher education program prepares elementary and secondary teachers for a variety of

school settings through academic work, professional studies, classroom teaching experiences and community field experiences.

School of Education and Human Development Degree Programs and Associated State Licenses

Admissions

Prospective degree candidates (master's, educational specialist and doctoral) should request application materials from the School of Education & Human Development Student Services Center located in the Lawrence Street Center, Suite 701, by telephone at 303-315-6300 or by e-mail to education@ucdenver.edu. Information about all degrees, programs and admission requirements can be found on the school's website at www.ucdenver.edu/education.

Continuing Professional Education

In cooperation with schools and other community agencies, the school's continuing education program offers a variety of graduate workshops, courses and academies. While these are designed to meet specific education and training needs of partner organizations, many of the continuing professional education programs articulate with the school's regular master's degree programs. For more information, please call 303-315-4920.

Centers and Cooperatives

For information about centers and cooperatives in the School of Education & Human Development, visit www.ucdenver.edu/education and click on Centers.

Center for Transforming Learning and Teaching (CTLT)
Colorado Principal's Center
Culturally Responsive Urban Education (CRUE)
Evaluation Center
Experiential Science Learning and Research Collaborative
Front Range Board of Cooperative Education Services for Teacher Leadership (BOCES)
Laboratory for Educational Assessment Research and Innovation (LEARN)
Paraeducator Resource and Research Center (PAR^2A)
Positive Early Learning Experiences Center (PELE)
Professional Development in Autism Center (PDA)

Departments and Programs

Comparison of Programs Offered

SEHD Degree Programs and Associated State Licenses

School of Education and Human Development Degree Programs and Associated State Licenses

Programs	Approved Degrees	Licenses and Endorsements
Administrative Leadership and Policy Studies	**Master of Arts:** Administrative Leadership and Policy Studies **Educational Specialist (EdS):** Administrative Leadership and Policy Studies	Principal License Administrator License
Counseling Psychology and Counselor Education	**Master of Arts:** Counseling Psychology and Counselor Education	**Public School Counselor License:** 0–21 **Encouraged to apply for licensure from the State of Colorado:** Couples and Family Therapy Clinical Mental Health Counseling –Interdisciplinary Clinical Mental Health Counseling – Multicultural
Curriculum and Pedagogy	**Master of Arts:** Curriculum and Instruction	Emphasis: • Elementary Math/Science • Secondary Math or Science
Doctoral Studies in Education	**Doctor of Education (EdD)** in Leadership for Educational Equity **Doctor of Philosopy (PhD)** in Educational Studies and Research	EdD emphases: Instructional Leadership Executive Leadership

Early Childhood Education	**Master of Arts:** Early Childhood Education	Early Childhood Special Education Specialist Birth -8
Educational Psychology	**Master of Arts:** Educational Psychology	Emphases: Human Learning Human Development Research & Evaluation Educational Assessment Individualized Programs
Graduate and Undergraduate Teacher Licensure	**Master of Arts:** Curriculum and Instruction Educational Psychology Special Eduation **College of Liberal Arts Degrees:** **Bachelor of Arts** **Bachelor of Science**	**Graduate Teacher Licensure:** Elementary Education Secondary Education: Math, Science, Social Studies, English, Foreign Language Special Education: Generalist–K–12 **Undergraduate Teacher Licensure:** Elementary Education Secondary Education: Math, English, Science, Social Studies, Foreign Language
Information and Learning Technologies	**Master of Arts:** Information and LearningTechnologies	Endorsements/emphases: • Adult Learning & Instructional Design • E-Learning Design and Implementarion • K-12 Instructional Technology Teacher and Instructional Technology Specialist • School and Teacher Librarian

Linguistically Diverse Education	**Master of Arts:** Curriculum and Instruction	Endorsement/emphasis: • Linguistically Diverse Education
Literacy, Language and Culturally Responsive Teaching	**Master of Arts:** Curriculum and Instruction	Endorsements/emphases: • Reading Teacher: K–6, 7–12 • Secondary English Education
Special Education	**Master of Arts:** Special Education	Special Education Generalist K-12
School Psychology	**Educational Specialist (EdS):** School Psychology	School Psychology Birth - 21

Urban Community Teacher Education Program

Lawrence Street Center, 701
Campus Box 106
P.O. Box 173364
Denver, CO 80217-3364
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/ipte

Graduate Programs
Undergraduate Program
Admissions Requirements

Urban Community Teacher Education Licensure Program Overview

The Urban Community Teacher Education program is both an undergraduate and graduate level program for general education licensure. (Special education is currently only an option at the graduate level, but undergraduates who want to obtain a special education license are encouraged to consider pursuing their endorsement plus an MA in special education.) The expectations for performance are identical for both

undergraduates and graduates because the expectations for newly licensed teachers in the state of Colorado are exactly the same. Undergraduates and graduates work side by side in coursework and internships. There are very slight differences including the course registration numbers (undergraduates register for 4000 level; graduate students register for 5000 level) and undergraduates take 1-2 licensure courses and one internship prior to admission in the program. The teacher education program fosters critically reflective inquiry about teaching and learning and the development of collaborative skills necessary to work effectively with other adults on schooling issues. The program strives to meet the needs of an increasingly diverse population of students, and to productively participate in and lead school renewal by applying democratic principles in educational settings.

Education Pathways

The graduate teacher education program at CU Denver is designed for individuals with a minimum of a bachelor's degree who seek a master's degree along with an initial Colorado provisional teacher's license in the following areas:

- **Elementary Education** (K–6) (43 semester hours)
- **Secondary Education** (7–12) (36 semester hours)
    - English
    - mathematics
    - science (general science, biology, earth science, physics, chemistry)
    - social studies
    - foreign language (Spanish, French)
- **Special Education Generalist** (Ages 5–21) (59 semester hours)
- **Dual General Education/Special Education** (64-67 semester hours)

Program Distinctions

Program Structure

The program admits teacher candidates in three cohort groups, one in the summer, one in fall and one in the spring. The initial professional teacher education program includes a full time 1 - 1.5 year licensure plan for regular education and a 1.5 year full time option for initial special education and dual special education. Part time 2-3 year options for regular education are planned for spring 2011. Students will be taking course work at the university and field-based work in one of CU Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship level with the sequence of the program plan. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher/mentor, called a site coordinator.

Assessment

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in Special Education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluting our program to meet student needs, please see current programs of study in the teacher education handbook.

Master's Degree Options

The teacher education program design supports the concept of teacher education as an ongoing developmental process linking preservice, induction and ongoing professional growth experiences. Upon completion of the licensure portion of the program, beginning teachers continue working toward their master's degree (an additional 18-35 semester hours) in the areas of special education, educational psychology, content in English or history in collaboration with the College of Liberal Arts and Sciences, or curriculum and instruction during their first or second year of teaching. This ensures that CU Denver's new teachers are provided with continuing support from the university while in their first few years of teaching.

Undergraduate Teacher Licensure

Undergraduate Teacher Education Program

The undergraduate teacher education program at CU Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program "gates" that teacher candidates go through to complete licensure.

CU Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

Please note: The admission into the School of Education & Human Development teacher education program is a separate process from admission to the university. Summer deadlines are January 15* February 15; the fall deadline is March 15. Spring admission deadlines are August 15, September 15 and October 15.

Undergraduate Teacher Education Pathways

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

- BA—Individually Structured Major Elementary Education Licensure
- BA—English Literature Secondary English Licensure
- BS—Mathematics Secondary Mathematics Licensure
- BA—History Secondary Social Science Licensure
- BA—Political Science Secondary Social Science Licensure
- BA—Spanish Secondary Spanish Licensure
- BA—French Secondary French Licensure

Program Distinctions

Program Structure

The School of Education & Human Development teacher education program admits teacher candidates in two cohort groups: one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 15-month licensure plan. Students will be taking course work at the university and field-based work in one of CU Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

Assessment

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6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Undergraduate Advising

Undergraduate teacher candidates will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

College of Liberal Arts and Science (CLAS) Education Advisor

The CLAS advisor will assist you upon entry to the university though graduation.The CLAS advisor will monitor your progress through the core curriculum, pre-IPTE curriculum, eligibility requirements for the IPTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

Faculty Advisor

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

School of Education and Human Development Advisor

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

IPTE Undergraduate Academic Planning Sheets

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

IPTE Undergraduate Community College Articulation

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluating this program for students, for the 2011-2012 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

Requirements for Admission

The program rolling admissions each semester. Summer admission deadlines are January 15 & February 15; Fall admission deadline is February 15 and March 15. Spring admission deadlines are August 15 and September 15.

Urban Community Teacher Education Information Sessions

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the CU Denver website. Go to www.ucdenver.edu/education to reserve a space under the menu item "Information Sessions."

Urban Community Teacher Education Program Requirements

- Applicants to theurban community teacher education program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- Verification of passing official scores for PLACE or PRAXIS II.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. *
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. *
- Undergraduate candidates must have an individually structured elementary emphasis.
- A complete application which can be obtained at scheduled information sessions, downloaded online, or at the Student Services Center

*This is determined through transcript evaluations at information sessions.

License

Elementary/Secondary Education Licensure

Urban Community Teacher Education Program

Lawrence Street Center, 701
Campus Box 106

P.O. Box 173364
Denver, CO 80217-3364
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/ipte

Graduate Programs
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7. Internship Performance Rubric (used at the end of each internship)

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluting our program to meet student needs, please see current programs of study in the teacher education handbook.

Master's Degree Options

The teacher education program design supports the concept of teacher education as an ongoing developmental process linking preservice, induction and ongoing professional growth experiences. Upon completion of the licensure portion of the program, beginning teachers continue working toward their master's degree (an additional 18-35 semester hours) in the areas of special education, educational psychology, content in English or history in collaboration with the College of Liberal Arts and Sciences, or curriculum and instruction during their first or second year of teaching. This ensures that CU Denver's new teachers are provided with continuing support from the university while in their first few years of teaching.

Undergraduate Teacher Licensure

Undergraduate Teacher Education Program

The undergraduate teacher education program at CU Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program "gates" that teacher candidates go through to complete licensure.

CU Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

Please note: The admission into the School of Education & Human Development teacher education program is a separate process from admission to the university. Summer deadlines are January 15* February 15; the fall deadline is March 15. Spring admission deadlines are August 15, September 15 and October 15.

Undergraduate Teacher Education Pathways

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

- BA—Individually Structured Major Elementary Education Licensure
- BA—English Literature Secondary English Licensure
- BS—Mathematics Secondary Mathematics Licensure
- BA—History Secondary Social Science Licensure
- BA—Political Science Secondary Social Science Licensure
- BA—Spanish Secondary Spanish Licensure
- BA—French Secondary French Licensure

Program Distinctions

Program Structure

The School of Education & Human Development teacher education program admits teacher candidates in two cohort groups: one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 15-month licensure plan. Students will be taking course work at the university and field-based work in one of CU Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and

special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

Assessment

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAa are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both coursework and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in Special Education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)

7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Undergraduate Advising

Undergraduate teacher candidates will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

College of Liberal Arts and Science (CLAS) Education Advisor

The CLAS advisor will assist you upon entry to the university though graduation.The CLAS advisor will monitor your progress through the core curriculum, pre-IPTE curriculum, eligibility requirements for the IPTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

Faculty Advisor

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

School of Education and Human Development Advisor

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

IPTE Undergraduate Academic Planning Sheets

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

IPTE Undergraduate Community College Articulation

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluating this program for students, for the 2011-2012 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

Requirements for Admission

The program rolling admissions each semester. Summer admission deadlines are January 15 & February 15; Fall admission deadline is February 15 and March 15. Spring admission deadlines are August 15 and September 15.

Urban Community Teacher Education Information Sessions

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the CU Denver website. Go to www.ucdenver.edu/education to reserve a space under the menu item "Information Sessions."

Urban Community Teacher Education Program Requirements

- Applicants to theurban community teacher education program must hold at least a bachelor’s degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- Verification of passing official scores for PLACE or PRAXIS II.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. *

- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. *
- Undergraduate candidates must have an individually structured elementary emphasis.
- A complete application which can be obtained at scheduled information sessions, downloaded online, or at the Student Services Center

*This is determined through transcript evaluations at information sessions.

Special Education

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education

Special Education Program Overview

The special education program within the initial professional teacher education division offers a special education generalist license and a special education endorsement as well as a master of arts degree in special education. All special education program options foster the development of critical reflection, inquiry about teaching and learning, as well as the breadth and depth in content knowledge necessary to work effectively in elementary and secondary classrooms. The program faculty promote the ability of teacher candidates to meet the needs of an increasingly diverse population of K–12 learners, as well as to participate productively in and lead school renewal.

The faculty in the program in special education value collaborative relationships between general and special educators, so we offer our teacher candidates the option of pursuing a dual endorsement in both general and special education to offer our teacher candidates the option of pursuing a dual endorsement in both general and special education.

Special Education Program Distinctions

Special Education Licensing Pathways

To be a licensed as a special education generalist for grades ages 5-21, a teacher candidate must hold a bachelor's degree from a four-year accepted institution of higher education, have completed the plan of study from one of the program options for the

preparation of special education generalist, have passed the approved elementary content and special education assessments and have demonstrated all required state and national standards.

Program options for the special education generalist include: 1) initial licensure as a special education generalist; 2) dual licensure in either elementary or secondary education and as a special education generalist; and, 3) for those who already hold a Colorado teaching license, an added endorsement, which is also fully online. There is also an option to count these courses towards a masters in special education which will require an additional 12 semester hours of course work.

The time needed to complete the various special education generalist program options varies based on the needs of teacher candidates. In addition to traditional on-campus offerings, a wide selection of courses are available in online formats. During the academic year, core special education courses are scheduled in late afternoons, evenings and on Saturdays to avoid conflict with teaching responsibilities.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Special education eeacher candidates engage in a series of four internships from the beginning of the program to the end of the program. Dual teacher candidates engage in five internships that result in a general education license at the elementary or secondary level and then complete a fifth internship and additional course work; this can be done during an additional full time semester or can be worked out flexibly as the student assumes their first teaching position to complete their special education license. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

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Master of Arts

Special Education MA

Special Education

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education

Special Education Program Overview

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Special Education Program Distinctions

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2. Collaboration & Positive Behavior Supports

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4. The Individualized Education Program (I.E.P.) Process

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Programs of Study

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Requirements for Admission

The program conducts rolling admissions each semester. Summer admission deadlines are January 15 and February 15; fall admission is February 15 and March 15. Spring admission deadlines are August 15 and September 15.

Teacher Education Information Sessions

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming

information sessions can be viewed on the CU Denver website. Go to www.ucdenver.edu/education and click on "Information Session" to reserve a space.

Teacher Education Program Requirements

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. *
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. *
- Copy of passing official scores for PLACE or PRAXIS II.
- A complete application on file that can be obtained at information sessions, online or through the Student Services Center.

*This is determined through transcript evaluations at information sessions.

Counseling Psychology and Counselor Education

Counseling Psychology and Counselor Education MA

Program Leader: Marsha Wiggins
Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/counseling

Faculty

Information about faculty in the counseling psychology and counselor education program is available online at www.ucdenver.edu/education.

Degree

The master of arts degree in counseling psychology and counselor education prepares professionals for community/mental health agencies, private practice and public schools. Students should obtain faculty advising regarding professional requirements.

All programs consist of 63 semester hours (66 for the multicultural/diversity strand). Core requirements that are common to all areas of study are followed by courses specific to each program. All programs require a practicum (150 clock hours) and an internship (600 clock hours). For most students, the master's degree is a three-year program with course work for two years followed by a year of practicum and internship. All beginning students enroll in CPCE 5010 and CPCE 5810.

The clinical mental health counseling, school counseling and couple and family therapy programs are nationally accredited by CACREP, the Council for the Accreditation of Counseling and Related Educational Programs.

All students are expected to have online computer capability for communication and instructional purposes. For students in off-campus programs, some courses may be offered via computer technology.

Admission Requirements

Successful applicants to the counseling psychology and counselor education (CPCE) program will have obtained a minimum 2.75 undergraduate GPA and will score at least 900 on the verbal and quantitative sections of the Graduate Record Exam (GRE) or at least 396 on the Miller Analogy Test (MAT). Also, applicants will submit a current resume, a statement of goals and three letters of recommendation (at least 2 academic letters are strongly advised). Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, small group interviews, a writing assignment and a group exercise.

A prerequisite course in basic statistics (undergraduate level) is required prior to enrollment in the program.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline: September 15 for spring semester; January 15 for summer and fall semesters. Application materials include the following:

- part I of the application for admission
- tuition classification form
- $50 application fee (make checks payable to the University of Colorado Denver)
- letter of intent
- three letters of recommendation - at least 2 academic letters strongly advised (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in original sealed envelope)
- official GRE or MAT scores sent directly to the University of Colorado Denver (if you do not already hold a graduate degree; see CPCE application checklist)
- oath and consent
- fingerprint affidavit

Matriculation Requirements

CPCE students must earn at least a B in skills-oriented courses (CPCE 5100, 5160, 6140, 7100, 5910, 5930) or must repeat these courses until they do so. In addition, all students must make a formal case presentation in CPCE 5930 (internship) to demonstrate their clinical knowledge. Students must also take a national comprehensive examination (after 30 semester hours). Students may choose to conduct research and submit a thesis (research conducted under faculty advisement) instead of taking the national written examination.

Program Areas

Students accepted into the CPCE program follow one of three programs offered counseling psychology and counselor education. The clinical mental health counseling program follows state licensure requirements for licensed professional counselor; the couple and family therapy program follows licensure requirements designated by the state of Colorado of licensure as a marriage and family therapist; and the school program follows both the licensed professional counselor licensure and state department of education certificate as a school counselor requirements.

Program Areas

Counseling Psychology and Counselor Education Core

(required in all program areas)

- CPCE 5010 - Counseling Theories **gtPATHWAYS:**
- CPCE 5100 - Techniques of Counseling **gtPATHWAYS:**
- CPCE 5110 - Group Counseling **gtPATHWAYS:**
- CPCE 5150 - Family Therapy Theory **gtPATHWAYS:**
- CPCE 5330 - Counseling Issues and Ethics **gtPATHWAYS:**
- CPCE 5400 - Career Development **gtPATHWAYS:**
- CPCE 5810 - Multicultural Counseling Issues for Individuals and Families **gtPATHWAYS:**
- CPCE 5910 - Practicum in CPCE **gtPATHWAYS:**
- CPCE 5930 - Internship in Counseling **gtPATHWAYS:**
- EPSY 6200 - Human Development Over the Life Span **gtPATHWAYS:**
- RSEM 5200 - Introduction to Research Methods **gtPATHWAYS:**
- RSEM 5300 - Introduction to Measurement **gtPATHWAYS:**
- National Comprehensive Exam to be taken after the CPCE core classes are completed.

Total: 42 Hours

Additional Requirements for Program Area One: Clinical Mental Health Counseling (MA)

- CPCE 5160 - Techniques in Family Therapy **gtPATHWAYS:**
- CPCE 5280 - Addictions Counseling **gtPATHWAYS:**
- CPCE 5820 - Strategies of Agency Counseling **gtPATHWAYS:**
- CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**
- CPCE 7100 - Advanced Theories and Techniques in Psychotherapy **gtPATHWAYS:**
- Two Additional Electives (6 semester hours)

Total: 21 Hours

Additional Requirements for Multicultural/Diversity Strand in Clinical Mental Health Counseling

- CPCE 5160 - Techniques in Family Therapy **gtPATHWAYS:**
- CPCE 5280 - Addictions Counseling **gtPATHWAYS:**
- CPCE 5820 - Strategies of Agency Counseling **gtPATHWAYS:**
- CPCE 5830 - Special Topics **gtPATHWAYS:** Gender & Sexual Orientation
- CPCE 6100 - Spiritual Dimensions of Counseling **gtPATHWAYS:**
- CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**
- CPCE 6810 - Advanced Multicultural Counseling **gtPATHWAYS:**
- CPCE 7100 - Advanced Theories and Techniques in Psychotherapy **gtPATHWAYS:**

Total: 24 Hours

Additional Requirements for Program Area Two: Public School Counseling Certificate (MA)*

- CPCE 5280 - Addictions Counseling **gtPATHWAYS:**
- CPCE 5425 - Developing & Implementing a School Counseling Program: ASCA **gtPATHWAYS:**
- CPCE 5815 - Introduction to School Counseling **gtPATHWAYS:**
- CPCE 5915 - Practicum in School Counseling **gtPATHWAYS:**
- CPCE 6140 - Counseling Children, Adolescents and Their Parents **gtPATHWAYS:**
- CPCE 6220 - Youth Challenges and Resiliency **gtPATHWAYS: Or** CPCE 6230 - Developmental Counseling in Schools: Prevention & Intervention
- CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**

- Place Test is required for the Colorado Department of Education Certification for school counselors.

Total: 21 Hours

* 100 hour practicum is required in the schools (CPCE 5915). Three hundred of the 600 hours of internship must be in a concentrated environment. Full time experience consisting of at least a four-hour block of time each day is required. Students may not do their internship in their primary employment (agency or school setting). For school counseling, three hundred (300) hours of internship are needed at the middle and secondary level for a K–12 program. CPCE 5150, 6140 and 7100 are necessary for students to work with school-related family issues, individual counseling and children's counseling in practicum and internship. CPCE 5160 is necessary prior to internship in couple and family therapy; this course requires 10 hours of laboratory experiences working with youth.

Additional Requirements for Program Area Three: Couple and Family Therapy (MA)

- CPCE 5160 - Techniques in Family Therapy **gtPATHWAYS:**
- CPCE 5170 - Issues In Family Studies **gtPATHWAYS:**
- CPCE 5180 - Counseling Couples **gtPATHWAYS:**
- CPCE 6000 - Introduction to Sex Therapy **gtPATHWAYS:**
- CPCE 6140 - Counseling Children, Adolescents and Their Parents **gtPATHWAYS:**
- CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems **gtPATHWAYS:**
- CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**

Total: 21 Hours

Master of Arts

Counseling Psychology and Counselor Education MA

Program Leader: Marsha Wiggins
Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311

E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/counseling

Faculty

Information about faculty in the counseling psychology and counselor education program is available online at www.ucdenver.edu/education.

Degree

The master of arts degree in counseling psychology and counselor education prepares professionals for community/mental health agencies, private practice and public schools. Students should obtain faculty advising regarding professional requirements.

All programs consist of 63 semester hours (66 for the multicultural/diversity strand). Core requirements that are common to all areas of study are followed by courses specific to each program. All programs require a practicum (150 clock hours) and an internship (600 clock hours). For most students, the master's degree is a three-year program with course work for two years followed by a year of practicum and internship. All beginning students enroll in CPCE 5010 and CPCE 5810.

The clinical mental health counseling, school counseling and couple and family therapy programs are nationally accredited by CACREP, the Council for the Accreditation of Counseling and Related Educational Programs.

All students are expected to have online computer capability for communication and instructional purposes. For students in off-campus programs, some courses may be offered via computer technology.

Admission Requirements

Successful applicants to the counseling psychology and counselor education (CPCE) program will have obtained a minimum 2.75 undergraduate GPA and will score at least 900 on the verbal and quantitative sections of the Graduate Record Exam (GRE) or at least 396 on the Miller Analogy Test (MAT). Also, applicants will submit a current resume, a statement of goals and three letters of recommendation (at least 2 academic letters are strongly advised). Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, small group interviews, a writing assignment and a group exercise.

A prerequisite course in basic statistics (undergraduate level) is required prior to enrollment in the program.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline:

September 15 for spring semester; January 15 for summer and fall semesters. Application materials include the following:

- part I of the application for admission
- tuition classification form
- $50 application fee (make checks payable to the University of Colorado Denver)
- letter of intent
- three letters of recommendation - at least 2 academic letters strongly advised (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in original sealed envelope)
- official GRE or MAT scores sent directly to the University of Colorado Denver (if you do not already hold a graduate degree; see CPCE application checklist)
- oath and consent
- fingerprint affidavit

Matriculation Requirements

CPCE students must earn at least a B in skills-oriented courses (CPCE 5100, 5160, 6140, 7100, 5910, 5930) or must repeat these courses until they do so. In addition, all students must make a formal case presentation in CPCE 5930 (internship) to demonstrate their clinical knowledge. Students must also take a national comprehensive examination (after 30 semester hours). Students may choose to conduct research and submit a thesis (research conducted under faculty advisement) instead of taking the national written examination.

Program Areas

Students accepted into the CPCE program follow one of three programs offered counseling psychology and counselor education. The clinical mental health counseling program follows state licensure requirements for licensed professional counselor; the couple and family therapy program follows licensure requirements designated by the state of Colorado of licensure as a marriage and family therapist; and the school program follows both the licensed professional counselor licensure and state department of education certificate as a school counselor requirements.

Program Areas

Counseling Psychology and Counselor Education Core

(required in all program areas)

- CPCE 5010 - Counseling Theories **gtPATHWAYS:**
- CPCE 5100 - Techniques of Counseling **gtPATHWAYS:**

- CPCE 5110 - Group Counseling **gtPATHWAYS:**
- CPCE 5150 - Family Therapy Theory **gtPATHWAYS:**
- CPCE 5330 - Counseling Issues and Ethics **gtPATHWAYS:**
- CPCE 5400 - Career Development **gtPATHWAYS:**
- CPCE 5810 - Multicultural Counseling Issues for Individuals and Families **gtPATHWAYS:**
- CPCE 5910 - Practicum in CPCE **gtPATHWAYS:**
- CPCE 5930 - Internship in Counseling **gtPATHWAYS:**
- EPSY 6200 - Human Development Over the Life Span **gtPATHWAYS:**
- RSEM 5200 - Introduction to Research Methods **gtPATHWAYS:**
- RSEM 5300 - Introduction to Measurement **gtPATHWAYS:**
  National Comprehensive Exam to be taken after the CPCE core classes are completed.

Total: 42 Hours

Additional Requirements for Program Area One: Clinical Mental Health Counseling (MA)

- CPCE 5160 - Techniques in Family Therapy **gtPATHWAYS:**
- CPCE 5280 - Addictions Counseling **gtPATHWAYS:**
- CPCE 5820 - Strategies of Agency Counseling **gtPATHWAYS:**
- CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**
- CPCE 7100 - Advanced Theories and Techniques in Psychotherapy **gtPATHWAYS:**
  Two Additional Electives (6 semester hours)

Total: 21 Hours

Additional Requirements for Multicultural/Diversity Strand in Clinical Mental Health Counseling

- CPCE 5160 - Techniques in Family Therapy **gtPATHWAYS:**
- CPCE 5280 - Addictions Counseling **gtPATHWAYS:**
- CPCE 5820 - Strategies of Agency Counseling **gtPATHWAYS:**
- CPCE 5830 - Special Topics **gtPATHWAYS:** Gender & Sexual Orientation
- CPCE 6100 - Spiritual Dimensions of Counseling **gtPATHWAYS:**
- CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**
- CPCE 6810 - Advanced Multicultural Counseling **gtPATHWAYS:**

- CPCE 7100 - Advanced Theories and Techniques in Psychotherapy **gtPATHWAYS:**

Total: 24 Hours

Additional Requirements for Program Area Two: Public School Counseling Certificate (MA)*

- CPCE 5280 - Addictions Counseling **gtPATHWAYS:**
- CPCE 5425 - Developing & Implementing a School Counseling Program: ASCA **gtPATHWAYS:**
- CPCE 5815 - Introduction to School Counseling **gtPATHWAYS:**
- CPCE 5915 - Practicum in School Counseling **gtPATHWAYS:**
- CPCE 6140 - Counseling Children, Adolescents and Their Parents **gtPATHWAYS:**
- CPCE 6220 - Youth Challenges and Resiliency **gtPATHWAYS: Or** CPCE 6230 - Developmental Counseling in Schools: Prevention & Intervention
- CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**
  Place Test is required for the Colorado Department of Education Certification for school counselors.

Total: 21 Hours

* 100 hour practicum is required in the schools (CPCE 5915). Three hundred of the 600 hours of internship must be in a concentrated environment. Full time experience consisting of at least a four-hour block of time each day is required. Students may not do their internship in their primary employment (agency or school setting). For school counseling, three hundred (300) hours of internship are needed at the middle and secondary level for a K–12 program. CPCE 5150, 6140 and 7100 are necessary for students to work with school-related family issues, individual counseling and children's counseling in practicum and internship. CPCE 5160 is necessary prior to internship in couple and family therapy; this course requires 10 hours of laboratory experiences working with youth.

Additional Requirements for Program Area Three: Couple and Family Therapy (MA)

- CPCE 5160 - Techniques in Family Therapy **gtPATHWAYS:**
- CPCE 5170 - Issues In Family Studies **gtPATHWAYS:**
- CPCE 5180 - Counseling Couples **gtPATHWAYS:**
- CPCE 6000 - Introduction to Sex Therapy **gtPATHWAYS:**

- CPCE 6140 - Counseling Children, Adolescents and Their Parents **gtPATHWAYS:**
- CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems **gtPATHWAYS:**
- CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**

Total: 21 Hours

School Psychology

School Psychology EdS/Licensure

Program Leader: Franci Crepeau-Hobson
Office: Lawrence Street Center, 1113
Phone: 303-315-6315
Fax: 303-315-6349
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/schoolpsychology

Faculty

Information about faculty in the school psychology program is available online at www.ucdenver.edu/education.

Degree

The educational specialist degree in school psychology is a 75 graduate semester-hour program that leads to licensure in school psychology by the Colorado Department of Education, national certification in school psychology by the National Association of School Psychologists Certification Board and the educational specialist degree (EdS) in school psychology.

This NASP-approved program allows students to create individual plans for meeting program requirements on a full- or part-time basis, during summer and academic year terms and during evening and weekend hours.

The school psychology faculty have adopted a culturally responsive preventative model of school mental health services. Upon completion of the program, students will be able to:

- screen for and recognize the early warning signs of social, emotional or academic risk, distinguishing between these and the typical development of infants, children and adolescents (birth–age 21)

- communicate effectively and consult collaboratively with students, parents, school professionals and community leaders to enhance the academic and mental health skills of students
- incorporate data-based decision making through formal and informal assessment procedures and planning interventions that enhance students' cognitive, social-emotional and behavioral competencies
- plan, implement and evaluate the effectiveness of preventative and remedial therapeutic interventions that strengthen students' mental health and academic skills
- advocate for children and families through the application of legal, ethical and professional standards for practice

Bilingual School Psychologist Concentration Option

This specialization provides School Psychology students with the knowledge and skills to effectively serve English language learners in the school setting. In addition to the two required courses and practicum component, the Bilingual School Psychologist concentration consists of language proficiency assessments to ensure that school psychologists are adequately proficient in another language to provide psychoeducational services. CU Denver provides one of the few bilingual school psychology concentration areas in the country making our graduates even more desirable in their future endeavors.

Admission Requirements

Successful applicants to the school psychology (SPSY) program will have obtained a minimum 3.0 undergraduate GPA and will score at least 1000 on the verbal and quantitative sections of the Graduate Record Exam (GRE) and a minimum score of a 3.5 on the written portion of the GRE. Applicants will also submit a current resume, a personal statement that outlines their reasons for pursuing a degree in school psychology at CU Denver, and three letters of recommendations. Applicants meeting these minimum standards will be invited to a half-day group interview that includes a program orientation, and a writing assignment.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline—January 15 for fall semester. Application materials include the following:

- part I of the application for admissions
- tuition classification form
- $50 application fee (make checks payable to the University of Colorado Denver)
- letter of intent

- three letters of recommendations (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in the original, sealed envelope)
- official GRE scores sent directly to the University of Colorado Denver
- oath and consent
- fingerprint affidavit

Requirements for the Educational Specialist Degree in School Psychology and Licensure

Students will complete course work in child development, learning and cognition, academic interventions, legal and professional issues, assessment, crisis intervention, counseling and other direct, interventions and consultation. Specific course requirements include one prerequisite course, 20 graduate courses, including one elective and 15 graduate semester hours (1700 clock hours) of supervised experiences. Prerequisites include an undergraduate or graduate course in tests and measurement (i.e., RSEM 5100 or RSEM 7110).

Students will complete the following core course work:

- CPCE 5010 - Counseling Theories **gtPATHWAYS:**
- EPSY 5100 - Advanced Child Growth and Development **gtPATHWAYS:**
- Or

- EPSY 5140 - Advanced Adolescent Growth and Development **gtPATHWAYS:**
- Or

- EPSY 5240 - Cognition and Instruction **gtPATHWAYS:**
- EPSY 6200 - Human Development Over the Life Span **gtPATHWAYS:**
- RSEM 5400 - Introduction to Evaluation of Programs and Persons **gtPATHWAYS:**
- RSEM 5100 - Basic Statistics **gtPATHWAYS:**
- Or

- RSEM 7110 - Intermediate Statistics **gtPATHWAYS:**
- SPSY 5600 - Behavior Analysis and Intervention **gtPATHWAYS:**
- SPSY 5900 - School-Based Multicultural Interventions **gtPATHWAYS:**
- SPSY 6100 - School Psychology: Professional and Legal Foundations **gtPATHWAYS:**
- SPSY 6150 - Psychoeducational Assessment I **gtPATHWAYS:**
- SPSY 6160 - Psychoeducational Assessment II **gtPATHWAYS:**
- SPSY 6170 - Assessment and Intervention: Birth to 3 **gtPATHWAYS:**
- SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health **gtPATHWAYS:**

- SPSY 6350 - School-Based Interventions: Children, Youth and Families **gtPATHWAYS:**
- SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems **gtPATHWAYS:**
- SPSY 6410 - Psychoeducational Assessment of Culturally and Linguistically Diverse Students **gtPATHWAYS:**
- SPSY 6420 - Crisis Prevention, Planning and Intervention **gtPATHWAYS:**
- SPSY 6450 - School-Based Consultation for Mental Health Professionals **gtPATHWAYS:**
- SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents **gtPATHWAYS:**
- SPSY 6550 - Academic Interventions in School Psychology **gtPATHWAYS:**
- SPSY 6917 - Advanced Practicum in Psychological Assessment **gtPATHWAYS:**
- **One 3-credit hour elective course from the list below**

- ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives **gtPATHWAYS:**
- EPSY 5180 - Psychology of Gifted, Talented and Creative Children **gtPATHWAYS:**
- SPED 5300 - Collaborating in Schools and Communities **gtPATHWAYS:**

Supervised Experiences

- SPSY 6911 - School Psychology Practicum **gtPATHWAYS:**
- SPSY 6930 - School Psychology Internship **gtPATHWAYS:**

Total: 75 Hours

The education specialist in school psychology degree also requires satisfactory completion of two professional portfolios (pre-internship and EdS) demonstrating mastery of the program objectives and passing scores (≥ 165) on the PRAXIS specialty exam in school psychology.

Professional Expectations

All students in the SPSY program are expected to show a strong commitment to the program and to maintain a high academic, professional, ethical standards and a sensitivity to diversity. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Education Specialist

School Psychology EdS/Licensure

Program Leader: Franci Crepeau-Hobson
Office: Lawrence Street Center, 1113
Phone: 303-315-6315
Fax: 303-315-6349
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/schoolpsychology

Faculty

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- screen for and recognize the early warning signs of social, emotional or academic risk, distinguishing between these and the typical development of infants, children and adolescents (birth–age 21)
- communicate effectively and consult collaboratively with students, parents, school professionals and community leaders to enhance the academic and mental health skills of students
- incorporate data-based decision making through formal and informal assessment procedures and planning interventions that enhance students' cognitive, social-emotional and behavioral competencies
- plan, implement and evaluate the effectiveness of preventative and remedial therapeutic interventions that strengthen students' mental health and academic skills

- advocate for children and families through the application of legal, ethical and professional standards for practice

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Students will complete course work in child development, learning and cognition, academic interventions, legal and professional issues, assessment, crisis intervention, counseling and other direct, interventions and consultation. Specific course requirements include one prerequisite course, 20 graduate courses, including one elective and 15 graduate semester hours (1700 clock hours) of supervised experiences. Prerequisites include an undergraduate or graduate course in tests and measurement (i.e., RSEM 5100 or RSEM 7110).

Students will complete the following core course work:

- CPCE 5010 - Counseling Theories **gtPATHWAYS:**
- EPSY 5100 - Advanced Child Growth and Development **gtPATHWAYS:**
  Or
- EPSY 5140 - Advanced Adolescent Growth and Development **gtPATHWAYS:**
  Or
- EPSY 5240 - Cognition and Instruction **gtPATHWAYS:**
- EPSY 6200 - Human Development Over the Life Span **gtPATHWAYS:**
- RSEM 5400 - Introduction to Evaluation of Programs and Persons **gtPATHWAYS:**
- RSEM 5100 - Basic Statistics **gtPATHWAYS:**
  Or
- RSEM 7110 - Intermediate Statistics **gtPATHWAYS:**
- SPSY 5600 - Behavior Analysis and Intervention **gtPATHWAYS:**
- SPSY 5900 - School-Based Multicultural Interventions **gtPATHWAYS:**
- SPSY 6100 - School Psychology: Professional and Legal Foundations **gtPATHWAYS:**
- SPSY 6150 - Psychoeducational Assessment I **gtPATHWAYS:**
- SPSY 6160 - Psychoeducational Assessment II **gtPATHWAYS:**
- SPSY 6170 - Assessment and Intervention: Birth to 3 **gtPATHWAYS:**
- SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health **gtPATHWAYS:**
- SPSY 6350 - School-Based Interventions: Children, Youth and Families **gtPATHWAYS:**
- SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems **gtPATHWAYS:**
- SPSY 6410 - Psychoeducational Assessment of Culturally and Linguistically Diverse Students **gtPATHWAYS:**
- SPSY 6420 - Crisis Prevention, Planning and Intervention **gtPATHWAYS:**
- SPSY 6450 - School-Based Consultation for Mental Health Professionals **gtPATHWAYS:**

- SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents **gtPATHWAYS:**
- SPSY 6550 - Academic Interventions in School Psychology **gtPATHWAYS:**
- SPSY 6917 - Advanced Practicum in Psychological Assessment **gtPATHWAYS:**

One 3-credit hour elective course from the list below

- ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives **gtPATHWAYS:**
- EPSY 5180 - Psychology of Gifted, Talented and Creative Children **gtPATHWAYS:**
- SPED 5300 - Collaborating in Schools and Communities **gtPATHWAYS:**

Supervised Experiences

- SPSY 6911 - School Psychology Practicum **gtPATHWAYS:**
- SPSY 6930 - School Psychology Internship **gtPATHWAYS:**

Total: 75 Hours

The education specialist in school psychology degree also requires satisfactory completion of two professional portfolios (pre-internship and EdS) demonstrating mastery of the program objectives and passing scores (≥ 165) on the PRAXIS specialty exam in school psychology.

Professional Expectations

All students in the SPSY program are expected to show a strong commitment to the program and to maintain a high academic, professional, ethical standards and a sensitivity to diversity. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Curriculum and Pedagogy

Curriculum and Pedagogy MA

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education

Faculty

Information about faculty is available online at www.ucdenver.edu/education/c&p.

Areas of Study

Curriculum and Pedagogy
Master of Arts for Practicing Teachers
Science-Math-Social Studies

The curriculum and pedagogy (C&P) studies lead to an advanced master's degree in curriculum and instruction. All programs require 36 semester hours, including the C&P core or its equivalent. The core courses provide a sound basis in curriculum theory, teacher inquiry, appreciation of diversity and philosophical foundations. The various specializations allow teachers to focus in an area of interest.

Elementary teachers take the math and science concentration. Secondary teachers may choose mathematics, science or social studies.

Each of these programs is designed to prepare teachers to qualify for master certification from the National Board of Professional Teaching Standards, as well as prepare for licensure renewal with the Colorado Department of Education.

Core (Required in Elementary Math and Science, Secondary Science, Secondary Math and Secondary Social Studies)

- ELED 6110 - Curriculum Development and School Improvement **gtPATHWAYS:**
  Or
- SECE 6110 - Curriculum in Urban Studies **gtPATHWAYS:**
- FNDS 5050 - Critical Issues in American Education **gtPATHWAYS:**
- RSEM 5XXX - One 5000-level course in research and evaluation methodology.
  Semester Hours: 3

Total: 9 Hours

Elementary Math and Science

24 semester hours of electives, chosen with advisor's approval (24 semester hours)

- Elementary emphasis required course
- SECE 5500 - The Nature of Science **gtPATHWAYS:**

Total: 36 Hours

Science (Secondary)

- SECE 5340 - Multicultural Science Education **gtPATHWAYS:**
- SECE 5350 - Issues and Problems in Science Education **gtPATHWAYS:**
- SECE 5500 - The Nature of Science **gtPATHWAYS:**
- SECE 5650 - Environmental Education **gtPATHWAYS:**
- 15 hours of electives in science or education chosen with advisor's approval

Total: 36 Hours

Mathematics (Secondary)

- SECE 5400 - Curriculum in Secondary Mathematics **gtPATHWAYS:** or
- SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics **gtPATHWAYS:**
- SECE 5401 - Assessment in Mathematics Education **gtPATHWAYS:**

Choose three:

- ELED 5416 - Math-Science Connections: Outdoor **gtPATHWAYS:**
- SECE 5417 - Structure of Rational Numbers **gtPATHWAYS:**
- SECE 5418 - Mathematical Modeling **gtPATHWAYS:**
- SECE 5419 - Exploring the Structure of Geometry Using Technology **gtPATHWAYS:**
- SECE 5420 - Teaching Mathematics to Low Achievers **gtPATHWAYS:**
- SECE 5440 - Topics in Mathematics Education **gtPATHWAYS:**
- 12 hours of electives from the School of Education & Human Development or the mathematics department, chosen with an advisor's approval

Total: 36 Hours

Social Studies (Secondary)

Please refer to the School of Education & Human Development Web site for the advising plan at www.ucdenver.edu/education/c&p.

Total: 36 Hours

Comprehensive Exam

C&P programs requires a master's comprehensive exam that consists of a project or a comprehensive portfolio for the program completion requirement. Details may be obtained from your faculty advisor and from the "C&P Handbook" available at www.ucdenver.edu/education/c&p.

Master of Arts

Curriculum and Pedagogy MA

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education

Faculty

Information about faculty is available online at www.ucdenver.edu/education/c&p.

Areas of Study

Curriculum and Pedagogy
Master of Arts for Practicing Teachers
Science-Math-Social Studies

The curriculum and pedagogy (C&P) studies lead to an advanced master's degree in curriculum and instruction. All programs require 36 semester hours, including the C&P core or its equivalent. The core courses provide a sound basis in curriculum theory, teacher inquiry, appreciation of diversity and philosophical foundations. The various specializations allow teachers to focus in an area of interest.

Elementary teachers take the math and science concentration. Secondary teachers may choose mathematics, science or social studies.

Each of these programs is designed to prepare teachers to qualify for master certification from the National Board of Professional Teaching Standards, as well as prepare for licensure renewal with the Colorado Department of Education.

Core (Required in Elementary Math and Science, Secondary Science, Secondary Math and Secondary Social Studies)

- ELED 6110 - Curriculum Development and School Improvement **gtPATHWAYS:**
  Or
- SECE 6110 - Curriculum in Urban Studies **gtPATHWAYS:**
- FNDS 5050 - Critical Issues in American Education **gtPATHWAYS:**
  RSEM 5XXX - One 5000-level course in research and evaluation methodology.
  Semester Hours: 3

Total: 9 Hours

Elementary Math and Science

24 semester hours of electives, chosen with advisor's approval (24 semester hours)

Elementary emphasis required course

- SECE 5500 - The Nature of Science **gtPATHWAYS:**

Total: 36 Hours

Science (Secondary)

- SECE 5340 - Multicultural Science Education **gtPATHWAYS:**
- SECE 5350 - Issues and Problems in Science Education **gtPATHWAYS:**
- SECE 5500 - The Nature of Science **gtPATHWAYS:**
- SECE 5650 - Environmental Education **gtPATHWAYS:**
  15 hours of electives in science or education chosen with advisor's approval

Total: 36 Hours

Mathematics (Secondary)

- SECE 5400 - Curriculum in Secondary Mathematics **gtPATHWAYS:** or
- SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics **gtPATHWAYS:**
- SECE 5401 - Assessment in Mathematics Education **gtPATHWAYS:**

Choose three:

- ELED 5416 - Math-Science Connections: Outdoor **gtPATHWAYS:**
- SECE 5417 - Structure of Rational Numbers **gtPATHWAYS:**
- SECE 5418 - Mathematical Modeling **gtPATHWAYS:**
- SECE 5419 - Exploring the Structure of Geometry Using Technology **gtPATHWAYS:**

- SECE 5420 - Teaching Mathematics to Low Achievers **gtPATHWAYS:**
- SECE 5440 - Topics in Mathematics Education **gtPATHWAYS:**
  12 hours of electives from the School of Education & Human Development or the mathematics department, chosen with an advisor's approval

Total: 36 Hours

Social Studies (Secondary)

Please refer to the School of Education & Human Development Web site for the advising plan at www.ucdenver.edu/education/c&p.

Total: 36 Hours

Comprehensive Exam

C&P programs requires a master's comprehensive exam that consists of a project or a comprehensive portfolio for the program completion requirement. Details may be obtained from your faculty advisor and from the "C&P Handbook" available at www.ucdenver.edu/education/c&p.

Information and Learning Technologies

Information and Learning Technologies MA

Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education

Faculty

Information about Information ILT faculty is available online at www.ucdenver.edu/education.

Master's Degree

The ILT master's program helps people design and use various resources and technologies for learning. Applying sound principles of instructional design, graduates can integrate a variety of learning technologies into their teaching including multimedia presentations, social-networking tools and tools for authoring, production, assessment and participation. Program graduates learn to implement learning technologies in specific professional settings—either K–12 schools or adult learning settings such as business or higher education.

Students are assigned to tracks according to their professional goals:

- The instructional design track prepares students to work in adult learning settings such as business, higher education, health care, nonprofits or government.
- The eLearning track prepares educators to develop online courses and learning materials and to teach and facilitate learning in those eLearning environments.
- The K–12 teaching track helps teachers integrate technologies into schools and classrooms with a focus on improving teaching practices. Teachers may earn a state endorsement in instructional technology.

Once admitted, students begin a plan of study that typically takes about 1-1/2 years to complete. Some students are organized into a cohort to complete courses together at a fixed sequence. Other students select courses at a more flexible pace. Consult the ILT website for more information about specific plans of study, course offerings and expectations of cohort groups.

ILT faculty members also participate in the school's doctoral program. Students interested in a PhD may participate in a technology-focused doctoral lab with a number of ILT faculty members. The program also delivers an online certificate on eLearning design.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the ILT program website for complete admission procedures and requirements.

Professional Expectations

All students in the ILT program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The ILT program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, ILT students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

Instructional Design

Students complete at least 30 graduate semester hours of course work from a set of core courses and approved electives within and outside the ILT program. The plan of study is nationally accredited by NCATE and AECT and is consistent with standards for instructional designers.

Sample plan for Instructional Design Track			
	Fall	Spring	Summer
Year 1	INTE 6750 - Current Trends and Issues in Instructional Technology EPSY 5220 Adult Learning and Education	INTE 5600 - Multimedia Authoring INTE 6710 Creative Designs for Instructional Materials	INTE 5680 - Integrating Media in eLearning Environments INTE 5830 Information and Learning Technologies Workshop
Year 2	INTE 6930 - Internship in Information and Learning Technologies INTE 6720 - Research in Information and Learning Technologies	INTE 5160 - Managing Information and Learning Technology Programs Elective	

eLearning Design and Implementation

Students may complete a 30 semester hours online master's degree with an eLearning emphasis. The focus of this master's track is on the planning, design, development, delivery, facilitation and evaluation of online learning resources and programs. A certificate is also available in this area, constituting the first-year requirements of the master's program.

Sample plan for eLearning Track			
	Fall	Spring	Summer
Year 1	INTE 5660 - Designing and Teaching in eLearning Environments	INTE 5670 - Developing eLearning Instruction	INTE 5680 - Integrating Media in eLearning Environments INTE 5650 - Policies and Planning for eLearning Programs
Year 2	INTE 6720 - Research in Information and Learning Technologies INTE 6710 Creative Designs for Instructional Materials	INTE 5160 - Managing Information and Learning Technology Programs Elective	

K–12 Teaching

Students may select a master's program or an endorsement program in instructional technology. For the full master of arts degree, students complete at least 30 graduate semester hours of course work consisting of a core set of courses and approved electives. The plan of study is accredited by NCATE and AECT and is designed in line with standards of the Colorado Department of Education. Students may also complete an endorsement-only program in instructional technology consisting of 24 graduate semester hours.

Sample Plan for K-12 Teaching Track			
	Fall	Spring	Summer
Year 1	INTE 6750 - Current Trends and Issues in Instructional Technology	INTE 5600 - Multimedia Authoring	INTE 6515 - Leadership for

	INTE 5830 Information and Learning Technologies Workshop	INTE 6710 Creative Designs for Instructional Materials	Learning Technologies Integration INTE 5710 - Telecommunications and Networking in Education
Year 2	INTE 6930 - Internship in Information and Learning Technologies INTE 6720 - Research in Information and Learning Technologies	INTE 6999 - Leadership and Practice in Information and Learning Technologies Elective	

Certificate

Designing E-learning Environments Graduate Certificate

The DeE certificate is an 15-semester-hour program offered entirely online that focuses specifically on the skills needed to design and facilitate online learning opportunities for learners in K–12, higher education and corporate settings. This program is perfect for educators who are not interested in a graduate degree. More information is available at www.ucdenver.edu/academics/colleges/SchoolOfEducation/Academics/MASTERS/ILT/Pages/eLearning.aspx.

Sample plan for eLearning Certificate

Year 1
Fall: INTE 5660 - Designing and Teaching in eLearning Environments
Spring: INTE 5670 - Developing eLearning Instruction
Summer: INTE 5680 - Integrating Media in eLearning Environments

Comprehensive Examination for All ILT Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester.

For more information or for complete details about ILT programs, see the ILT website.

Digital Storytelling Graduate Certificate

A 9-semester-hour certificate in digital storytelling includes face-to-face workshops as well as a 4-semester-hour online course. Participants develop digital stories using nonlinear video editing programs and other presentation tools. They learn to integrate digital storytelling methods into existing courses and curricula for all ages.

Endorsement

Instructional Technology Endorsement

K–12 teachers may elect to complete a 24-semester-hour program leading to state endorsement in instructional technology at the teacher or specialist level. Teachers beginning their careers may complete the initial teacher licensing program, followed by 24 semester hours for teacher-level endorsement. More experienced teachers may complete 24 semester hours for the specialist-level endorsement.

Comprehensive Examination for all ILT Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT website.

For complete details about ILT programs, endorsement requirements and certificates, see the ILT website.

Sample Plan for K-12 IT Endorsement			
	Fall	Spring	Summer
Year 1	INTE 6750 Current Trends and Issues in Instructional Technology INTE 5830 Information and Learning Technologies Workshop	INTE 6720 Research in Information and Learning Technologies	INTE 6515 Leadership for Learning Technologies Integration INTE 5710 Telecommunications and Networking in Education
Year 2	INTE 6930 Internship in Information and Learning Technologies INTE 6710 Creative Designs for Instructional Materials	INTE 6999 Leadership and Practice in Information and Learning Technologies	

School Library Endorsement

School Library and Instructional Leadership MA

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/schoollibrary

Faculty

Information about SLIL faculty is available online at www.ucdenver.edu/education/schoollibrary.

Program Overview

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries. The program integrates information literacy standards through the use of collaborative planning, as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL website for more information about specific plans of study, course offerings and expectations of cohort groups.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program website for complete admission procedures and requirements.

Professional Expectations

All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass the PLACE test in school library. This is a Colorado Department of Education requirement.

An Example of Two-Year Plan for School Library Program

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program**.** Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

Typical First Year

Fall	**Spring**	**Summer**
SCHL 5530 - Foundations of School Librarianship* LCRT 5790 - Children's Literature Through the Ages***	SCHL 5020 - Collection Development	SCHL 5110 - Integrating Instructional Technology Practices in School Libraries (MA only) LCRT 5201 - Adolescent Literature . ***

Second Year

Fall	**Spring**	**Summer**
SCHL 5160 - Managing School Library Programs SCHL 6720 - Practitioner-Based Research in School Libraries *** SCHL 5911 - School Library Field Experience-Elementary **	SCHL 5030 - Information Literacy and Reference SCHL 5912 - School Library Field Experience-Secondary ** Elective (2 semester hours) (MA only)****	SCHL 5040 - Information Storage and Utilization SCHL 6999 - Leadership and Practice in School Libraries (MA Only)

***** SCHL 5530 Foundations in School Librarianship should be taken as the first course in your program.

** 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field

experience timeframe. Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

*** LCRT 5201; LCRT 5790; and SCHL 6720 are offered on-campus in other semesters as well.

****Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

Comprehensive Examination for All SLIL Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT website. For complete details about the SLIL program and endorsement requirements, see the ILT website at www.ucdenver.edu/education/schoollibrary.

Master of Arts

Information and Learning Technologies MA

Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education

Faculty

Information about Information ILT faculty is available online at www.ucdenver.edu/education.

Master's Degree

The ILT master's program helps people design and use various resources and technologies for learning. Applying sound principles of instructional design, graduates

can integrate a variety of learning technologies into their teaching including multimedia presentations, social-networking tools and tools for authoring, production, assessment and participation. Program graduates learn to implement learning technologies in specific professional settings—either K–12 schools or adult learning settings such as business or higher education.

Students are assigned to tracks according to their professional goals:

- The instructional design track prepares students to work in adult learning settings such as business, higher education, health care, nonprofits or government.
- The eLearning track prepares educators to develop online courses and learning materials and to teach and facilitate learning in those eLearning environments.
- The K–12 teaching track helps teachers integrate technologies into schools and classrooms with a focus on improving teaching practices. Teachers may earn a state endorsement in instructional technology.

Once admitted, students begin a plan of study that typically takes about 1-1/2 years to complete. Some students are organized into a cohort to complete courses together at a fixed sequence. Other students select courses at a more flexible pace. Consult the ILT website for more information about specific plans of study, course offerings and expectations of cohort groups.

ILT faculty members also participate in the school's doctoral program. Students interested in a PhD may participate in a technology-focused doctoral lab with a number of ILT faculty members. The program also delivers an online certificate on eLearning design.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the ILT program website for complete admission procedures and requirements.

Professional Expectations

All students in the ILT program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The ILT program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, ILT students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

Instructional Design

Students complete at least 30 graduate semester hours of course work from a set of core courses and approved electives within and outside the ILT program. The plan of study is nationally accredited by NCATE and AECT and is consistent with standards for instructional designers.

Sample plan for Instructional Design Track			
	Fall	Spring	Summer
Year 1	INTE 6750 - Current Trends and Issues in Instructional Technology EPSY 5220 Adult Learning and Education	INTE 5600 - Multimedia Authoring INTE 6710 Creative Designs for Instructional Materials	INTE 5680 - Integrating Media in eLearning Environments INTE 5830 Information and Learning Technologies Workshop
Year 2	INTE 6930 - Internship in Information and Learning Technologies INTE 6720 - Research in Information and Learning Technologies	INTE 5160 - Managing Information and Learning Technology Programs Elective	

eLearning Design and Implementation

Students may complete a 30 semester hours online master’s degree with an eLearning emphasis. The focus of this master’s track is on the planning, design, development, delivery, facilitation and evaluation of online learning resources and programs. A

certificate is also available in this area, constituting the first-year requirements of the master's program.

Sample plan for eLearning Track			
	Fall	Spring	Summer
Year 1	INTE 5660 - Designing and Teaching in eLearning Environments	INTE 5670 - Developing eLearning Instruction	INTE 5680 - Integrating Media in eLearning Environments INTE 5650 - Policies and Planning for eLearning Programs
Year 2	INTE 6720 - Research in Information and Learning Technologies INTE 6710 Creative Designs for Instructional Materials	INTE 5160 - Managing Information and Learning Technology Programs Elective	

K–12 Teaching

Students may select a master’s program or an endorsement program in instructional technology. For the full master of arts degree, students complete at least 30 graduate semester hours of course work consisting of a core set of courses and approved electives. The plan of study is accredited by NCATE and AECT and is designed in line with standards of the Colorado Department of Education. Students may also complete an endorsement-only program in instructional technology consisting of 24 graduate semester hours.

Sample Plan for K-12 Teaching Track			
	Fall	Spring	Summer
Year 1	INTE 6750 - Current Trends and Issues in Instructional Technology INTE 5830 Information and Learning Technologies Workshop	INTE 5600 - Multimedia Authoring INTE 6710 Creative Designs for	INTE 6515 - Leadership for Learning Technologies Integration

		Instructional Materials	INTE 5710 - Telecommunications and Networking in Education
Year 2	INTE 6930 - Internship in Information and Learning Technologies INTE 6720 - Research in Information and Learning Technologies	INTE 6999 - Leadership and Practice in Information and Learning Technologies Elective	

School Library and Instructional Leadership MA

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
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E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/schoollibrary

Faculty

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Program Overview

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries. The program integrates information literacy standards

through the use of collaborative planning, as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL website for more information about specific plans of study, course offerings and expectations of cohort groups.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program website for complete admission procedures and requirements.

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All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass

the PLACE test in school library. This is a Colorado Department of Education requirement.

An Example of Two-Year Plan for School Library Program

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program**.** Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

Typical First Year

Fall	Spring	Summer
SCHL 5530 - Foundations of School Librarianship* LCRT 5790 - Children's Literature Through the Ages***	SCHL 5020 - Collection Development	SCHL 5110 - Integrating Instructional Technology Practices in School Libraries (MA only) LCRT 5201 - Adolescent Literature . ***

Second Year

Fall	Spring	Summer
SCHL 5160 - Managing School Library Programs SCHL 6720 - Practitioner-Based Research in School Libraries *** SCHL 5911 - School Library Field Experience-Elementary **	SCHL 5030 - Information Literacy and Reference SCHL 5912 - School Library Field Experience-Secondary ** Elective (2 semester hours) (MA only)****	SCHL 5040 - Information Storage and Utilization SCHL 6999 - Leadership and Practice in School Libraries (MA Only)

***** SCHL 5530 Foundations in School Librarianship should be taken as the first course in your program.

** 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field experience timeframe. Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

*** LCRT 5201; LCRT 5790; and SCHL 6720 are offered on-campus in other semesters as well.

****Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

Comprehensive Examination for All SLIL Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT website. For complete details about the SLIL program and endorsement requirements, see the ILT website at www.ucdenver.edu/education/schoollibrary.

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich

environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in

collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate teacher education licensure program)*	**TESOL Certificate**

CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
CLDE 5050 - Linguistic and Cultural Issues in	Required	Required	Required	Required	Required

Linking Assessment and Instruction					
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second Language Learners	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL	Required	Required	Required	Required	

and Bilingual Education					
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping

students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Certificate

Content Instruction for English Learners (CIEL) Graduate Certificate

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
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The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the

MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)

- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate teacher education licensure program)*	**TESOL Certificate**
CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 -	Select One	Select One	Select One	Select One	

Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education					
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826

Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second Language Learners					
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	

One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Culturally Responsive Urban Education (CRUE) Graduate Certificate

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses,

laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)

Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate teacher education licensure program)*	**TESOL Certificate**
CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required

CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826

Language Learners					
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			

Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete

requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Teaching English to Speakers of Other Languages (TESOL) Graduate Certificate

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme

involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica

experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate teacher education licensure*	**TESOL Certificate**

				program)	
CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second Language Learners	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
CLDE 6912 - Seminar and Practicum in	Required	Required	Required	Required	

Literacy and Language, ESL and Bilingual Education					
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
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CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

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Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Endorsement

Linguistically Diverse Education Endorsement

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
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Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education

- a Teaching English to Speakers of Other Languages (TESOL) certificate
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Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate teacher education licensure program)*	**TESOL Certificate**
CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 -	Select One	Select One	Select One	Select One	

Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education					
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and	5826 preferred	Elem: 5825 preferred Sec:	Elem: 5825 preferred Sec:	Elem: 5825 preferred Sec:	5826

Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second Language Learners		5826 preferred	5826 preferred	5826 preferred	
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 -	Select One	Select One		Select One	

Research for Teachers					
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-

CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado

Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Master of Arts

Linguistically Diverse Education, MA Curriculum and Instruction

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311

E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)

- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as

outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate teacher education licensure program)*	**TESOL Certificate**
CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
CLDE 5070 - Linguistic	Required	Required	Required	Required	Required

Analysis of English: Implications for Teaching					
CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 -	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826

Effective Literacy Instruction for Second Language Learners					
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			

Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Websites: www.ucdenver.edu/education/literacy and www.ucdenver.edu/education/englished

Reading and Writing

Secondary English

Early and Adolescent Literacy Certificates

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (LLCRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LLCRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. This program is a credentialed program meeting the Colorado Department of Education requirements for the reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed University of Colorado Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and

endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)

	ELEMENTARY (K-6)			SECONDARY (7-12)		
Course	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**
LCRT 5020 - Workshop in Literacy and Language Teaching	Required		Required	Required	Required	Required
LCRT 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required

LCRT 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LCRT 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LCRT 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LCRT 5201 - Adolescent Literature				Required	Required *(waived if taken as part of English Licensure)*	Required
LCRT 6910 - Seminar and Practicum	Required	Required	Required			

in Literacy and Language, K-6						
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LCRT 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LCRT 6915 - Seminar and Practicum in Literacy Professional Development	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course -	Select one			Select one		

see list below						
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations.

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/english for recommended course sequence.

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy Semester Hours: 3

LCRT 5201 - Adolescent Literature Semester Hours: 3
LCRT 5200 - Theory and Methods of English Education Semester Hours: 3
-OR-
LCRT 5835 - Special Topics: Literacy and Language Semester Hours: 3

LCRT 5810 - Wksp: Lang Acq & Development Semester Hours: 3
LCRT 5010 - Foundations of Language Semester Hours: 3
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3
Research and Evaluation Methodology core course (see list below).
Interdisciplinary core course (see list below).
Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 36 semester hours

Program Requirements--When Added to CU Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to CU Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
-OR-
SPED 5300 - Collaborating in Schools and Communities Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3
RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America Semester Hours: 3
LCRT 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certficate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

Certificate

Early and Adolescent Literacy Certificates

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Websites: www.ucdenver.edu/education/literacy and
www.ucdenver.edu/education/englished

Reading and Writing

Secondary English

Early and Adolescent Literacy Certificates

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (LLCRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LLCRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. This program is a credentialed program meeting the Colorado Department of Education requirements for the reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed University of Colorado Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)						
	ELEMENTARY (K-6)			**SECONDARY (7-12)**		
Course	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher*	**CDE Endorsement Only**	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education*	**CDE Endorsement Only**

		education licensure program)			*licensure program)*	
LCRT 5020 - Workshop in Literacy and Language Teaching	Required		Required	Required	Required	Required
LCRT 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LCRT 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LCRT 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LCRT 5730 - Language and Literacy Across the	Required		Required	Required		Required

Curriculum						
Children's literature course, per advisor approval	Select one	Select one	Select one			
LCRT 5201 - Adolescent Literature				Required	Required *(waived if taken as part of English Licensure)*	Required
LCRT 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LCRT 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LCRT 6915 - Seminar	Required	Required		Required	Required	Required

and Practicum in Literacy Professional Development						
Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a

well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations.

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy Semester Hours: 3
LCRT 5201 - Adolescent Literature Semester Hours: 3
LCRT 5200 - Theory and Methods of English Education Semester Hours: 3
-OR-
LCRT 5835 - Special Topics: Literacy and Language Semester Hours: 3

LCRT 5810 - Wksp: Lang Acq & Development Semester Hours: 3
LCRT 5010 - Foundations of Language Semester Hours: 3
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3
Research and Evaluation Methodology core course (see list below).
Interdisciplinary core course (see list below).
Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 36 semester hours

Program Requirements--When Added to CU Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to CU Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
-OR-
SPED 5300 - Collaborating in Schools and Communities Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3
RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America Semester Hours: 3
LCRT 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certficate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

Endorsement

Reading Teaching Endorsement

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Websites: www.ucdenver.edu/education/literacy and www.ucdenver.edu/education/englished

Reading and Writing

Secondary English

Early and Adolescent Literacy Certificates

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (LLCRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LLCRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home”

literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master’s program is designed for K-6 and 7-12 teachers. This program is a credentialed program meeting the Colorado Department of Education requirements for the reading teacher endorsement. Therefore, students who obtain a master’s degree emphasizing reading education are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master’s program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner’s construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student’s reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed University of Colorado Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master’s degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor’s degree.) Electives and core courses are not required. Two additional courses

must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)						
	ELEMENTARY (K-6)			**SECONDARY (7-12)**		
Course	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**
LCRT 5020 - Workshop in Literacy and Language Teaching	Required		Required	Required	Required	Required
LCRT 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LCRT 5010 - Foundations of Language,	Required	Required	Required	Required	Required	Required

Literacy and Culture						
LCRT 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LCRT 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LCRT 5201 - Adolescent Literature				Required	Required *(waived if taken as part of English Licensure)*	Required
LCRT 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			

LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LCRT 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LCRT 6915 - Seminar and Practicum in Literacy Professional Development	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of				Select one		

Education and Human Development elective						
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations.

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy Semester Hours: 3
LCRT 5201 - Adolescent Literature Semester Hours: 3
LCRT 5200 - Theory and Methods of English Education Semester Hours: 3
-OR-
LCRT 5835 - Special Topics: Literacy and Language Semester Hours: 3

LCRT 5810 - Wksp: Lang Acq & Development Semester Hours: 3

LCRT 5010 - Foundations of Language Semester Hours: 3
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3
Research and Evaluation Methodology core course (see list below).
Interdisciplinary core course (see list below).
Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 36 semester hours

Program Requirements--When Added to CU Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to CU Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
-OR-
SPED 5300 - Collaborating in Schools and Communities Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3
RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America Semester Hours: 3
LCRT 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-

evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certficate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

Master of Arts

Reading and Writing Option, MA Curriculum and Instruction

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701
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Reading and Writing

Secondary English

Early and Adolescent Literacy Certificates

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (LLCRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LLCRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. This program is a credentialed program meeting the Colorado Department of Education requirements for the reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to

become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed University of Colorado Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)						
	ELEMENTARY (K-6)			**SECONDARY (7-12)**		
Course	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**
LCRT 5020 - Workshop	Required		Required	Required	Required	Required

in Literacy and Language Teaching						
LCRT 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LCRT 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LCRT 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LCRT 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per	Select one	Select one	Select one			

advisor approval						
LCRT 5201 - Adolescent Literature				Required	Required *(waived if taken as part of English Licensure)*	Required
LCRT 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LCRT 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LCRT 6915 - Seminar and Practicum in Literacy Professional	Required	Required		Required	Required	Required

Development						
Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations.

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy Semester Hours: 3
LCRT 5201 - Adolescent Literature Semester Hours: 3
LCRT 5200 - Theory and Methods of English Education Semester Hours: 3
-OR-
LCRT 5835 - Special Topics: Literacy and Language Semester Hours: 3

LCRT 5810 - Wksp: Lang Acq & Development Semester Hours: 3
LCRT 5010 - Foundations of Language Semester Hours: 3
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3
Research and Evaluation Methodology core course (see list below).
Interdisciplinary core course (see list below).
Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 36 semester hours

Program Requirements--When Added to CU Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to CU Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student’s course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
-OR-
SPED 5300 - Collaborating in Schools and Communities Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3
RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America Semester Hours: 3
LCRT 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours:

3
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

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Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Early and Adolescent Literacy Certificates

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Secondary English Education Option, MA Curriculum and Instruction

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701
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Reading and Writing

Secondary English

Early and Adolescent Literacy Certificates

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (LLCRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LLCRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an

approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. This program is a credentialed program meeting the Colorado Department of Education requirements for the reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

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Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)

	ELEMENTARY (K-6)			SECONDARY (7-12)		
Course	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**
LCRT 5020 - Workshop in Literacy and Language Teaching	Required		Required	Required	Required	Required
LCRT 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LCRT 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LCRT 5710 - Primary Literacy:	Required	Required	Required			

Pre-3rd Grade						
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LCRT 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LCRT 5201 - Adolescent Literature				Required	Required *(waived if taken as part of English Licensure)*	Required
LCRT 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			
LCRT 6911 - Seminar and Practicum in Literacy and				Required	Required	Required

Language, 7-12+						
LCRT 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LCRT 6915 - Seminar and Practicum in Literacy Professional Development	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	

PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations.

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy Semester Hours: 3
LCRT 5201 - Adolescent Literature Semester Hours: 3
LCRT 5200 - Theory and Methods of English Education Semester Hours: 3
-OR-
LCRT 5835 - Special Topics: Literacy and Language Semester Hours: 3

LCRT 5810 - Wksp: Lang Acq & Development Semester Hours: 3
LCRT 5010 - Foundations of Language Semester Hours: 3
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3
Research and Evaluation Methodology core course (see list below).
Interdisciplinary core course (see list below).
Four electives, per advisor approval, from the English department and/or the School of

Education & Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 36 semester hours

Program Requirements--When Added to CU Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to CU Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
-OR-
SPED 5300 - Collaborating in Schools and Communities Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3
RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America Semester Hours: 3
LCRT 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certficate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/alps

Principal Licensure

Master of Arts Degree

Education Specialist Degree

Executive Leadership Administrator Licensure Program

Faculty

For information about faculty in this area, visit www.ucdenver.edu/education/alps.

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Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

Note: Those already holding a master's degree and 5 years of leadership in education should also see the Executive Leadership Program (below) for pursuing administrator licensure.

Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.
EDUC 5751 - Principal/Administrator Licensing I Semester Hours: 5 to 9
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**
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EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9
Total: 32 Hours

MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

Section A: Educational Research

RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3
LCRT 5140 or CLDE 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 or CLDE 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

Section C: Educational Psychology/Special Education

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3
EPSY 5110 - Human Learning. Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

EdS Program

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally, for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

Administrator Licensure - Executive Leadership Program

Designed for the professional educator who, already holding a master's degree and 5 years leadership experience in education, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at www.ucdenver.edu/education/elp.

Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Education Specialist

Administrative Leadership and Policy Studies EdS

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

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Principal Licensure

Master of Arts Degree

Education Specialist Degree

Executive Leadership Administrator Licensure Program

Faculty

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Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

Note: Those already holding a master's degree and 5 years of leadership in education should also see the Executive Leadership Program (below) for pursuing administrator licensure.

Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.
EDUC 5751 - Principal/Administrator Licensing I Semester Hours: 5 to 9
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**
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EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9
Total: 32 Hours

MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

Section A: Educational Research

RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3
LCRT 5140 or CLDE 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 or CLDE 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

Section C: Educational Psychology/Special Education

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3
EPSY 5110 - Human Learning. Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

EdS Program

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally, for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

Administrator Licensure - Executive Leadership Program

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Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

License

Administrator License - Executive Leadership Program

Administrative Leadership and Policy Studies

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Principal Licensure

Master of Arts Degree

Education Specialist Degree

Executive Leadership Administrator Licensure Program

Faculty

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Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

Note: Those already holding a master's degree and 5 years of leadership in education should also see the Executive Leadership Program (below) for pursuing administrator licensure.

Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.
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EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

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Total: 32 Hours

MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

Section A: Educational Research

RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3

FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3
LCRT 5140 or CLDE 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 or CLDE 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

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Principal Licensure

Administrative Leadership and Policy Studies

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Master of Arts Degree

Education Specialist Degree

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EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

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MA Program

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RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3
LCRT 5140 or CLDE 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 or CLDE 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

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Master of Arts

Administrative Leadership and Policy Studies MA

Administrative Leadership and Policy Studies

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Principal Licensure

Master of Arts Degree

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Note: Those already holding a master's degree and 5 years of leadership in education should also see the Executive Leadership Program (below) for pursuing administrator licensure.

Denver Metro-Area Cohorts

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EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

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MA Program

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RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3

FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3
LCRT 5140 or CLDE 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 or CLDE 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

Section C: Educational Psychology/Special Education

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3
EPSY 5110 - Human Learning. Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

EdS Program

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master’s degree. Generally, for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

Administrator Licensure - Executive Leadership Program

Designed for the professional educator who, already holding a master's degree and 5 years leadership experience in education, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at www.ucdenver.edu/education/elp.

Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Early Childhood Education

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Faculty

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Early Childhood Education Program

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ECE Program students may select from three program options:

1. MA in early childhood education
2. ECSE specialist license (initial or added endorsement)
3. MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

- literacy development and disorders

- child growth and development, differences and disorders
- learning approaches with young children
- measurement and evaluation
- basic statistics/research methods
- multicultural education
- research and current issues
- early childhood curriculum and program development for inclusive classrooms
- working collaboratively with parents and families
- program administration/leadership

The early childhood special education program provides specialized preparation in:

- screening and assessment of young children
- intervention strategies with infants and preschoolers
- behavior management
- working as a member of the transdisciplinary team
- cognitive and socio-emotional development and disorders
- treatment of children who have neurological impairment and chronic illness
- challenging behaviors and autism

Program Requirements

Semester Hour Requirements

Master's degree in ECE: 40 semester hours
ECSE specialist license: 40 semester hours
Master's degree plus ECSE specialist license: 49 semester hours
Master's degree plus ECSE specialist added endorsement: 40 semester hours
ECSE specialist added endorsement: 25 semester hours

Fieldwork and Practicum Requirements

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

ECE Program Options Plans of Study	MA in ECE	ECSE Specialist License	MA in ECE and ECSE Specialist License	ECSE Specialist Endorsement for those holding Elementary or ECE License	MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License	ECSE Specialist Endorsement for those holding Special Education License	MA in ECE and ECSE Specialist Endorsement for those holding Special Education license
Course							
EPSY 5100 - Advanced Child Growth and Development	Required	Required	Required				
RSEM 5100 - Basic Statistics	Required		Required		Required		Required
ECED 5000 - The Early Childhood Profession	Required	Required	Required	Required	Required	Required	Required
ECED 6100 - Medical and Physiological	Required	Required	Required	Required	Required	Required	Required

Aspects of Developmental Disabilities							
ECED 5020 - Approaches to Young Children's Learning	Required	Required	Required		Required **	Required *	Required **
ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children **or** ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives		Required	Required	Required	Required	Required *	Required *
ECED 5080 - Language and Literacy in Young Children	Required	Required	Required	Required	Required	Required *	Required*
ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required

ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives	Required				Required **		Required **
ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education	Required		Required		Required		Required
ECED 5140 - Measurement and Evaluation in Early Childhood Education	Required		Required		Required		Required
ECED 6010 - Literacy and Mathematics K-2	Required	Required	Required	Required*	Required*		
ECED 5200 - Screening and Assessment		Required	Required	Required	Required	Required	Required

of Young Children							
ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
ECED 6911 - Practicum in Early Childhood Education	Required						
ECED 6910 - Infant/Toddler Practicum in ECSE		Required	Required	Required	Required	Required	Required
ECED 6912 - Preschool Practicum in ECSE Preschool Practicum		Required	Required	Required	Required	Required	Required
ECED 6914 - Primary Practicum in ECSE		Required	Required	Required	Required	Required	Required
Total Semester Hours	**40**	**40**	**49**	**25**	**40**	**25**	**40**
Comprehensive Exam	Required		Required		Required		Required
PLACE Exam #27		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two

					** choose two		** choose two

Endorsement

Early Childhood Special Education Specialist Endorsement

Early Childhood Education

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
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- treatment of children who have neurological impairment and chronic illness
- challenging behaviors and autism

Program Requirements

Semester Hour Requirements

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Master's degree plus ECSE specialist license: 49 semester hours
Master's degree plus ECSE specialist added endorsement: 40 semester hours
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Plans of Study

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Course							
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RSEM 5100 - Basic Statistics	Required		Required		Required		Required

ECED 5000 - The Early Childhood Profession	Required	Required	Required	Required	Required	Required	Required
ECED 6100 - Medical and Physiological Aspects of Developmental Disabilities	Required	Required	Required	Required	Required	Required	Required
ECED 5020 - Approaches to Young Children's Learning	Required	Required	Required		Required **	Required *	Required **
ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children **or** ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives		Required	Required	Required	Required	Required *	Required *
ECED 5080 - Language and Literacy in Young Children	Required	Required	Required	Required	Required	Required *	Required*

ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required
ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives	Required				Required **		Required **
ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education	Required		Required		Required		Required
ECED 5140 - Measurement and Evaluation in Early Childhood Education	Required		Required		Required		Required

ECED 6010 - Literacy and Mathematics K-2	Required	Required	Required	Required*	Required*		
ECED 5200 - Screening and Assessment of Young Children		Required	Required	Required	Required	Required	Required
ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
ECED 6911 - Practicum in Early Childhood Education	Required						
ECED 6910 - Infant/Toddler Practicum in ECSE		Required	Required	Required	Required	Required	Required
ECED 6912 - Preschool Practicum in ECSE Preschool Practicum		Required	Required	Required	Required	Required	Required
ECED 6914 - Primary Practicum in ECSE		Required	Required	Required	Required	Required	Required
Total Semester Hours	**40**	**40**	**49**	**25**	**40**	**25**	**40**

Comprehensive Exam	Required		Required		Required		Required
PLACE Exam #27		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
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License

Early Childhood Special Education Specialist Licensure

Early Childhood Education

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- treatment of children who have neurological impairment and chronic illness
- challenging behaviors and autism

Program Requirements

Semester Hour Requirements

Master's degree in ECE: 40 semester hours
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Fieldwork and Practicum Requirements

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Course							
EPSY 5100 - Advanced Child Growth and Development	Required	Required	Required				
RSEM 5100 - Basic Statistics	Required		Required		Required		Required
ECED 5000 - The Early Childhood Profession	Required	Required	Required	Required	Required	Required	Required
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ECED 5020 - Approaches to Young Children's Learning	Required	Required	Required		Required **	Required *	Required **
ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children **or** ECED 5202 - Stress, Violence, and Behavior Challenges in		Required	Required	Required	Required	Required *	Required *

Young Children's Lives							
ECED 5080 - Language and Literacy in Young Children	Required	Required	Required	Required	Required	Required *	Required*
ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required
ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives	Required				Required **		Required **
ECED 6690 - Seminar: Research and Current Issues in Early	Required		Required		Required		Required

Childhood Education							
ECED 5140 - Measurement and Evaluation in Early Childhood Education	Required		Required		Required		Required
ECED 6010 - Literacy and Mathematics K-2	Required	Required	Required	Required*	Required*		
ECED 5200 - Screening and Assessment of Young Children		Required	Required	Required	Required	Required	Required
ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
ECED 6911 - Practicum in Early Childhood Education	Required						
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Comprehensive Exam	Required		Required		Required		Required
PLACE Exam #27		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

Master of Arts

Early Childhood Education MA

Early Childhood Education

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- treatment of children who have neurological impairment and chronic illness
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Program Requirements

Semester Hour Requirements

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			st License	y or ECE License	holding Elementary or ECE License	Education License	holding Special Education license
Course							
EPSY 5100 - Advanced Child Growth and Development	Required	Required	Required				
RSEM 5100 - Basic Statistics	Required		Required		Required		Required
ECED 5000 - The Early Childhood Profession	Required	Required	Required	Required	Required	Required	Required
ECED 6100 - Medical and Physiological Aspects of Developmental Disabilities	Required	Required	Required	Required	Required	Required	Required
ECED 5020 - Approaches to Young Children's Learning	Required	Required	Required		Required **	Required *	Required **
ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young		Required	Required	Required	Required	Required *	Required *

Children **or** ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives							
ECED 5080 - Language and Literacy in Young Children	Required	Required	Required	Required	Required	Required *	Required*
ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required
ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives	Required				Required **		Required **

ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education	Required		Required		Required		Required
ECED 5140 - Measurement and Evaluation in Early Childhood Education	Required		Required		Required		Required
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ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
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PLACE Exam #27		Required	Required	Required	Required	Required	Required
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Educational Psychology

Educational Psychology MA

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Website: www.ucdenver.edu/education

Faculty

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Master's Degree

The MA program in educational psychology prepares students to facilitate the teaching/learning process. Thus, many students pursue the degree to enhance their skills as professional classroom teachers. The degree also provides skills necessary for a variety of roles where knowledge of learning, development, motivation, and research is essential; examples would include teaching at the community college level, teaching adults and conducting program evaluation. Other students seek the MA as preparation for advanced study in educational psychology.

Note, too, that many students in the school's initial professional teacher education program—as well as interns in the alternative teacher licensure programs conducted by the Stanley British Primary School, the Boulder Journey School and Friends' School—also seek the MA degree in the Division of Educational Psychology.

Areas of Study

Four major areas of concentration are available—human learning, child growth and development, research and evaluation and individualized programs (such as adult learning). Regardless of the concentration area selected, all students must:

- take 9 semester hours of core courses required by the School of Education & Human Development
- demonstrate competence in educational psychology by successfully completing a minimum of 36 semester hours of relevant course work (9 of which are the core)
- complete either a master's thesis (4 semester hours, MA Plan I) or an independent study project (3 to 4 semester hours, MA Plan II), the latter involving the collection of data bearing on a given problem and its analysis and interpretation in writing
- perform satisfactorily on a written comprehensive examination (typically during the last term enrolled in regular courses)
- complete the degree on a timely basis, usually within three years

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2011-2012 term, please refer to the most current version of the handbook for academic requirements for this program.

Research and Evaluation Methodology

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Telephone: 303-315-6300
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Web site: www.ucdenver.edu/education

Faculty

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Emphasis Track

There is a REM emphasis track within the educational psychology master's degree program; students can select either an evaluation/data analysis focus or an assessment focus. This area also provides classes to all education graduate programs, offering courses in research methods, evaluation, statistics, analysis, assessment and measurement.

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EPSY Handbook 2010-11

Master of Arts

Educational Psychology MA

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- take 9 semester hours of core courses required by the School of Education & Human Development
- demonstrate competence in educational psychology by successfully completing a minimum of 36 semester hours of relevant course work (9 of which are the core)
- complete either a master's thesis (4 semester hours, MA Plan I) or an independent study project (3 to 4 semester hours, MA Plan II), the latter involving the collection of data bearing on a given problem and its analysis and interpretation in writing
- perform satisfactorily on a written comprehensive examination (typically during the last term enrolled in regular courses)
- complete the degree on a timely basis, usually within three years

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2011-2012 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Handbook 2010-11

Research and Evaluation Methodology

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax:303-315-6311

E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education

Faculty

To find information about faculty in this program visit www.ucdenver.edu/education.

Emphasis Track

There is a REM emphasis track within the educational psychology master's degree program; students can select either an evaluation/data analysis focus or an assessment focus. This area also provides classes to all education graduate programs, offering courses in research methods, evaluation, statistics, analysis, assessment and measurement.

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2011-2012 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Handbook 2010-11

Doctoral Studies in Education

The School of Education & Human Development offers two doctoral programs:

Leadership for Educational Equity EdD

and

Educational Studies and Research PhD

Please visit the Web site at www.ucdenver.edu/education/doctorate for additional information.

Doctor of Philosophy

Educational Studies and Research PhD

► Graduate School Rules apply to this program

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/doctorate

The PhD in educational studies and research links an intensive research-based course of study with a content area in order to prepare candidates to assume positions in institutions of higher education or research-based organizations. Successful applicants will be paired with a faculty mentor with whom the student will engage in research and developing content expertise over time. The preparation model will require students to be available for about 20 hours per week in research and to enroll in 2-3 courses per semester.

Students complete a plan of study that includes at least 45 semester hours of course work (including all required core courses) and 30 semester hours of dissertation and labs. PhD students are expected to be full-time, typically working (research assistantships, teaching assignments, internships, grants, etc.) at the university while completing their course work. This allows for induction to the university research and teaching culture.

Overview of Course Work:

Foundations: Equity and Diversity, Learning, Epistemology, and Teaching in Higher Education - 4 Courses; 12 Semester Hours

Research Methods – 6 Courses; 18 Semester Hours

Concentration Area – 5 Courses; 15 Semester Hours**

Dissertation: 30 semester hours total (6-9 research lab credits and 21-24 dissertation credits)

**Doctoral students will complete a series of courses/experiences in a specified concentration area. Content domains that align to prospective positions in institutions of higher education will be the basis for concentration areas. We define a concentration area as a line of courses that leads to increasing subject matter expertise. Concentration areas are designed to help students focus on a defined discipline or content area in preparation for professional roles as researchers and faculty members. Following, we list the current areas of concentration in which students can be admitted. These areas may change over time as they are tied to faculty research and externally funded grant projects; prospective students will find updated information regarding current availability on the School of Education & Human Development Web site.

- **Math Education**. Students and faculty in this concentration area focus on teacher learning and professional development experiences. Specifically, projects investigate the ways that particular interventions used in professional

development for mathematics teachers impacts their content knowledge and pedagogical practices in their classrooms. Work in this area is framed by a situative perspective of learning and incorporates mixed methods to answer questions around the ways particular interventions support teacher and student learning. Video data is prominent in both the design of professional development interventions as well as a major data source for analyses. Analytic methods vary based on the research question and grain size.

- **Science Education**. The goal of this area is to prepare students to explore, understand, and think critically about the nature of science and science education from a largely research-oriented perspective. Students may elect to focus on environmental science education as an area of specialization within this concentration area through electives and discipline- specific research agendas.
- **Urban Ecologies**. This concentration area brings together several faculty members in interdisciplinary study of education in urban ecologies. Participating faculty members are aligned with the interdisciplinary concentration area as a whole, rather than specific threads or foci. The philosophical assumptions underlying work in this concentration area are: 1) Cultural groups are not monolithic, 2) Urban life and learning, including Pre-K-20 education, complex phenomena that benefit from the multiple lenses offered by multi-disciplinarity, and 3) Trans-nationalism characterizes the cultural experiences and political/economic realities of many communities in cities and contributes to the hybrid identities of residents. These assumptions contribute to a conceptual frame for investigating diversity within the city that is not focused on specific groups and is concerned with the influence of globalization on communities in general within the city. Experiences of and issues confronting different cultural and ethno-linguistic groups will be the key content of this concentration area.
- **Assessment**. The goal of this concentration area is to introduce students to the theory, methods, practices and problems in the development and technical evaluation of assessments in education at both large-scale and classroom assessment levels, considering issues of diverse learners, including English Language Learners and students with special educational needs. The arena of assessment is playing in increasingly important part in P-20 education. This ranges from issues of accountability, student achievement, growth- models, common/benchmark assessments to classroom assessment. In addition to the need for researchers in this area, there are needs for individuals with advanced skills in developing and evaluating the technical quality of instruments in education for different purposes, from developing and implementing surveys to collecting information about teachers to implementing and analyzing achievement assessments to make decisions about the efficacy of educational programs. These individuals need to know how to analyze the information gathered from these instruments and make appropriate decisions based on the information collected. They need to understand the limitations of assessment instruments based on the evaluation on their technical quality.

- **Administrative Leadership and Policy**. This concentration serves as key area for those concerned about leadership in schools and a key focus for research by scholars in higher education. A crucial assumption the underlies this concentration area is that school leadership makes the difference in how schools succeed in improving learning outcomes for all students, but we are only beginning to scratch the surface in understanding why leadership is successful when it is, what the interactions are between effective leadership and effective teaching, and their collective impact on learning outcomes at all levels in schools.

Doctor of Education

Leadership for Educational Equity EdD

► Graduate School Rules apply to this program

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/doctorate

Program Overview

The goal of the doctor of education (EdD) leadership for educational equity program is to prepare future leaders for social justice and equity in P-20 and community-based education contexts who can effectively translate research into practice, influence policy, use data effectively in decision making and organize individuals and groups to address challenges collaboratively and successfully.

The EdD is a practice-based, doctoral level program for professional leadership in P-20 or community-based educational contexts. The EdD will prepare leaders within the profession to address complex educational challenges by combining decision-focused analytic and research skills with a broad-based understanding of systems anchored in principles of social justice and equity and access to public education.

This program reflects a cohort model. Courses will generally be offered in weekend, hybrid (part face-to-face, part online), online and/or summer intensive formats. Students follow their cohort in taking the prescribed course work and experiences for three consecutive years.

Course Work – 69 Semester Hours

Equity and Diversity Core (9 hours)

Leadership Core (12 hours)

Research Methods Core (12 hours)

Concentration Area Core (9 hours)

Culminating Experiences:

Concentration Area Internship (one, 6 credit experience)

Dissertation Courses and Independent Hours (21 credits)

Concentration Areas

Executive Leadership: designed to deepen individuals' skills in policy analysis, development and research; personnel management; finance; accountability systems and evaluation; and community relations. Support individuals who hold or seek to move into senior management positions inside school districts, community colleges, higher education policy or community-based education organizations. Roles may include that of a director, deputy, superintendent or president.

Instructional Leadership: designed for individuals who want to hone their skills through inquiry in the areas of adult learning, professional development, teaching, assessment and accountability, technology and policy analysis and application. This concentration area targets professionals who hold or seek to move into positions such as teacher leaders, coaches/mentors, program coordinators, curriculum directors or instructors at teaching colleges or community colleges.

College of Engineering and Applied Science

Dean
Marc Ingber

Assistant Dean
Brian Brady

Contact

Office
North Classroom, 3024
1200 Larimer Street, 3rd Floor
Telephone: 303-556-2870

Fax: 303-556-2511
engineering@ucdenver.edu

Mailing Address
College of Engineering and Applied Science
Campus Box 104
P.O. Box 173364
Denver, CO 80217-3364

Website
http://engineering.ucdenver.edu

Engineering Student Services
303-556-4768

Application Deadlines

Undergraduate
Fall—August 1
Spring—December 1
Summer—May 1

Graduate Programs

Bioengineering

Fall: April 30

Civil Engineering

Domestic

Fall: master's—July 15
doctoral—May 15

Spring: master's—December 1
doctoral—October 1

Summer: master's—March 15
doctoral—January 15

International

Fall: master's—June 15
doctoral—April 15

Spring: master's—November 1
doctoral—September 1

Summer: master's—February 15
doctoral—December 15

Computer Science and Engineering
Rolling Admissions

Electrical Engineering
Rolling Admissions

Mechanical Engineering
Fall—April 1
Spring—October 1

Overview

Continuing an 85-year tradition, the College of Engineering and Applied Science at the University of Colorado Denver meets the needs of the Denver metropolitan area by providing nationally accredited engineering education in a flexible format that suits both students and employers. Recognizing the importance for students to pursue professional studies and related employment simultaneously, the college offers undergraduate and graduate degree programs in civil engineering, mechanical engineering, electrical engineering and computer science and engineering through evening studies or through a more traditional schedule of day classes. As a practicing engineer, you can improve and update your professional capabilities and earn a graduate degree. Or, through our interdisciplinary master of engineering degree, you can obtain graduate education in management, computer science, behavioral science or other areas together with new engineering skills in your field. We also participate in an interdisciplinary master of science in environmental science.

A listing of the fields in which engineers work would have hundreds of entries. The following list gives only a brief summary of the fields available at UC Denver.

Bioengineering offers opportunities for interdisciplinary graduate training for master of science and doctor of philosophy degrees. Our training program is uniquely integrated with the Anschutz Medical Campus. Students enjoy opportunities to learn from clinicians and engineers and to perform research or medical device design in world-class hospitals and clinical research labs. Bioengineering will be one of the fastest growing job markets over the next decade. An advanced degree in this area provides numerous opportunities to work in health care, biomedical industry, government regulatory agencies and academia.

Civil engineering offers an interesting and challenging career in the design and construction of buildings, bridges, dams, aqueducts and other structures; in

transportation systems including highways, canals, pipelines, airports, rapid transit lines, railroads and harbor facilities; in the distribution of water and the regulation of rivers; in the development of water resources for urban use, industry and land reclamation; in the control of water quality through water purification and proper waste treatment; in the construction and contracting industry; and in the problems concerned with our physical environment and the growth of cities.

Computer science and engineering offers graduates the solid foundation needed for jobs in computing and information technologies. Career paths in computer science involve designing and implementing software, devising new applications of computers and developing effective ways to solve computing problems. Computer engineers design and develop computer hardware and supervise its manufacture and installation.

Electrical engineering offers professional careers that include research in development of new electrical or electronic devices, instruments or products; design of equipment or systems; production and quality control of electrical products; and sales or management for private industry or government. There are numerous specialties within electrical engineering. Among them are the design and application of computer systems and digital engineering; electromagnetic fields and microwave devices; control systems; communication theory and signal processing; electrical integrated circuits and electron devices; and energy and power systems.

Mechanical engineering offers a wide range of interesting and challenging career opportunities in research, design, development, manufacturing, testing and marketing for either private industry or government. Mechanical engineers help develop a wide range of products such as engines, transmissions, compressors, pumps, computer disk drives, oil field drilling rigs, missiles, space satellites, earth-moving equipment, container-manufacturing machines, medical equipment and many other products encountered in daily life.

College of Engineering and Applied Science Educational Goals

The College of Engineering and Applied Science has established the following goals and objectives for undergraduate education:

- successful completion of the fundamental core courses, primarily lower division, in mathematics and the physical sciences
- successful completion of the required upper-division courses in engineering science, analysis and design
- successful completion of real-world engineering design projects that require integration of engineering, economic and social skills
- successful completion of a series of humanities and social science courses that introduce the student to societal problems and historical perspectives

- evidence, through close student/faculty contact, of development of professionalism, ethics and concern for the multifaceted human element of engineering
- evidence, from successful completion of a full engineering curriculum, of the ability to maintain professional competency through lifelong learning
- evidence, through successful completion of a series of communications oriented courses and project presentations, of an ability to communicate effectively with professionals and lay persons alike

Accreditation

The undergraduate degree programs in civil, computer science and engineering, electrical and mechanical engineering programs are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

Availability of Degree Programs

CU Denver will accept for matriculation only those prospective engineering students who designate a degree program awarded by the CU Denver College of Engineering and Applied Science. Students desiring degree programs other than those named above must apply to the campus awarding the degree. In some cases, the university campus accepting the student may grant permission to take courses on another University of Colorado campus, subject to enrollment limitations. In such cases, the engineering department of the admitting campus will counsel the student in the preparation of course schedules.

Nondegree Students

Nondegree students may apply 12 semester hours of course work (or up to 18 if taken in one semester) toward a bachelor's degree in engineering from CU Denver. Nondegree graduate students may apply 9 semester hours of graduate-level course work toward a master's degree in engineering from CU Denver.

Summer Courses

Summer session courses are offered for regular students and those who have course deficiencies. Courses are also offered for high school graduates who wish to enter as freshmen and need some additional preparatory work. For some students, there are advantages in starting their college careers during the summer session. Some required freshman and sophomore courses and many elective courses are offered at CU Denver during the summer. The summer session gives students a head start and enables them

to take a lighter load during the fall semester or take additional courses to enrich their programs.

Computing

The College of Engineering and Applied Science encourages all students to develop their skills in using the computer as a tool, not only for solving technical problems but for use in all other facets of their careers. Students are encouraged to explore computer courses other than the fundamental programming course required in their curriculum.

Internships and Cooperative Education

Internships and cooperative education are a way for students to gain professional experience while studying at UC Denver. Many internship and co-op positions lead to permanent employment opportunities upon graduation. Please see the “Career Center” section of the Campus Life chapter in this catalog or contact the Career Center at 303-556-2250 for information on the specific eligibility requirements. Information can also be obtained by contacting Engineering Student Services (ESS) in the Office of the Dean at 303-556-4768.

Scholarships

The college receives an annual allocation of state funds for Dean’s Scholarships; these funds are awarded to students who apply and meet scholarship and community service criteria. Additional funds for scholarships and loans are obtained through contributions from alumni and friends. Enrollment in the College of Engineering and Applied Science makes the student eligible for these scholarships. Scholarship application forms are available in the college. Students must apply by April 1 for summer or fall semester and by October 1 for spring semester of each year for consideration. Students can apply for all industry scholarships and Dean’s Scholarships using the general application form. Scholarship application forms require information about the applicant’s participation in school related activities, community activities and work. Dean’s Scholarship applicants must qualify for in-state tuition and have at least a 3.0 GPA, but do not need to show unmet financial need. All recipients must be registered for six or more hours in the semester for which the awards are made.

The College of Engineering and Applied Science also offers scholarships to new, financially eligible students who are enrolled full time as an engineering major through its Recruiting Engineers to ACHieve (REACH) program. Through this National Science Foundation program, scholarship recipients can receive up to $7,600 their first year (depending on need) and up to $3,800 the second year. Detailed REACH program information and details about scholarships is available College of Engineering and Applied Science website.

For additional information on other types of financial aid, consult the Tuition, Fees and Financial Aid chapter of this catalog.

Research Centers

Transportation Research Center

Director: Bruce Janson
Telephone: 303-556-2831

The Transportation Research Center (TRC) involves both students and faculty on the Denver campus in a range of education and research activities. The TRC works on projects in collaboration with other departments and colleges such as business, urban planning and public affairs. TRC projects address local, state, national and international concerns with funding from federal, state, local or private sources.

Some focuses of the Transportation Research Center are transportation modeling; traffic monitoring technologies and data analysis techniques; transportation planning and travel demand forecasting for both person and freight movements; traffic engineering and control; facility design and management; sustainable transportation systems; safety studies; use of geographic information systems in transportation; environmental impact assessment; transportation investment decision analysis, including cost-benefit and life-cycle analyses and cross-subsidization issues; and accident studies. Several studies on advanced system development involve partnerships with Colorado's high-tech industry.

Facility for Advanced Spatial Technology

GIS Lab Coordinator: M. Sue Hawkins
Affiliated Faculty: Deborah Thomas, College of Liberal Arts and Sciences; Lynn E. Johnson, College of Engineering and Applied Science; Brian Muller, College of Architecture and Planning
Telephone: 303-556-4172
Website: ucdenver.edu/academics/colleges/Engineering/Programs/Civil-Engineering/Laboratories/Pages/FacilityforAdvancedSpatialTechnologyLab.aspx

The Facility for Advanced Spatial Technology (FAST) is a coordinated facility of the Colleges of Architecture and Planning, Engineering and Applied Science and Liberal Arts and Sciences. The FAST is comprised of computer clients and servers, GIS and related software and classroom and research space. It is the campus interdisciplinary center of GIS related activities that is used by students, faculty and outside community groups seeking to develop GIS techniques for various applications.
The FAST provides support for GIS courses and degree programs for students of varying backgrounds, learning styles and locations. The programs give students modern proficiencies in applying GIS techniques to analyze, plan and design natural and built

environments. Students can complete the engineering GIS program entirely online.

Colorado Advanced Photonics Technology Laboratory

Director: Robin Shandas
Telephone: 303-556-4175
Website: www.engineering.ucdenver.edu

The Colorado Advanced Photonics Technology (CAPT) Laboratory is a state-of-the-art measurement and fabrication research center. The four major areas of concentration are optical characterization and metrology, photonics, prototype packaging and photolithography and environmental testing and evaluation.

The CAPT Laboratory provides cutting-edge technical services to corporate and educational partners. It is the only photonics resource in Colorado that can deliver surface roughness measurements, optical testing, contract measurement services, prototyping, precision metrology, environmental testing, use of photonics equipment and facilities and training. The CAPT Laboratory provides access to advanced facilities and equipment, including $5 million in equipment for material characterization, prototype packaging, measuring, inspection and environmental testing.

Center for Geotechnical Engineering Science

Director: Nien-Yin Chang
Associate Director: Brian Brady
Telephone: 303-556-2362

The Center for Geotechnical Engineering Science aims to advance the understanding of the safety, reliability, performance and environmental impact of engineered geostructures. Resolutions of geostructural and geoenvironmental remediation problems are addressed through research sponsored by public funding agencies and private industry. The center seeks the opportunity for cooperative research with other institutions. Research interests include soil-structure interaction (SSI) effects on the response of structures under strong seismic shakings (high rises, bridges, retaining walls, deep foundations and other infrastructures); load and resistance factors designs (LRFD) of deep foundations; seismic responses of mechanically stabilized earth (MSE) structures; and expansive soils foundation designs.

The Center can provide technical expertise pertaining to expansive soil investigation, foundation designs, forensic investigation and rehabilitation of damaged structures. With billions of dollars lost due to expansive soil damage to structures, much is desired in formulating prediction mechanisms for expansive soil behaviors and design procedures for the mitigation of severe damage and technology for the rehabilitation of the damaged structures. Severe expansive soil problems have led to a Center research effort aimed at

a better understanding of expansive soil mechanics, foundation performance and forensic investigation of the damage to structures (buildings, highways, airport taxiway and runway). The Center promotes technology transfer through engineering education and public forums.

Center for Sustainable Infrastructure Systems

Director: Anu Ramaswami

Managing Director: Felix Flechas

Assistant Director of Operations: Luann Rudolph

Telephone: 303-556-6086

Website:
http://www.ucdenver.edu/academics/colleges/Engineering/research/Pages/ResearchCenters.aspx

The Center for Sustainable Infrastructure Systems (CSIS) is an interdisciplinary research center between the College of Engineering and Applied Science and the School of Public Affairs bringing together engineers with professionals from public policy, public affairs, public health and business development for the rapid diffusion, review and redesign of resilient and sustainable infrastructure systems in society. There are four unique aspects of CSIS sustainable infrastructures research:

- Systems Approach—integrating research across various infrastructures and/or sectors, with efficiency benchmarks in each sector to aid in scenario modeling and quantitative goal setting.
- Multi-objective—taking into consideration infrastructure performance and its impact on people, prosperity and the planet
- Outcomes and metrics driven
- Considers people and processes—understanding the policy process and engaging with communities and institutions

In addition to conducting research, CSIS provides educational programs (curriculum, professional development, and outreach); conducts outreach for development of sustainable infrastructure projects and activities; and develops and disseminates a body of knowledge related to CSIS.

Continuing Engineering Education Program

Program Manager: Heidi Utt
Telephone: 303-556-4907
Website: www.engineering.ucdenver.edu/CEEP

Continuing Engineering Education Program (CEEP) courses are offered at convenient times and locations, are taught by academic and industry professionals, and are responsive to changing technologies. By addressing topics for both engineers and non-engineers, the curriculum supplies the knowledge, skills, and competitive edge required in many professional fields. Moreover, CEEP students finish with ready-to-apply expertise. Program disciplines encompass civil, electrical, mechanical, environmental, systems, information technology, project management and more, with a focus on key industry certifications, such as the FE, PE, CAPM, PMP, CCENT, CCNA, SCJP and others. Most CEEP offerings are non-credit Continuing Education Unit earning courses, although some courses are available for graduate credit.

Other University Campuses

University of Colorado at Boulder

Six engineering departments are located on the campus of the University of Colorado at Boulder. Complete BS, MS and PhD degree programs are offered by the Department of Aerospace Engineering Sciences; the Department of Chemical Engineering; the Department of Civil, Environmental and Architectural Engineering; the Department of Computer Science; the Department of Electrical and Computer Engineering; and the Department of Mechanical Engineering. Undergraduate and graduate degrees also are offered in applied mathematics and engineering physics. The programs at the Boulder campus are primarily oriented to the full-time student who can attend day classes.

University of Colorado at Colorado Springs

Three engineering departments—computer science; electrical and computer engineering; and mechanical and computer engineering—are located on the campus of the University of Colorado at Colorado Springs (UCCS). Complete BS degree programs are offered in computer engineering, computer science, electrical engineering and mechanical engineering; bachelor of innovation programs are offered in computer science, computer science security, electrical engineering and game design and development. Master of engineering programs are offered in information assurance, software engineering and space operations; and MS and PhD programs are awarded in computer science, electrical engineering and mechanical engineering.

General Requirements for Undergraduate Admission

The student must meet the admission requirements described in the Information for Undergraduate Students and Information for Graduate Students chapters of this catalog and of the College of Engineering and Applied Science in which the degree program selected by the student is offered.

Beginning undergraduate students in engineering should be prepared to start analytic geometry-calculus. No credit toward any degree in engineering will be given for algebra, trigonometry or precalculus mathematics (MATH 1110, 1120 and 1130). (These courses are offered to allow students to prepare for calculus if needed.) Students who question the adequacy of their precollege background in mathematics should contact the Department of Mathematics office in the College of Liberal Arts and Sciences. Placement tests covering precalculus mathematics are required of new freshmen to select the appropriate beginning mathematics course.

To be prepared for the type of mathematics courses that will be taught, the student must be competent in the basic ideas and skills of ordinary algebra, geometry and plane trigonometry. These include such topics as the fundamental operations with algebraic expressions, exponents and radicals, fractions, simple factoring, solution of linear and quadratic equations, graphical representation, simple systems of equations, complex numbers, the binomial theorem, arithmetic and geometric progressions, logarithms, the trigonometric functions and their use in triangle solving and simple applications, and the standard theorems of geometry, including some solid geometry. It usually takes eight semesters to cover this material adequately in high school.

Refer to the “Minimum Academic Preparation Standards (MAPS)” and “Admission Requirements for Freshmen” sections in the Information for Undergraduate Students chapter of this catalog for a list of high school subjects required for admission to the College of Engineering and Applied Science.

Former Students

Former students must meet the readmission requirements outlined in the Information for Undergraduate Students and Information for Graduate Students chapters of this catalog. Students who interrupt their degree program for more than one academic year will be required to follow the degree program in effect at the time of their readmission to the college. Repetition of course work may be necessary because of the interruption; readmitted applicants will be evaluated on an individual basis. Repeated courses must be taken for no credit (NC). See the “Repetition of Courses” policy under “Academic Policies” in this chapter of the catalog.

Intercampus Transfer

Transfers between campuses of the University of Colorado should be carefully planned to avoid loss of academic credit. Courses and credits required for engineering degrees vary from campus to campus; therefore, students should plan as far ahead as possible. The campus advisor can help choose the right courses. Such planning should also include contacting the engineering department to which the student plans to transfer at least one semester before the transfer is planned. The transfer student must have at least a 2.0 GPA for 30 hours of credit toward an engineering degree to be eligible to

transfer. A higher GPA may be required to transfer directly into the College of Engineering and Applied Science. In general, calculus, physics and chemistry courses will transfer for full credit. In addition, 12 semester hours of humanities and social sciences electives will usually transfer for full credit. Fundamental computing courses may be unique by campus and should be checked with the campus to which the student is transferring. Any minimum academic preparation standards (MAPS) deficiencies should be eliminated before transferring.

Transfer Agreements

The College of Engineering and Applied Science has formal transfer agreements with all Colorado community colleges, including the following Denver metro-area community colleges:

Arapahoe Community College (Littleton)—303-794-1550
Community College of Aurora—303-360-4790
Community College of Denver—303-556-2600
Front Range Community College (Westminster)—303-466-8811
Red Rocks Community College (Lakewood)—303-988-6160

Students interested in transfering should contact Engineering Student Services at 303-556-4768 and the respective community college counseling office at the phone number indicated above.

Transfer Students

Students applying for transfer from other accredited collegiate institutions will be considered for admission on an individual basis if they meet the requirements outlined in the Information for Undergraduate Students chapter of this catalog and have successfully completed a year each of calculus and physics (calculus-based).

Applications to transfer from another college on the Denver campus to the College of Engineering and Applied Science will be considered on an individual basis by the Office of the Dean, if the student's prior academic record includes successful completion of a year each of calculus and calculus-based physics and the student's cumulative GPA is 2.75 or higher.

Transfer Credit

Refer to the Information for Undergraduate Students and Information for Graduate Students chapters of this catalog for descriptions of universitywide policies on transfer credit.

Nontransferable Credits

Courses on basic subjects such as mathematics or physics may be acceptable for direct transfer of credit if they were taught as part of an accredited program for all students and were not specifically designated for engineering technology students. Engineering technology courses (courses with technology designations) will not be considered for transfer into an engineering degree program.

Students may seek credit for course work by examination (see “Transfer of College-Level Credit” section of the Information for Undergraduate Students chapter of this catalog).

Undergraduate Core Curriculum in Engineering

The faculty of the College of Arts & Media, the Business School, the College of Engineering and Applied Science and the College of Liberal Arts and Sciences have established a core curriculum for undergraduate students. See the General Information section of this catalog for an overview of the common core concept.

Students graduating from the College of Engineering and Applied Science are required to satisfy the humanities and social sciences and writing portions of their engineering program by taking courses from the CU Denver Undergraduate Core Curriculum, gtPATHWAYS.

The intent of the humanities and social sciences component of an engineering program is to provide the student with a coherent and well-structured exploration of a substantive issue or theme appropriate to the engineering profession and/or of interest to the student. The required humanities and social sciences electives must include both breadth and depth, must include advanced-level course work and should be planned in consultation with the advisor. A random selection of lower-division courses will not satisfy the humanities and social sciences elective requirement.

Courses such as accounting, contracts, management, elementary foreign languages, public speaking and technical writing are not acceptable as humanities and social sciences electives.

Program Requirements

Social Sciences

(3 semester hours) Choose one course from any of the following courses: ECON, ENVS, ETST, GEOG, HBSC, PSCI, SOC.

- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
- ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
- ETST 2000 - Introduction to Ethnic Studies **gtPATHWAYS:** GT-SS3
- GEOG 1102 - World Regional Geography **gtPATHWAYS:** GT-SS2
- GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2
- GEOG 2202 - Natural Hazards **gtPATHWAYS:** GT-SS2
- HBSC 2001 - Understanding Community and Public Health **gtPATHWAYS:** GT-SS3
- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice **gtPATHWAYS:** GT-SS1
- PSCI 1101 - American Political System **gtPATHWAYS:** GT-SS1
- SJUS 2000 - Democratic Participation and Social Justice **gtPATHWAYS:**
- SOCY 1001 - Introduction to Sociology **gtPATHWAYS:** GT-SS3
- SOCY 2462 - Introduction to Social Psychology **gtPATHWAYS:** GT-SS3

Humanities

(3 semester hours) Choose one course from any of the following courses: ENGL, ETST, FREN, GRMN, HIST, PHIL, RLST.

- CHIN 1000 - China and the Chinese **gtPATHWAYS:** GT-AH1
- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film **gtPATHWAYS:** GT-AH2
- ENGL 2600 - Great Works in British and American Literature **gtPATHWAYS:** GT-AH2
- ETST 2155 - African American History **gtPATHWAYS:** GT-HI1
- FREN 1000 - Introduction to Cultures of the French- Speaking World **gtPATHWAYS:** GT-AH1
- GRMN 1000 - Germany and the Germans **gtPATHWAYS:** GT-AH1
- HIST 1361 - U.S. History to 1876 **gtPATHWAYS:** GT-HI1
- HIST 1362 - U.S. History Since 1876 **gtPATHWAYS:** GT-HI1
- HIST 1381 - Paths to the Present I **gtPATHWAYS:** GT-HI1
- HIST 1382 - Getting Here: Paths to the Present II **gtPATHWAYS:** GT-HI1
- PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World **gtPATHWAYS:** GT-AH3
- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community **gtPATHWAYS:** GT-AH3
- PHIL 2441 - Logic and Language **gtPATHWAYS:** GT-AH3
- RLST 1610 - Introduction to Religious Studies **gtPATHWAYS:** GT-AH3
- RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3
- SPAN 1000 - Introduction to Cultures of the Spanish Speaking World **gtPATHWAYS:** GT-AH4

Arts

(3 semester hours) Choose one course from any of the following courses: FINE, PMUS, THTR.

- FINE 1001 - Introduction to Art **gtPATHWAYS:** GT-AH1
- PMUS 1001 - Music Appreciation **gtPATHWAYS:** GT-AH1
- THTR 1001 - Introduction to Theatre **gtPATHWAYS:** GT-AH1

International Perspectives

(3 semester hours) Choose one course from any of the following courses: ENGR, HIST, PSCI.

- ENGL 3798 - International Perspectives in Literature and Film **gtPATHWAYS:**
- ENGR 3600 - International Dimensions of Technology and Culture **gtPATHWAYS:**
- FREN 3200 - The Francophone World in the Post-Colonial Era **gtPATHWAYS:**
- GRMN 3200 - Current German Society and Culture **gtPATHWAYS:**
- HIST 3121 - The World at War, 1914-1945 **gtPATHWAYS:**
- HIST 4032 - Globalization in World History Since 1945 **gtPATHWAYS:**
- INTB 3000 - Global Perspectives **gtPATHWAYS:**
- PSCI 3022 - Introduction to Comparative Politics **gtPATHWAYS:**
- PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**

Cultural Diversity

(3 semester hours) Choose one course from any of the following courses: ANTH, CMMU, ECON, ENGR, ETST, PHIL, PSYC, SOCY, THTR, HIST, MGMT, PSCI, RLST.

- ANTH 3142 - Cultural Diversity in the Modern World **gtPATHWAYS:**
- COMM 3271 - Communication and Diversity **gtPATHWAYS:**
- ECON 3100 - Economics of Race and Gender **gtPATHWAYS:**
- ENGL 3795 - Race and Ethnicity in American Literature **gtPATHWAYS:**
- ENGR 3400 - Technology and Culture **gtPATHWAYS:**
- ETST 3704 - Culture, Racism and Alienation **gtPATHWAYS:**
- ETST 3794 - Ethnic Diversity in American Literature **gtPATHWAYS:**
- HIST 3345 - Immigration and Ethnicity in American History **gtPATHWAYS:**
- HIST 3349 - Social Movements in 20th Century America **gtPATHWAYS:**
- MGMT 4100 - Managing Cultural Diversity **gtPATHWAYS:**
- PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
- PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
- PSCI 3035 - Political Movements: Race and Gender **gtPATHWAYS:**
- PSYC 4485 - Psychology of Cultural Diversity **gtPATHWAYS:**

- RLST 4000 - Religion and Cultural Diversity **gtPATHWAYS:**
- SOCY 3020 - Race and Ethnicity in the U.S. **gtPATHWAYS:**
- THTR 3611 - Drama of Diversity **gtPATHWAYS:**

Behavioral Sciences

(3 semester hours) Choose one course from any of the following courses: ANTH, CMMU, PSYC.

- ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3
- ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
- COMM 1011 - Fundamentals of Communication **gtPATHWAYS:** GT-SS3
- COMM 1021 - Fundamentals of Mass Communication **gtPATHWAYS:** GT-SS3
- PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3
- PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3

Intellectual Comptetencies*

(6 semester hours)

- ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01 **
- ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02

Total: 24-25 Hours

Please note the above core list does not include mathematics or biological and physical sciences due to the extensive math and physics curricula required by the College of Engineering and Applied Science. Please see the Engineering Student Services advisor for questions.

*English 1020 and English 2030 are the only approved composition courses for the CU Denver Core Curriculum.

**English 1020 should be taken the first semester a student is enrolled at CU Denver.

Academic Policies

Refer to the Information for Undergraduate Students and University Policies chapters of this catalog for descriptions of universitywide policies. The following policies apply specifically to students in the College of Engineering and Applied Science.

Advanced Placement

Advanced placement credit may be granted by special examination or by College Entrance Examination Board (CEEB) tests. If the applicant has scored four or five on the CEEB Advanced Placement Examination, credit toward graduation may be awarded. Students who have scored three may be considered for advanced placement by the department concerned. All advanced placement and transfer credit must be validated by satisfactory achievement in subsequent courses in accordance with standard transfer policies of the college.

College-Level Examination (CLEP) Credit

Prospective students may earn college-level credit through the College-Level Examination Program (CLEP) subject examinations, provided that they score at the 50th percentile or above. The Engineering Student Services advisor will advise students of the credits accepted for such courses toward a degree program. CLEP general examinations are not acceptable. (See also “College-Level Examination Program” in the Information for Undergraduate Students chapter of this catalog.)

Attendance Regulations

Successful work in the College of Engineering and Applied Science is dependent upon regular attendance in all classes. Students who are absent should make arrangements with instructors to make up the work missed. Students who for illness or other good reason miss a final examination must notify the instructor or Engineering Student Services in the Office of the Dean no later than the end of the day on which the examination is given. Failure to do so may result in an *F* in the course.

Changing Departments

Students who wish to change to another department within the College of Engineering and Applied Science must apply for transfer by submitting a change of major for undergraduate degree student's form, which must have the approval of the new department. (See also discussion of interdepartmental transfer requirements under “Transfer Students” in this chapter of the catalog.)

Advising

Freshman students are advised by Engineering Student Services and by representatives from each academic department. These representatives are readily available to assist students with academic or vocational concerns. Contact Engineering Student Services at 303-556-4768. Students are assigned specific departmental advisors for academic planning and should contact the departmental office for advising appointments.

Counseling

Personal counseling is available through the CU Denver Student and Community Counseling Center. Contact 303-556-4372 for questions or an appointment.

Course Load Policy

Full-time Students. Undergraduate students employed less than 10 hours per week should consider registering for courses as outlined in the departmental curricula. Additional courses may be allowed when there is satisfactory evidence that the student has the capability to handle the added load. Permission to take more than 19 hours may be granted by written petition and approval of the department chair and the dean's office.

Freshman Year

Fundamentals taught in the freshman year are of critical importance in the more advanced classes. Special attention should be given to taking courses in the proper sequence. (Course requirements for freshmen are detailed within the typical curriculum given under each department.) All students are urged to consult their instructors whenever they are experiencing difficulties with course materials or for questions related to the class.

Repetition of Courses

Undergraduate students may not register for credit in a course in which they already have received a grade of C- or higher. An F grade in a required course necessitates subsequent satisfactory completion of the course. Students must repeat a prerequisite course in which a grade of D+ or lower was earned before moving on to the subsequent course, if that course is a prerequisite to another required course. If students do not successfully complete (C- or higher) an engineering class on the second attempt, they must obtain written approval from their major department to enroll for the course for the third time. When a course is retaken because of a D or F grade, both grades will appear on the transcript and both will be averaged into the GPA. Any exceptions to these policies must be made by written petition through Engineering Student Services in the Office of the Dean.

No Credit

An engineering student must request approval before enrolling for no credit (NC) for any course. Required courses must be taken for credit. Once a course has been taken NC, the course cannot be repeated for credit.

Work Experience

The College of Engineering and Applied Science does not award academic credit for work experience.

College Policy on Academic Progress

All undergraduate students must declare a major by the time they have accumulated 60 semester hours. An undergraduate engineering student must maintain a cumulative GPA of 2.0 or better in all hours attempted at the University of Colorado, in those courses applied toward graduation requirements and in all courses taken from the student's major department in order to remain in good standing in the College of Engineering and Applied Science. Grades earned at another institution are not used in calculating the GPA at the University of Colorado. However, grades earned in another school or college of the University of Colorado will be used in determining the student's scholastic standing and progress or lack of progress toward the bachelor of science degree in the College of Engineering and Applied Science.

Read about academic probation and suspension in the University Policies section.

Dean's List Criteria

CU Denver uses a fixed criterion across all colleges for determining eligibility for the Dean's List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete 9 hours in the semester upon which to determine the grade point. These courses can be both within and outside of the college. Pooled courses will not be included in the calculation nor will they count toward the 9 hours required for consideration. The GPA set for inclusion in the Dean's List is 3.75. In the summer semesters, students must complete 6 hours as a basis for inclusion in the Dean's List. Course inclusion will be the same as in fall and spring semesters. The GPA for Dean's List in summer is also 3.75.

Colleges will collect data each semester on the number of students making the Dean's List and report the numbers and percentage of total students in the college.

Scholarships tied to Dean's Lists in individual college may have additional requirements.

The Registrar's Office will calculate the semester GPAs for all students two weeks prior to the due date for semester grades. Those GPAs will be the basis for determining the Dean's List. Incompletes will not be considered in the calculation of minimum number of hours. The Dean's List will not be recalculated to include completed incompletes.

Academic Ethics (Dishonesty, Cheating)

Students are expected to conduct themselves in accordance with the highest standards of honesty and integrity. Cheating, plagiarism, illegitimate possession and disposition of examinations, alteration, forgery or falsification of official records and similar acts or attempts to engage in such acts are grounds for suspension or expulsion from the university.

In particular, students are advised that plagiarism consists of any act involving the offering of the work of someone else as the student's own.

At CU Denver, there is a student Academic Honor Code. The code is published in a brochure available from the Office of Student Life. Information regarding all student grievance procedures may be obtained in that office.

In addition, the college has a committee on discipline that hears cases of alleged violations of academic ethics and recommends disciplinary action. In a case of proven academic dishonesty/misconduct, the committee may invoke penalties that may include probation, suspension or expulsion. In a case of suspension or expulsion, a distinction may be placed on a student's academic record indicating the action was due to academic dishonesty/misconduct. Students who suspect or observe violations of academic ethics should report them to their instructor, the department chair or the Office of the Dean.

Grading System, Incompletes, Pass/Fail and Drop/Add Procedures

See the Registration and Records chapter of this catalog for the University of Colorado uniform grading system and for additional pass/fail information and drop/add procedures.

Final grades, as reported by instructors, are to be considered permanent and final. Grade changes will be considered only in cases of documented clerical error and must be approved by the dean.

Incompletes

An incomplete may be given by the instructor for circumstances beyond the student's control, such as a documented medical or personal emergency. When it is given, the student, Engineering Student Services and the departmental office must be informed in writing by the instructor, who states what the student is to do in order to remove the incomplete and the date the tasks are to be completed. The instructor will assign an "I" distinction. The student is expected to complete the course requirements (e.g., the final examination or term paper), within the established deadline and not to retake the entire course. The majority of course requirements (75%) must have been completed with a passing grade to be eligible for an incomplete. An "I" distinction will be converted automatically to a grade of "F" after one year if the specified work is not completed.

Pass/Fail

The primary purpose for offering courses on a pass/fail grade basis is to encourage students, especially juniors and seniors, to broaden their educational experience by electing challenging upper-division humanities and social sciences elective courses without serious risk to their academic records. In general, pass/fail should be limited to 3000- or 4000-level humanities and social sciences courses. Students must process the pass/fail form during the first two weeks of the semester. Engineering students cannot take required courses pass/fail.

Dropping a Course

After the tenth week of the semester, dropping a course requires a petition signed by the department chair and Engineering Student Services. Only under very extenuating circumstances, such as a documented medical or personal emergency, will petitions for dropping courses be approved after the tenth week of the semester.

Sequence of Courses

Full-time students must generally complete the courses in the department in which they are registered, according to the typical curriculum shown under their major department in this catalog. Part-time students may modify the order of courses with their advisor's approval.

Graduate-Level Courses Taken at Undergraduate Level

With faculty advisor approval, an undergraduate engineering student may be granted the opportunity to take graduate courses to be counted toward an undergraduate degree. A maximum of 6 semester hours of graduate-level course work taken as an undergraduate can be considered for credit toward a graduate degree. Only a grade of B (3.0) or above will be considered for graduate-level credit. All consideration of graduate work to be counted toward both an undergraduate and a graduate degree must be approved by a faculty advisor and Engineering Student Services.

Graduation with Honors

In recognition of high scholarship and professional attainments, *Honors, Special Honors or With Distinction* may be awarded at graduation at the discretion of the student's major department. These honors are recorded on the diploma of the graduate and indicated in the commencement program. Grades earned during the semester of graduation will not be considered.

For *Special Honors*, a student must have a cumulative GPA of at least 3.80, and for Honors, a GPA between 3.60 and 3.79. *With Distinction* is awarded at the discretion of the College Executive Council.

Transfer students, to be considered for *honors*, will be expected to complete a minimum of one-half of their work within the University of Colorado System. Grades earned at other institutions will not be considered. Transfer students must have completed at least 54 semester hours at University of Colorado before their last semester and must have a minimum of 64 semester hours completed at graduation.

Planning an Engineering Program

It is the responsibility of all students to do the following:

- meet with department academic advisor at least once each year
- meet with department transfer credit advisor as necessary
- meet with the assistant dean of engineering student services as necessary
- meet with department senior check-out advisor prior to their last 30 semester hours of course work to finalize a graduation program that will be reviewed by the assistant dean of engineering student services
- complete a graduation contract and an application for diploma card before or during the first two weeks of their last semester
- keep the assistant dean of student services informed of any changes in the student's plans throughout their last year

Graduation Requirements

In order to become eligible for one of the bachelor's degrees in the College of Engineering and Applied Science, a student, in addition to being in good standing in the university, must meet the following minimum requirements:

Courses—The prescribed and elective work in any curriculum as determined by the appropriate department must be completed satisfactorily.

Hours—A minimum of 130 semester hours is required for students seeking a civil engineering degree; a minimum of 128 semester hours for computer science and engineering, electrical engineering or mechanical engineering degrees.

Hours in Residence—At least 30 semester hours of course work applicable to a bachelor of science degree in engineering must be taken at the Denver campus while a declared student in good standing at the College of Engineering and Applied Science. Students must be enrolled in the college for at least the final two semesters prior to graduation.

Transfer Credit—All requests for consideration of transfer credit and its application toward a degree in Engineering and Applied Science must be submitted prior to the student's last two semesters at the Denver campus.

Grade Point Average (GPA)—A minimum GPA of 2.0 (C) is required for all courses attempted, for all required courses and for all courses taken from the student's major department.

Faculty Recommendation—The recommendation of the faculty of the department offering the degree and the approval of the faculty of the College of Engineering and Applied Science is required.

Incompletes and Correspondence Courses—It is the student's responsibility to ensure that all incompletes and correspondence courses are officially completed before the tenth week of the student's final semester in school.

Simultaneous Conferring of Degrees—For any double degree program, both bachelor's degrees must be conferred at the same commencement.

Commencement Exercises—Commencement exercises are held in December and May. A student finishing in August is encouraged to attend commencement the following December, but may request that the diploma be mailed.

Undergraduate Degrees

In addition to the standard four-year degree programs previously listed, the college is involved in double degree programs.

Business and Engineering

Undergraduates in the College of Engineering and Applied Science with career interests in management may complete all of the requirements for both a BS degree in engineering and a BS degree in business administration by extending their study programs to five years, including one or two summer terms. The business courses required by the Business School may be started in the second, third or fourth year, depending upon the curriculum plan for the particular field of engineering in which the student is enrolled.

Students interested in this undergraduate program are required to submit an application to the Business School. Students should contact a business advisor to obtain the application form and determine an acceptable degree program.

Requirements for the undergraduate business degree and engineering degree must be completed concurrently. At least a 2.0 GPA must be earned in all business courses undertaken in the Business School. No fewer than 30 semester credits in business courses from CU Denver must be earned after admission to business to establish residency credit. Courses offered or required by the Business School may be used in lieu of electives required for undergraduate engineering degrees, subject to the approval of the individual department.

Joint Engineering Degrees

A student may obtain two engineering majors by meeting the requirements of both programs; however, the approval of both departments and the dean is required. Thirty hours of elective or required subjects must be completed in addition to the largest minimum number required by either of the two departments. A course taken for one completed master's degree may not be counted toward a second master's degree.

Premedicine Option

A professional school in a field such as medicine requires a student to have a college education prior to pursuing its professional courses. In practically all cases, medical students are university graduates, although occasionally a student may enter medical school after three years of university training.

The desirability of obtaining an engineering education prior to undertaking a study of medicine is increasing continually as medicine itself is evolving. A great deal of new equipment, most of it electronic, is being developed to assist the medical practitioner in treatment of patients. Bioengineering, engineering systems analysis, probability and communication theory are highly applicable to medical problems. Improved communication techniques also are allowing the storage and retrieval of information not previously available to the medical doctor. An advanced knowledge of basic mathematics and computing techniques, along with increased understanding of physical chemistry, improves the scientific base upon which medical knowledge rests. It is therefore desirable that the future medical practitioner and researcher be well equipped with the tools engineering can offer.

To provide a minimum of the necessary knowledge, the additional courses listed below must be completed with superior grades. Students can meet these requirements by careful substitution of electives in the engineering curriculum. In some cases where additional hours may be required, interested students should consult with the engineering department chair.

General Chemistry (two semesters) (CHEM 2031, 2038, 2061, 2068), 9 semester hours
Organic Chemistry (two semesters) (CHEM 3411, 3421, 3418, 3428), 10 semester hours
General Biology (two semesters) (BIOL 2051, 2061, 2071, 2081), 8 semester hours
English Composition (one semester), 3 semester hours
Literature (two semesters), 6 semester hours
Total: 36 semester hours

Students desiring to enter a premedical program should consult the representative of the department involved. On the Denver campus, premedical advising is available through the health careers advisor, North Classroom, 3014B, 303-556-4350.

Graduate Study in Engineering

The College of Engineering and Applied Science offers graduate programs in bioengineering, civil engineering, computer science, electrical engineering, and mechanical engineering.

For information regarding courses and requirements leading to the master of science, master of engineering or the PhD degree, see the appropriate discipline heading in this section. For graduate admission information and policies, see the Information for Graduate Students chapter of this catalog.

TOEFL/Language Requirements

International graduate students who take the TOEFL English proficiency exam must score at least 525 on the paper-based exam or 71 on the Internet-based exam (IBT). International students must score a 6.0 on the IELTS exam. International students who successfully complete study at Spring International with a grade of B or better are not required to submit TOEFL scores. Students must successfully complete studies through Level Six to be eligible for the waiver consideration. Contact Spring International for more information at www.spring.edu.

Education for Employed Professional Engineers

Continuing education for employed engineers grows more important each year. Therefore, the college puts great emphasis upon making graduate courses available through late afternoon and evening courses. The master of engineering degree permits graduate students more flexibility in defining specialized interdisciplinary fields that meet their professional needs. This degree has standards equivalent to those of the master of science degree.

In addition to credit course work, the college also offers courses of interest to practicing engineers through its Continuing Engineering Education Program, 303-556-4907. (See also information under “Continuing Engineering Education Program” in this chapter.)

Concurrent BS and MS Degree Program in Engineering

A student who plans to continue on to graduate study after completing the requirements for the BS degree may be admitted to a graduate program through his/her major department in the senior year (after completion of at least 110 semester hours). Requirements are the same as for the two degrees taken separately: 128 or 130 semester hours, depending on the major, for the BS degree; and 30 semester hours for the MS degree. Humanities and social sciences requirements must be completed within the first 128 or 130 semester hours. A 3.0 GPA for all work attempted through the first

six semesters (at least 96 semester hours) and written recommendations from at least two major-field faculty members are required.

The purpose of the concurrent degree program is to allow students who qualify for graduate study and expect to continue for an advanced degree to plan their graduate program from the beginning of the senior year rather than from the first year of graduate study. The student can then reach the degree of proficiency required to begin research at an earlier time and can make better and fuller use of courses offered only in alternate years.

Students will be assigned faculty advisors to help them develop the program best suited to their particular interests. The program selected must be planned so that the student may qualify for a BS degree after completing the semester-hour requirements for the degree, if the student so elects, or if the student's GPA falls below the 3.0 required to remain in the program. In this case, all hours completed with a passing grade while in the program will count toward fulfilling the normal requirements for the BS degree.

Graduate Work in Business

Undergraduates in engineering who intend to pursue graduate study in business may complete some of the business background requirements as electives in their undergraduate programs. Seniors in engineering who have such intentions and appear likely to qualify for admission to graduate study in business may be permitted to register for graduate fundamentals courses, which are designed to provide qualified students with needed background preparation in business. Students must see an advisor from the Business School for approval.

Programs of Study

Courses listed in the following curricula are typical illustrations. Changes in specific courses may be necessary to accommodate students' needs and/or changes in institution requirements; however, students should take courses in logical sequence, i.e., complete all freshman courses before taking sophomore courses.

Bioengineering

Chair: Robin Shandas
Office: Room 6C03 Research 2 - Building P15
Telephone: 303-724-5893
Fax: 303-724-5800
E-mail: bioengineering@ucdenver.edu
Website: www.engineering.ucdenver.edu/bioengineering

Faculty

Core Faculty

Emily Gibson, PhD
Assistant Professor
emily.gibson@ucdenver.edu
Specialties: Microfluidics technology, optical microscopy, and spectroscopy

Kendall Hunter, PhD
Assistant Professor
kendall.hunter@ucdenver.edu
Specialties: Development, diagnosis, and progression of pulmonary hypertension.

Robin Shandas, PhD
Professor
robin.shandas@ucdenver.edu
Specialties: Novel methods for translational bioengineering.

Richard Weir, PhD
Research Associate Professor
richard.weir@ucdenver.edu
Specialties: Neural Engineering, biomechatronic design, and rehabilitation engineering.

Affiliated Faculty

Students receive instruction from affiliate faculty in the University of Colorado system, including CU Boulder and the School of Medicine. Faculty research areas include Imaging and Biophotonics; Cardiovascular Biomechanics and Hemodynamics; Orthopedic Biomechanics; Surgery; Ophthalmology; and Neuroscience Engineering. Please consult our website for more information.

Mission Statement

The Department of Bioengineering bridges the fields of engineering and medicine with a core mission of applying engineering principles and analyses to improving human health. The department will fulfill this mission by providing opportunities for training, research, and service in bioengineering to faculty, students, and residents of Colorado and the greater Rocky Mountain region.

Program Objectives

The Department of Bioengineering offers high quality training in bioengineering that is both flexible and multidisciplinary. A design-based focus permeates every aspect of our training philosophy which can be summarized by the following question: what does the user want and how can I best utilize my bioengineering training to achieve this need? Our academic instruction focuses on developing core competencies in life sciences, quantitative methods, technology, and research methods.

Graduate

All graduate students begin the program with intensive study of the bioengineering core. In consultation with an advisor, each student chooses elective courses, training pathways, and research to fit talents, preparation, and career plans. Students earn the MS, Dual MS, MD-PhD, or PhD degree in bioengineering with a choice of training tracks in basic research, clinical applications, or commercialization of medical technologies. Graduate School Rules apply to all programs. Please consult our website for more information on admissions requirements, degree requirements, core courses, training tracks, and faculty research areas.

Master of Science

Bioengineering MS

Master of Science (MS) Degree Program

The master of science degree is offered to students with an undergraduate degree in the life sciences or engineering. Students complete the degree in 1-2 years with the choice of research thesis or industry internship.

Master of Science (MS) Dual Degree Program

For students already enrolled or accepted into another MS program in the University of Colorado system. Please contact us for advising.

Doctor of Philosophy

Bioengineering PhD

MD/PhD Degree Program

For students already enrolled or accepted into the Medical Scientist Training Program in the School of Medicine at University of Colorado Anschutz Medical Campus. Please contact us for advising.

Doctor of Philosophy (PhD) Degree Program

Research areas include imaging and biophotonics; cardiovascular biomechanics and hemodynamics; orthopedic biomechanics, neuromuscular control and assistive technology; surgery and urological sciences; ophthalmology; and neuroscience engineering.

Civil Engineering

Chair: Kevin L. Rens
Associate Chair: Bruce Janson
Program Administrator: Maria Rase
Office: North Classroom, 3027
Telephone: 303-556-2871
Fax: 303-556-2368
Website: www.engineering.ucdenver.edu/civil

Faculty

Professors:
Nien-Yin Chang, PhD, Ohio State University, Professional Engineer (PE)—Ohio and Colorado
James C.-Y. Guo, PhD, University of Illinois at Urbana-Champaign, PE—Colorado
Bruce N. Janson, PhD, University of Illinois at Urbana-Champaign
Lynn E. Johnson, PhD, Cornell University, PE—Connecticut
Anu Ramaswami, PhD, Carnegie Mellon University
Kevin L. Rens, PhD, Iowa State University, PE—Colorado
Jonathan T.H. Wu, PhD, Purdue University

Assistant Professors:

Stephan A. Durham, PhD, University of Arkansas
Arunprakash Karunanithi, PhD, University of Connecticut
Chengyu Li, PhD, Arizona State University; PE—Colorado, North Carolina, New Mexico, Washington; SE—Utah, Arizona, Washington
Wesley Marshall, PhD, University of Connecticut, PE—Connecticut
David C. Mays, PhD, University of California at Berkeley, PE—Colorado, California
Zhiyong (Jason) Ren, PhD, Pennsylvania State University
Frederick R. Rutz, PhD, University of Colorado, PE—Colorado

Assistant Research Professor:
Saeed Baraghi, PhD, University of Colorado, PE—Colorado

Senior Instructors:
Brian T. Brady, PhD, Colorado School of Mines
Michael Tang, PhD, University of California Berkeley

Professors Emeriti:
Paul E. Bartlett, MS, University of Colorado, PE—Colorado
David W. Hubly, PhD, Iowa State University, PE—Colorado
Orem G. Strom, PhD, University of Texas at Austin

Mission Statement

The mission of the Department of Civil Engineering:

- deliver high-quality comprehensive degree programs (BS, MS, MEng, PhD) to all of our students at both the undergraduate and graduate levels
- matriculate students who excel in professional practice and leadership and who possess compassion and respect for people of all cultural backgrounds
- teach our classes with excellence, whether in a traditional classroom setting or online
- offer our students state-of-the-art laboratories, equipment and classrooms with the latest technology needed for a complete learning experience
- develop ambitious and innovative research programs involving both faculty and students through funding from federal, state and local sources
- provide supportive mentoring and guidance to our students through teaching, research and advising
- produce students who can work as leading professionals in civil engineering and in many other fields for which civil engineering knowledge can be a foundation

Undergraduate

The UC Denver undergraduate civil engineering curriculum places balanced emphasis on five principal areas of civil engineering practice: structures, transportation, environmental, water resources and geotechnical engineering. In each of these areas, the student receives instruction in planning, design and analysis methods. Microcomputer skills are taught early in the program of study and used frequently in subsequent courses.

A minimum of 130 semester hours is required to earn the BS degree. The faculty provide advising to help students develop an efficient study plan. The student must satisfactorily complete all the course work in the curriculum, satisfy all university graduation requirements and maintain at least a 2.0 GPA in the civil engineering courses.

Graduate

Requirements for Admission

Applicants to the master of science in civil engineering (MS) program must satisfy all requirements specified in the Information for Graduate Students chapter of this catalog. Most applicants have an ABET accredited undergraduate degree in civil engineering. An undergraduate GPA of 3.0 (on a 4-point scale) or better is required for regular admission. Students with lower GPAs may qualify for provisional admission and are strongly encouraged to submit GRE scores. International applicants are required to submit GRE scores to support their applications. Applicants whose undergraduate degree is in a field other than civil engineering may also be admitted into the MS in civil engineering degree program, if they have or will complete undergraduate prerequisite courses as required by the Department of Civil Engineering and the student's graduate advisor.

Applicants to the master of engineering (MEng) program must have a baccalaureate degree in engineering, math, science, economics or planning from an accredited college or university and satisfy all requirements specified by the Graduate School.

Prospective PhD students should contact the Department of Civil Engineering on the Denver Campus to inquire about application requirements and to obtain the "Rules and Policies for the Coordinated PhD Program."

Requests for applications for graduate study in civil engineering should be addressed to UC Denver Department of Civil Engineering, Campus Box 113, P.O. Box 173364, Denver, CO 80217-3364.

Applicants who are not citizens or permanent residents of the United States should apply through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Bachelor of Science

Civil Engineering BS

Program Objectives

The objectives of the bachelor of science in civil engineering program are to produce graduates who:

- are able to perform the technical analyses and design tasks of entry-level civil engineers
- can successfully work toward professional engineering licensure

- communicate effectively, both orally and in writing
- understand the importance of leadership skills, team building and ethical practice
- value lifelong learning and improvement through graduate degrees or professional study
- appreciate the importance of community involvement and social contribution civil engineers are dedicated to improving our living environment

Civil engineering offers an interesting and challenging career in the design, construction, and maintenance of buildings and urban infrastructure; in transportation systems, including highways, airports, rapid transit lines, railroads, and harbor facilities; in the development of water resources, including reservoirs for storage, canals for irrigation, dams for power generation, stormwater management for drainage, groundwater recharge for contamination prevention, wastewater treatment for environmental protection, and water purification for drinking purposes; in the construction industry; including foundations, bridges, concrete and steel structures, in problems concerned with environmental preservation; and in the sustainable development of cities. In preparing for work in such a broad field, the civil engineering student studies mathematics, basic science, communication, social science and humanities, engineering science and civil engineering design. CU Denver's civil engineering graduates usually find their first professional employment with consulting engineering firms, government agencies and various industries.

Typical Curriculum for BS (Civil Engineering)

Freshman Year

First Semester

- CHEM 1130 - Engineering General Chemistry **gtPATHWAYS:** *(see note 1*)
- ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01
- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1

  Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 15 Hours

Second Semester

- CVEN 1025 - Civil Engineering Graphics and Computer Aided Design **gtPATHWAYS:**
- CVEN 2212 - Plane Surveying **gtPATHWAYS:**
- ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02
- MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
- PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**

- PHYS 2321 - General Physics Lab I **gtPATHWAYS:**

Total: 18 Hours

Sophomore Year

First Semester

- CVEN 2121 - Analytical Mechanics I **gtPATHWAYS:**
- CVEN 2200 - Computing Methods in Civil Engineering **gtPATHWAYS:**
- MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
- PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
  Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 17 Hours

Second Semester

- CVEN 3121 - Mechanics of Materials **gtPATHWAYS:**
- CVEN 3141 - Introduction to Structural Materials **gtPATHWAYS:**
- CVEN 3401 - Introduction to Environmental Engineering **gtPATHWAYS:**
- CVEN 4780 - Engineering Geology **gtPATHWAYS:** or
- GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1 or
- MATH 3800 - Probability and Statistics for Engineers **gtPATHWAYS:**
- MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**

Total: 15 Hours

Junior Year

First Semester

- CVEN 3111 - Analytical Mechanics II **gtPATHWAYS:**
- CVEN 3313 - Theoretical Fluid Mechanics **gtPATHWAYS:**
- CVEN 3505 - Structural Analysis **gtPATHWAYS:**
- CVEN 3602 - Transportation Engineering **gtPATHWAYS:**
  Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 15 Hours

Second Semester

- CVEN 3323 - Applied Fluid Mechanics **gtPATHWAYS:**
- CVEN 3414 - Design of Water and Wastewater Systems **gtPATHWAYS:**
- CVEN 3708 - Introduction to Geotechnical Engineering **gtPATHWAYS:**
- CVEN 4718 - Intermediate Soils Engineering **gtPATHWAYS:**
- MECH 3012 - Thermodynamics **gtPATHWAYS:**
  Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 17 Hours

Senior Year

First Semester

- CVEN 4000 - Senior Seminar **gtPATHWAYS:**
- ELEC 3030 - Electric Circuits and Systems **gtPATHWAYS:**
  Civil Engineering Design Electives (*see note 3*) (6 semester hours)
  Upper-level Science, Math or Engineering Electives (*see note 4*) (6 semester hours)
  Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 18 Hours

Second Semester

Civil Engineering Design Electives (*see note 3*) (6 semester hours)

- CVEN 4067 - Senior Design Projects **gtPATHWAYS:**
  Core Curriculum Elective (*see note 2*) (3 semester hours)
  Science, Math or Engineering Electives (*see note 4*) (3 semester hours)

Total: 15 Hours

Program Total: 130 Hours

1. Or CHEM 2031 and CHEM 2038, which are required for students wishing to take CHEM 2061 and CHEM 2068 as general electives.
2. The communication, humanities and social science electives selected by the student and approved by his/her advisor must satisfy the college core curriculum.
3. Students must satisfactorily complete four of the six civil engineering design courses listed below:

CVEN 4427 Storm Water System Design

CVEN 4565 Timber Structure Design

CVEN 4575 Structural Steel Design

CVEN 4585 Reinforced Concrete Design

CVEN 4602 Highway Engineering

CVEN 4738 Intermediate Foundation Engineering

4. Science, math or engineering electives. The purpose of the electives is to extend the student's knowledge beyond the basic civil engineering requirements. Electives chosen should come from the areas of engineering, mathematics, chemistry, biology, physics or geology. In the case of mathematics, chemistry, physics or geology, the elective must be of higher level than courses in this field required by the civil engineering program. Suggested courses are CVEN 4077, CVEN 4087, CVEN design courses or any 5000-level CVEN course.

Certificate

Geographic Information Systems Graduate Certificate

This certificate is for students who want to get a taste of the geographic information systems (GIS) specialty area before applying for a graduate degree and for professionals who need a working knowledge of GIS. To earn the certificate in GIS, students must complete four of the core GIS classes, equaling 12 semester hours of work. Students can complete this certificate as a master's student or as a nondegree student. Students must already have a baccalaureate degree and must complete any course-specific prerequisites.

Sustainable Urban Infrastructure Graduate Certificate

This certificate is for students and working professionals who seek an interdisciplinary curriculum in the broad field of sustainable infrastructure to address complex water, energy, built environment and transportation challenges using engineering and social science strategies. Students must already have a baccalaureate degree.

Water Resources Graduate Certificate

This certificate is for graduate students who seek an interdisciplinary curriculum in the field of hydrologic and hydraulic engineering to analyze water-related problems and obtain knowledge pertaining to watershed hydrology, groundwater modeling, urban storm water management, flood mitigation and river mechanics. Students must already have a baccalaureate degree

Master of Science

Civil Engineering MS and MEng

► Graduate School Rules apply to these programs

Graduate

Degree Programs

The civil engineering graduate program is designed for both full-time and part-time students who want to advance their academic and professional skills in civil engineering and related areas. Many students are full time, while many also work full-time jobs and complete evening classes. Depending on a student's pace, the master's program takes 2-4 years to complete (on average). All graduate courses are offered in the afternoons, evenings or on Saturdays. Some courses, including all GIS classes, are offered online.

Specialty Areas:

Master of Science(MS)

- Environmental and Sustainability Engineering
- Geographic Information Systems (GIS)
- Geotechnical Engineering
- Hydrologic and Hydraulic Engineering
- Structural Engineering
- Transportation Engineering

Master of Engineering (MEng)

- Geographic Information Systems (GIS)

- Sustainable Infrastructure
- Transportation Systems

Degree Requirements

Two MS degree programs are available.

Plan I - Master's Thesis: This plan requires 24 semester hours of graduate-level course work and 6 semester hours of master's thesis credit.

Plan II - Master's Report: This plan requires 27 semester hours of graduate-level course work and 3 semester hours master's report credits.

Master of engineering students must follow Plan 2 above. Additionally, of those 30 semester hours, at least 15 hours must be completed with CE classes, including the master's report. The remaining hours may be completed in related disciplines that supplement the chosen area of study. Both the MS and MEng degrees require satisfactory completion of a written comprehensive exam and an oral defense of the master’s thesis or master’s report to a committee of at least three graduate faculty. Every graduate student must also satisfy the degree requirements of the Graduate School on the Denver campus, specified in the Information for Graduate Students chapter of this catalog. Both the MS and the MEng degree programs must be completed within seven years of the date the student begins the degree program.

Courses for both the MS and MEng degree programs are selected by mutual agreement of the student and his/her faculty advisor after admission to the degree program. The advisor may also specify undergraduate courses that must be completed before starting graduate course work, but these will not count toward the semester hour requirements for the degree. The student’s thesis or report topic must also be approved by the faculty advisor.

Requirements for Admission

GPA and GRE

Students with GPA's between 3.0 and 2.75 may be admitted provisionally, but are encouraged to submit official GRE scores to support their applications. Non-international applicants not wishing to take the GRE may gain admittance by registering as a nondegree student and completing three classes with a GPA of 3.25.

Transfer Credit:

Master's students may transfer up to 9 semester hours from another institution toward their master's degree, if approved by their advisor.

Program Prerequisites:

Prerequisite classes are in addition to the 30 semester hours needed to complete a master's degree, as they are necessary background information that is usually included in an engineering bachelor's program.

Students may complete prerequisite classes either before or after being admitted to a degree program. However, applicants with too many prerequisites may not gain admission. For applicants completing prerequisites after admission, all prerequisite courses must be completed before 12 of the 30 master's semester hours are complete.

Requests for applications for graduate study in civil engineering should be addressed to

CU Denver Department of Civil Engineering
Campus Box 113
P.O. Box 173364
Denver, CO 80217-3364.

Applicants who are not citizens or permanent residents of the United States must apply through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Doctor of Philosophy

Civil Engineering PhD

► Graduate School Rules apply to this program

The PhD degree in civil engineering is offered through a coordinated program with University of Colorado Boulder.

Specialty Areas for Degrees:

- Environmental and Sustainability Engineering
- Geotechnical Engineering
- Hydrologic and Hydraulic Engineering
- Structural Engineering
- Transportation Engineering
- Civil Engineering Systems

What is civil engineering systems?

The doctoral program in civil engineering systems has different rules than the five other traditional doctoral tracks in order to facilitate more interdisciplinary research. This doctoral track can be the degree that would follow a master's of engineering.

Additional Doctoral Admissions Requirements

In addition to the admissions requirements listed for master's students, doctoral applicants need to have the support of a faculty advisor before they are admitted. Once doctoral students are approved by the graduate admissions committee, their application must be reviewed again by the Department of Civil, Environmental and Architectural Engineering at CU Boulder as the programs are jointly administered. Prospective PhD students should contact the Department of Civil Engineering at CU Denver to inquire about application requirements and to obtain the “Rules and Policies for the Coordinated PhD Program.”

Requests for applications for graduate study in civil engineering should be addressed to

CU Denver Department of Civil Engineering
Campus Box 113
P.O. Box 173364
Denver, CO 80217-3364

Computer Science and Engineering

Chair: Gita Alaghband
Program Assistant: Frances Moore
Office: North Classroom, 2605
Telephone: 303-556-4083
Fax: 303-556-8369
Website: www.engineering.ucdenver.edu/cse

Faculty

Professors:

Gita Alaghband, PhD, University of Colorado
Tom Altman, PhD, University of Pittsburgh
Boris Stilman, PhD, National Research Institute for Electrical Engineering, Moscow, Russia

Associate Professors:

Bogdan Chlebus, PhD, Warsaw University, Poland
Min-Hyung Choi, PhD, University of Iowa
Ellen Gethner, PhD, University of British Columbia
Ilkyeun Ra, PhD, Syracuse University

Assistant Professor Clinical Teaching Track:

Richard Osborne, PhD, University of Colorado

Senior Instructor and Undergraduate Advisor:

Will Trobaugh, MS, University of Colorado

Mission and Vision Statement

With the advances in technology and the rapid and prevalent growth of the information-based economy, the computer science has become an enabling science for nearly all disciplines that impact engineering, science, business, health and government. The future of the discipline promises even more innovative advances. We in the Department of Computer Science and Engineering at the University of Colorado Denver are committed to providing outstanding education and research training to our diverse undergraduate and graduate students for productive careers in industry, academia and government in the Denver metropolitan area, state and beyond. Our faculty strive for excellence in teaching, research and service by covering a broad spectrum of the core fundamentals of the discipline as well as applied aspects including those of interdisciplinary nature. We will actively engage our students in classroom and out-of-classroom research and help them develop the skills needed to solve complex real-world technological problems of our modern society.

The Department of Computer Science and Engineering offers BS, MS and PhD degrees:

- The undergraduate BS degree is awarded in computer science and engineering (CSE). This curriculum is a rigorous study covering theoretical, software, hardware and their interfaces providing students with a coherent and in-depth education of key components of the field.
- The MS degree is awarded in computer science (CS) to those students who wish to pursue graduate studies to further develop their education. The MS in CS graduate program covers the core knowledge of key concepts of the computer science as well as offers flexibility to pursue specializing in various fields of interests.
- The PhD in computer science and information systems (CSIS) program is an interdisciplinary, joint program between the Department of Computer Science and Engineering in the College of Engineering and the Applied Science and Information Systems program in the Business School. The program offers a CS track with PhD degree awarded in CSIS from College of Engineering and an IS track where the degree is awarded in CSIS from the Business School.

Undergraduate

Computer Science and Engineering Program

Computers as a combination of software and hardware have become significant to the whole of society. They affect the way in which business is conducted and the way people study and learn. Very important is the use of computers to develop new avenues of human communication, interaction and cooperation. Communication networks and the combination of text with audio and video are providing more people with fingertip access to a vast array of information and knowledge.

The computer scientist and engineer is a professional who must be prepared to apply his or her skills, knowledge and creativity in a rapidly changing field. The bachelor of science in computer science and engineering at CU Denver prepares students for such creative work. The emphasis is on fundamental concepts and basic principles with a long useful life. The program is composed of five major study areas: mathematics, basic or engineering science, required computer science and engineering courses, technical electives and the CU Denver core curriculum.

The computer science and engineering program has dual accreditation from the Computing Accreditation Commission (CAC) and the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

Computer Science and Engineering Curriculum

The mathematics, basic science and computer science and engineering core requirements give the student a broad exposure to the concepts, methods and practice of computer science and engineering; the student learns the fundamentals of producing solutions to problems.

Technical electives are chosen to add depth to a student's knowledge in an area of special interest.

The Denver Campus core curriculum is designed to give the student an exposure to knowledge outside his or her major. For students in the College of Engineering and Applied Science, courses in the humanities, social sciences and human communications are required.

To be awarded the bachelor of science in computer science and engineering, a student must satisfactorily complete all course work shown in the curriculum below, satisfy all university graduation requirements and maintain at least a 2.0 GPA in all computer science courses attempted (see "Policy on Academic Progress" in the introductory section of this chapter). Students must meet with an undergraduate advisor each semester to assure that they are on track within the degree program and are aware of the current requirements of the program. An additional source of information is the "C SE Undergraduate Advising Handbook" or the department's Web site, www.ucdenver.edu/cse. Students are required to set up an appointment with the senior

check-out advisor before registering for the last 30 semester hours of their program. Upon completion of the 30-hour checkout, all students are required to schedule an appointment with the CSE undergraduate advisor to complete the graduation agreement. Prerequisites will be strictly enforced. *Note*: Prerequisites must be taken before a course that requires them; co-requisites may be taken before or concurrent with a course that requires them.

Graduate

The Department of Computer Science and Engineering (CSE) offers a master of science in computer science (MSCS). The CSE department, together with the Business School, also offers a joint program leading to a doctoral degree in computer science and information systems (CSIS).

Expertise expand several areas of research in algorithms, artificial intelligence, computer architectures, computer graphics, computational geometry, communication networks, computer security, database systems, distributed computing, high-performance computing, Internet, operating systems, parallel and distributed systems, simulation, software engineering and virtual reality.

Requests for applications for graduate study in computer science and engineering should be addressed to:

CU Denver Department of Computer Science and Engineering
Campus Box 109
P.O. Box 173364
Denver, CO 80217-3364

Applicants who are not citizens or permanent residents of the United States should make application through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Admission Requirements

Applicants should hold a bachelor’s degree from an institution comparable to the University of Colorado. They need to have sufficient programming experience and mathematical maturity to understand advanced courses. Qualified applicants holding a degree outside computer science, computer engineering or equivalent fields may need to take additional undergraduate courses before starting the graduate program.

Admission decisions are based on prior academic performance, letters of recommendation, English proficiency, if applicable, as well as the applicant's written statement of purpose.

Additional requirements include:
(1) 10 credit hours, on the semester basis, of university-level calculus
(2) at least one math course beyond calculus, such as advanced calculus, differential equations, linear algebra, probability, statistics or combinatorial analysis.

Students lacking some of these requirements, whose background is otherwise satisfactory, may be admitted with the understanding that the certain undergraduate courses have to be completed after admission.

Required GPA

Regular admission: Applicants should have an undergraduate GPA of at least 3.0.

Provisional admission: Applicants may be accepted as “provisional degree students.” This status is indicated in the acceptance letter along with the conditions that need to be satisfied by a specific deadline for the student to obtain regular status.

Transfer Credit
A maximum of 9 semester hours of graduate course work may be transferred into the program based on department approval. In principle, core courses must be taken from the CSE department at CU Denver.
Note: Candidates applying for the MS study will be individually evaluated by the department’s graduate committee. A letter with a decision will be sent to the applicant by the CSE chair.

Computer Science and Information Systems PhD

Admission

Prospective students apply to either the Department of Computer Science and Engineering (CSE) or the Business School. Applicants who pass the initial screening are then reviewed by a joint committee (consisting of the two co-directors of the program) for the final admittance decision.

Admission criteria include GPA (undergraduate and graduate), standardized test scores (GMAT or GRE), letters of recommendation, prior achievements in academia and industry and an application portfolio essay describing an applicant’s motivation and an initial plan for doctoral study. The application portfolio is important to gauge an applicant’s motivation for research training.

Students without a master’s degree in either computer science or information systems will need to take additional course work sufficient to complete the requirements of a master’s degree in one of the two areas.

Supervision of the PhD Program

The PhD program is supervised by the two program co-directors. The duties of the co-directors include scheduling of doctoral courses, setting program policies subject to approval of business and CSE faculty, working with advisors to ensure compliance with the program guidelines, resolving disputes, measuring performance of the program over time and providing the final decision on admittance of students.

Advisor

Upon entering the program, each chooses an advisor to provide mentoring and guidance throughout the program and work with the student to prepare a program of study. Requests to change advisors must be approved by the program co-directors, and this happens in very rare circumstances.

Doctoral Committee

The advisor and four other members form a doctoral committee. To foster interdisciplinary work, you may have your doctoral research co-supervised by two faculty members. At least one co-supervisor must be a full-time current graduate faculty member in the CSE department or Business School. The committee must contain at least one faculty member from the CSE department and at least one from the Business School. At least one committee member is from outside of the CSE department and the information systems faculty.

Bachelor of Science

Computer Science and Engineering BS

Program Objectives

The objectives of the bachelor of science degree in the computer science and engineering program are to:

1. Produce graduates who are successful professionals in computer science and engineering
2. Prepare students for graduate or professional study
3. Develop team building
4. Involve students in software design and projects
5. Support and enhance leadership skills
6. Produce students who can communicate effectively

Measurable Outcomes

To attain the educational objectives of the BS CSE program, the CSE department intends to produce the following measurable outcomes at the time of graduation. Graduates of the BS CSE program will have the following skills:

- an ability to apply knowledge of mathematics, science and engineering
- an ability to analyze a problem and identify and define the computing requirements appropriate to its solution
- an ability to design and conduct software and/or hardware experiments, as well as to analyze and interpret data
- an ability to design software and/or hardware to meet desired needs
- an ability to function on multidisciplinary teams
- an ability to identify, formulate and solve computer science and engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering and computer science solutions in a global and societal context
- a recognition of the need for, and an ability to engage in, lifelong learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills and modern tools necessary for computer science and engineering practice
- an ability to display leadership

Typical Curriculum for BS in Computer Science and Engineering

For up-to-date information, please refer to the current undergraduate handbook from CSE department website under degree programs at http://engineering.ucdenver.edu/cse

Freshman Year

First Semester

- CSCI 1410 - Fundamentals of Computing **gtPATHWAYS:**
- CSCI 1411 - Fundamentals of Computing Laboratory **gtPATHWAYS:**
- CSCI 1510 - Logic Design **gtPATHWAYS:**
- ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01 (see note 1)
- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1

Core Curriculum Elective. Semester Hours: 3 (see note 1)

Total: 17 Hours

Second Semester

- CSCI 2312 - Intermediate Programming **gtPATHWAYS:**
- MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
- PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
- PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
- ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02

Total: 15 Hours

Sophomore Year

First Semester

- CSCI 2421 - Data Structures and Program Design **gtPATHWAYS:**
- CSCI 2511 - Discrete Structures **gtPATHWAYS:**
- CSCI 2525 - Assembly Language and Computer Organization **gtPATHWAYS:**
- PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
- PHYS 2341 - General Physics Lab II **gtPATHWAYS:**
  Core Curriculum Elective Semester Hours: 3 (see note1)

Total: 17 Hours

Second Semester

- CSCI 2132 - Circuits and Electronics **gtPATHWAYS:**
- CSCI 3320 - Advanced Programming **gtPATHWAYS:**
- CSCI 3412 - Algorithms **gtPATHWAYS:**
  Core Curriculum Elective Semester Hours: 3 (see note 1)
- CSCI 3287 - Database System Concepts **gtPATHWAYS:**

Total: 15 Hours

Junior Year

First Semester

- CSCI 3415 - Principles of Programming Languages **gtPATHWAYS:**
- CSCI 3453 - Operating System Concepts **gtPATHWAYS:**

- CSCI 3511 - Hardware-Software Interface **gtPATHWAYS:**
- CSCI 3560 - Probability and Computing **gtPATHWAYS:**
  CSE Tech Elective. Semester Hours: 3
  Core Curriculum Elective Semester Hours: 3 (see note 1)

Total: 18 Hours

Second Semester

- CSCI 3508 - Introduction to Software Engineering **gtPATHWAYS:**
- MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**
  CSE Tech Elective. Semester Hours: 3
  CSE Tech Elective. Semester Hours: 3
  Core Curriculum Elective. Semester Hours: 3 (see note 1)

Total: 16 Hours

Senior Year

First Semester

- CSCI 3287 - Database System Concepts **gtPATHWAYS:**
- CSCI 4034 - Theoretical Foundations of Computer Science **gtPATHWAYS:**
- CSCI 4650 - Numerical Analysis I **gtPATHWAYS:**
- CSCI 4738 - Senior Design I **gtPATHWAYS:**
  CSE Tech Elective. Semester Hours: 3

Total: 15 Hours

Second Semester

- CSCI 4739 - Senior Design II **gtPATHWAYS:**
- CSCI 4591 - Computer Architecture **gtPATHWAYS:**
- CSCI 4761 - Introduction to Computer Networks **gtPATHWAYS:**
  CSE Tech Elective. Semester Hours: 3
  Core Curriculum Elective Semester Hours: 3 (see note 1)

Total: 15 Hours

Program Total: 128 Hours

In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior-level courses.

1. CU Denver core curriculum: core requirements of the College of Engineering and Applied Science are outlined in the section titled “Undergraduate Core Curriculum in Engineering”. In the communication area, students must pass ENGL 1020-3, Core Composition I, with a C- or better prior to taking either CSCI 2421 or CSCI 4739.
2. Computer science and engineering technical electives: The student must take five courses (15 semester hours) chosen from any CSCI 3000 or 4000-level courses that are not part of the required bachelor of science in computer science and engineering curriculum. The 2000-level CSCI "Practical Systems Administration" course will be counted as one CSCI elective. ELEC 4000-level computer engineering courses may be taken to satisfy a CSE tech elective with prior approval of a CSE academic advisor.

Non Degree

Computer Science Minor

The Department of Computer Science and Engineering offers a minor in computer science. The requirements for the minor are listed below.

Program Requirements

1. Any undergraduate student currently enrolled in a CU Denver degree program with a major other than computer science and engineering may earn a minor in computer science. This includes students from the College of Engineering and Applied Science, the College of Liberal Arts and Sciences, the Business School, the College of Arts & Media and the School of Public Affairs.
2. The student must complete the following classes with a grade of *C*- or better:

- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
- MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
- CSCI 1410 - Fundamentals of Computing **gtPATHWAYS:**
- CSCI 1411 - Fundamentals of Computing Laboratory **gtPATHWAYS:**
- CSCI 2312 - Intermediate Programming **gtPATHWAYS:**
- CSCI 2421 - Data Structures and Program Design **gtPATHWAYS:**
- CSCI 2511 - Discrete Structures **gtPATHWAYS:**

3. The student must complete (with a *C*- or better) three additional computer science courses at the 3000 level or higher with the approval of an undergraduate advisor.

Note: Some courses at the 3000 level and above require additional prerequisites. A student must fulfill all prerequisites for the courses he/she selects. See the catalog course descriptions for prerequisite information for each course.

4. All computer science courses 3000 level and above must be taken at the Denver campus.
5. At the time of graduation, the student must have a UC Denver cumulative GPA of 2.0 and must have a 2.0 GPA for the eight classes taken for the minor.
6. The student must file a minor declaration form with an undergraduate advisor or with the Engineering Student Services office in North Classroom, 3024. For more information or an advising appointment, contact the Department of Computer Science and Engineering in North Classroom, 2605, or by phone at 303-556-4314.

Master of Science

Computer Science MS

► Graduate School Rules apply to this program

General MS Degree Requirements

In addition to the basic requirements of the university, the Department of Computer Science and Engineering requires master's degree candidates to complete an approved program of study consisting of at least 30 semester hours of graduate-level computer science courses and a thesis or project while maintaining a GPA of at least 3.0. With prior approval of the graduate committee, a student may substitute up to 9 semester hours of graduate-level mathematics or other engineering courses. All courses must be taught by University of Colorado graduate faculty.

A student must submit an approved plan of study to the department during the first semester of his/her admission. An academic advisor will consult with each student to develop a plan of study.

Adequate Progress toward MS in Computer Science Degree

Students are expected to finish the MS degree program within five years. Candidates for the MS degree may not get credit for a course taken longer than five years before the date on which the degree is to be granted.

Students who do not enroll for any course work relevant to computer science in a given semester (summer semesters excluded) must supply the Department of Computer Science and Engineering with a written statement describing the reason for the inactivity. Students who are inactive for three consecutive semesters (summer semesters excluded) will be removed from the program, and must re-apply for admission.

Students may choose either Plan I (thesis) or Plan II (MS project).

For up-to-date information, please refer to the current graduate handbook from CSE department website under degree programs at http://engineering.ucdenver.edu/cse

Plan I—Thesis

Students choosing Plan I take 24 semester hours of graduate course work and conclude their program with 6 semester hours of thesis work. A minimum of three courses must be chosen from among five “core” courses and must be passed with a grade of B or better. Three additional courses must be chosen from among more than a dozen “breadth” courses. Plan I students must also write a thesis and defend it before a thesis committee. The students in Plan I may take one independent study course for a maximum of 3 hours.

Plan II—MS Project

Students choosing Plan II take 27 semester hours of graduate course work and conclude their program with 3 semester hours of MS project work. A minimum of three courses must be chosen from among five “core” courses and must be passed with a grade of B or better. Three additional courses must be chosen from among more than a dozen “breadth” courses. Plan II students must also write an MS project report and defend it before an MS project committee. The students in Plan II may take one independent study course for a maximum of 3 semester hours.

Note: Students can take only graduate engineering (21 semester hours must be CS courses) and graduate mathematics courses. No more than 6 semester hours can be taken in the form of online courses.

Doctor of Philosophy

Computer Science and Information Systems PhD

► Graduate School Rules apply to this program

Program co-directors: Gita Alaghband (CSE) and Mike Mannino (Business School)

Website: http://engineering.ucdenver.edu/CSISPhD

The Department of Computer Science and Engineering (CSE) and the Business School offer a joint doctor of philosophy degree program in computer science and information systems (CSIS). The program targets students with a master's-level education in either computer science or information systems who seek research training that combines CS and IS along with strong industry interaction. The joint PhD program provides training for academic positions, industrial research positions and senior consulting positions. The specific goals of the program complement these general goals:

- create a pool of graduates with CSIS research training who are qualified for academic and nonacademic careers
- meet student demand for advanced training in CSIS with accommodations for full-time and part-time students
- promote interdisciplinary research between CSE and the Business School
- enhance technology transfer between CSIS academic units and Front Range technology businesses through joint research, student internships, faculty externships and committee participation

Advisor

Upon entering the program, each chooses an advisor to provide mentoring and guidance throughout the program and work with the student to prepare a program of study. Requests to change advisors must be approved by the program co-directors, and this happens in very rare circumstances.

Doctoral Committee

The advisor and four other members form a doctoral committee. To foster interdisciplinary work, you may have your doctoral research co-supervised by two faculty members. At least one co-supervisor must be a full-time current graduate faculty member in the CSE department or Business School. The committee must contain at least one faculty member from the CSE department and at least one from the Business School. At least one committee member is from outside of the CSE department and the information systems faculty.

Program Components

Plan of Study

A list of course work and other requirements for the degree should be prepared with the advisor and then submitted to the co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the

beginning of the second year of the program and submitted for reapproval by the co-directors.

Preliminary Exam

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the PhD CSIS website.

Comprehensive Exam

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition, and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

Dissertation Proposal

Each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

Dissertation Completion

Once the dissertation proposal is approved, each student prepares and submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense.

Graduation

Upon completion of all degree requirements including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through CSE

receive the PhD from the College of Engineering and Applied Science, while students applying through information systems receive the PhD from the Business School.

Electrical Engineering

Chair: Miloje Radenkovic
Associate Chair: Dan Connors
Administrative Assistant: Janiece Hockaday
Office: North Classroom, 2615
Telephone: 303-556-2872
Fax: 303-556-2383
Website: www.engineering.ucdenver.edu/electrical

Faculty

Professors:

Hamid Fardi, PhD, University of Colorado Boulder
Titsa Papantoni, PhD, University of Southern California, Professional Engineer (PE)—Greek Chamber of Professional Engineers and Texas
Miloje Radenkovic, PhD, University of Belgrade, Yugoslavia

Associate Professor:

Jan Bialasiewicz, PhD, DSc, Silesian Technical University, Poland, PE—Colorado

Assistant Professors:

Dan Connors, PhD, University of Illinois Urbana-Champaign
Yiming Deng, PhD, Michigan State University
Mark Golkowski, PhD, Stanford University
Tim Chifong Lei, PhD, University of Michigan
Fernando Mancilla-David, PhD, University of Wisconsin at Madison
Jaedo Park, PhD, The Pennsylvania State University

Senior Instructors:

Brian Atkinson, MS, University of Colorado Denver
Robert Grabbe, MS, University of Colorado Denver

Professor Adjunct:

Carl Johnk, PhD, University of Illinois Urbana-Champaign

Modern electrical engineering is a very broad and diverse field. Never before has there been such a challenge and opportunity for electrical engineering to serve mankind. Today's electrical engineers are involved in the development of technology, materials and products to improve the quality of life. They are concerned with the generation and transmission of power, the control and utilization of natural and synthetic resources, the communication of data and information and the intelligent use of computers in consumer as well as industrial products and processes. Systems in electrical engineering range in size from microprocessors through megawatt energy conversion systems to global audio and video communication networks.

At CU Denver, the electrical engineering curriculum prepares students for careers in product design, manufacturing, research, development, operation and plant engineering, technical sales and application engineering. The goal is to educate and inspire students to achieve their maximum career potential.

Mission Statement

We provide graduate programs and an ABET-accredited undergraduate program that are accessible to a diverse group of students—students of different racial and cultural backgrounds, full-time students as well as those who have considerable work and family commitments outside their academic learning and students with a wide variety of work experiences.

Undergraduate

Entering students begin their program with a solid foundation in mathematics, physics, chemistry and computers. Social science, humanities and communication courses provide a diverse background. Intensive courses follow in the theory and laboratory application of digital logic and electrical circuits, electromagnetic fields, electronics, computer engineering and digital hardware design, linear systems, controls, electrical machines and power systems and microprocessors. Throughout the entire course of study, students reinforce their understanding of theory through laboratory experience and extensive design projects. A strong background is provided in all of the major fields of electrical engineering: circuits and electronics, microcomputers, signal and image processing, communications, autonomous and robotic systems, power and energy conversion, and automatic control systems and instrumentation. Ethics is an integral part of the curriculum. During the senior year, advanced undergraduate-level courses in different specialty areas, design projects and professional electives allow the student to explore areas of special interest.

Students should supplement this information about the curriculum by consulting a copy of the "E E Advisement Guide," which may be obtained in the Department of Electrical Engineering office located in North Classroom, 2615. The "E E Advisement Guide" contains the latest information concerning the curriculum as well as guidelines and procedures with which each student should be familiar. To be awarded the bachelor of science in electrical engineering, a student must satisfactorily complete 128 semester hours, satisfy all university graduation requirements and maintain at least a 2.0 GPA in

all electrical engineering and computer science courses attempted. Appointments to see any of the departmental advisors may be made by calling 303-556-2872.

Graduate

The Department of Electrical Engineering offers graduate programs with the following areas of emphasis: communications and signal processing; controls and signal processing; microelectronics and VLSI; fields, waves and optics; computer engineering and embedded systems design; and energy and power systems. The department offers graduate programs leading to the degrees of master of science in electrical engineering and master of engineering.

Requirements for Admission

Applicants, who are U.S. citizens or permanent residents, should request an application through:

Department of Electrical Engineering
University of Colorado Denver
110 UCD
P.O. Box 173364
Denver, CO 80217-3364
Telephone: 303-556-2872
Facsimile: 303-556-2383

Applicants, who are not U.S. citizens or permanent residents of the United States, should make application through the University of Colorado Denver, Office of International Education, 185 UCD, P.O. Box 173364, Denver, CO 80217-3364, U.S.A.; telephone 303-315-2231; facsimile 303-315-2246. All applicants for admission need to submit complete credentials as outlined in the instruction sheet which accompanies the application materials. Three recommendations are required.

The minimum requirements for “regular” admission to the master's program are: BS in electrical engineering, or equivalent degree in math, physics or other engineering disciplines, from a reputable institution, with a GPA of at least 3.0, on a 4.0 scale. Satisfaction of minimum requirements does not guarantee admission: The grades obtained in the student’s area of concentration are important factors in the consideration, and so are possible multiple repetitions of fundamental courses. Students who do not meet the requirements for direct admission to the program may be admitted “conditionally”: that is, they may be required to take or repeat certain undergraduate courses before their admission to the program is official.

For those undergraduate students with degrees in science and non-electrical engineering wishing to pursue graduate study in the Electrical Engineering Department there is no restriction or constraint in being admitted into the master of science in electrical engineering graduate program. However, they must fulfill any prerequisite

course requirements assigned to any graduate course in the department. Students with an undergraduate degree in areas other than electrical engineering must also see their graduate instructor to receive approval before registering for a class in electrical engineering.

Students must plan a program of study in consultation with their departmental advisor(s), during the first semester of study, and submit for approval to the department.

Bachelor of Science

Electrical Engineering BS

Undergraduate Program Objectives

Objectives of the bachelor of science in electrical engineering are to develop graduates:

- who are immediately productive engineers and can advance their careers on different professional tracks in the engineering industry
- who can pursue graduate education in engineering or other fields such as business, medicine and law

These objectives are consistent with the mission of the University of Colorado Denver, congruent with the goals of the College of Engineering and Applied Science and reflective of the mission of the Department of Electrical Engineering.

Typical Curriculum for BS (Electrical Engineering)

Freshman Year

First Semester

- CHEM 1130 - Engineering General Chemistry **gtPATHWAYS:**
- ELEC 1201 - Introduction to Electrical Engineering **gtPATHWAYS:**
- ELEC 1510 - Logic Design **gtPATHWAYS:**
- ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01 (*see note 1*)
- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1

Total: 16 Hours

Second Semester

- ELEC 1520 - Embedded Systems Engineering I **gtPATHWAYS:**

- ELEC 2531 - Logic Laboratory **gtPATHWAYS:**
- MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
- PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
- PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
  Core Curriculum Elective (*see note 1*) (3 semester hours)

Total: 16 Hours

Sophomore Year

First Semester

- ELEC 2132 - Circuit Analysis I **gtPATHWAYS:**
- ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02
- MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
- MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**
- PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**

Total: 18 Hours

Second Semester

- ELEC 2142 - Circuit Analysis II **gtPATHWAYS:**
- ELEC 2552 - Sophomore Circuits Laboratory **gtPATHWAYS:**
- ELEC 2520 - Embedded Systems Engineering 2 **gtPATHWAYS:**

Total: 13 Hours

Junior Year

First Semester

- ELEC 3133 - Electromagnetic Fields **gtPATHWAYS:**
- ELEC 3215 - Electronics I **gtPATHWAYS:**
- ELEC 3316 - Linear Systems Theory **gtPATHWAYS:**
- ELEC 3651 - Digital Hardware Design **gtPATHWAYS:**
- ELEC 3715 - Electronics Laboratory **gtPATHWAYS:**
  Core Curriculum Elective (*see note 1*) (3 semester hours)

Total: 16 Hours

Second Semester

- ELEC 3164 - Energy Conversion **gtPATHWAYS:**
- ELEC 3225 - Electronics II **gtPATHWAYS:**
- ELEC 3724 - Energy Conversion Laboratory **gtPATHWAYS:**
- ELEC 3735 - Junior Laboratory **gtPATHWAYS:**
- ELEC 3817 - Engineering Probability and Statistics **gtPATHWAYS:**
  Core Curriculum Elective (*see note 1*) (3 semester hours)

Total: 17 Hours

Senior Year

First Semester

- ELEC 4309 - Senior Design Project I **gtPATHWAYS:**
  Engineering Science Elective (*see note 4*) (3 semester hours)
  ELEC Specialty and Laboratory (*see note 5*) (4 semester hours)
  ELEC Specialty Course (3 semester hours)

Total: 16 Hours

Second Semester

- ELEC 4319 - Senior Design Project II **gtPATHWAYS:** *(see note 3)*
  Professional Elective (*see note 3*) (3 semester hours)
  ELEC Specialty and Laboratory (*see note 6*) (4 semester hours)
  ELEC Specialty *(see note 6*) (3 semester hours)
  Core Curriculum Elective (*see note 1*) (3 semester hours)

Total: 16 Hours

Program Total: 128 Hours

The particular curriculum to be satisfied by each student is the one published in the catalog current at the time of his/her 30-hour senior checkout. A graduation agreement should be requested by each student after completing registration for his/her last semester. Additional information is contained in the “E E Advisement Guide.” Students should also refer to the section in this catalog on “Academic Policies of theCollege of Engineering and Applied Science.”

1. Common core requirements of the College of Engineering and Applied Science are outlined in the section titled “Undergraduate Core Curriculum in Engineering” in this catalog or in the “E E Advisement Guide.”
2. All electrical engineering students must satisfactorily complete ELEC 4309, Senior Design Project I, and ELEC 4319, Senior Design Project II, in consecutive semesters.
3. Professional electives may be selected from an approved list of upper-division or graduate-level courses or cooperative education. The electrical engineering advisor must be consulted prior to the selection of these electives.
4. The engineering science elective may be satisfied by taking ENGR 3012, Thermodynamics.
5. Seventeen semester hours of electrical engineering elective and specialty courses in association with the laboratories are required.

Laboratory Requirements

Students are required to take at least two laboratories out of the following six groups.Theory components are either prerequisites or corequisites to the laboratory components.The theory component may be taken as a specialty course.

- ELEC 4136 - Control Systems Analysis **gtPATHWAYS:**
- ELEC 4276 - Digital Control Systems **gtPATHWAYS:**
- ELEC 4406 - Control Systems Laboratory **gtPATHWAYS:**

- ELEC 4225 - Advanced Electronics **gtPATHWAYS:**
- ELEC 4435 - Advanced Electronics Laboratory **gtPATHWAYS:**

- ELEC 4247 - Communication Theory **gtPATHWAYS:**
- ELEC 4248 - Digital Communication Systems **gtPATHWAYS:**
- ELEC 4467 - Communications Laboratory **gtPATHWAYS:**

- ELEC 4133 - Advanced Electromagnetic Fields **gtPATHWAYS:**
- ELEC 4423 - Microwave Laboratory **gtPATHWAYS:**

- ELEC 4501 - Microprocessor Based Design **gtPATHWAYS:**
- ELEC 4521 - Microprocessor Laboratory **gtPATHWAYS:**

- ELEC 4511 - Hardware-Software Interface **gtPATHWAYS:**
- ELEC 4561 - Hardware-Software Lab **gtPATHWAYS:**

Other courses available (without any laboratory component) as electrical engineering specialty courses include the following:

- ELEC 4174 - Power Electronic Systems **gtPATHWAYS:**
- ELEC 4184 - Power Systems Analysis **gtPATHWAYS:**
- ELEC 4025 - Device Electronics **gtPATHWAYS:**
- ELEC 4555 - VLSI Circuit Simulation **gtPATHWAYS:**

Computer Engineering Option

Students can add a computer engineering emphasis to their electrical engineering degree program by making the following changes in the curriculum described above:

Junior Year

First Semester

Substitute ELEC 3651 Digital Hardware Design for ELEC 3817 Engineering Probability and Statistics.

Second Semester

Substitute ELEC 3817, Engineering Probability and Statistics for ELEC 3651 Digital Hardware Design, ELEC 3724 Power Laboratory, and a humanities and social sciences course.

Senior Year

First Semester

Choose ELEC 4501, Microprocessor-based Design, and ELEC 4521, Microprocessor Laboratory, as one electrical engineering specialty and laboratory selection.

Second Semester

Choose ELEC 4511, Hardware-Software Interface Design, ELEC 4561, Hardware-Software Laboratory, and a humanities and social sciences elective as professional elective and electrical engineering specialty and laboratory selections.

Master of Engineering

Electrical Engineering MEng

► Graduate School Rules apply to this program

The master of engineering (MEng) degree program is broad based and is designed especially for that person who wants to further his/her education in more than just electrical engineering. A minimum of 30 semester hours of academic work is required for the MEng degree. At least 15 of these hours must be in electrical engineering courses at the 5000-level or above. At least 15 semester hours must be taken in the Department of Electrical Engineering at CU Denver. As many as 15 semester hours may be taken outside of engineering. The student who wishes to enter the master of engineering program should apply to the electrical engineering department in the same manner as a master of science applicant.

Master of Science

Electrical Engineering MS

► Graduate School Rules apply to this program

The master of science (MS) program offers two plans, thesis (Plan I) and master's project (Plan II). In each, the student must complete 30 graduate semester hours. To satisfy the breadth requirement, two courses outside the area of specialization are required and two mathematics courses are recommended. Plan I requires a minimum of 24 semester hours of graduate course work and 6 semester hours of MS thesis work. Plan II requires a minimum of 27 semester hours of graduate course work and 3 semester hours of MS project. A minimum of 21 graduate semester hours must be earned through the electrical engineering department at CU Denver. Candidates with a BS degree from CU Denver can count 6 electrical engineering UC Denver graduate credits toward both undergraduate and graduate degrees if their undergraduate GPA is at least 3.0. Double counting applies only to credits earned with a B or better grade.

Mechanical Engineering

Chair: Samuel W. J. Welch
Program Assistant: Petrina M. Morgan
Office: North Classroom, 3502
Telephone: 303-556-8516

Fax: 303-556-6371
Web site: www.engineering.ucdenver.edu/mechanical

Faculty

Professors:

Peter E. Jenkins, PhD, Purdue, MBA, Pepperdine, Professional Engineer, PE—Texas

J. Kenneth Ortega, PhD, University of Colorado

John A. Trapp, PhD, University of California at Berkeley

Associate Professors:

Ronald A. L. Rorrer, PhD, Virginia Polytechnic Institute and State University, PE—Colorado

L. Rafael Sanchez, PhD, Michigan Technological University, PE—Colorado

Mohsen Tadi, PhD, Virginia Polytechnic Institute and State University

Samuel W. J. Welch, PhD, University of Colorado

Assistant Research Professor:

Atousa Plaseied, PhD, University of Toledo

Senior Instructor:

Joseph F. Cullen Jr., MS, University of Colorado

Professor Emeritus:

James Gerdeen, PhD, Stanford University

Associate Professor Emeritus:

B. Thomas Arnberg, MS, University of Colorado

Mission Statement

The mission of the Department of Mechanical Engineering is to contribute to the economic development of the state of Colorado and the Denver metropolitan area by providing high-quality bachelor's and master's programs (BS, MS and MEng) in mechanical engineering for a diverse group of working students

Program Objectives

The programs offered by the Department of Mechanical Engineering of the University of Colorado Denver can be completed in the afternoon and evening hours to accommodate both working and traditional students. The department seeks to graduate a diverse population of students with bachelor's and master's degrees, enabling them to:

- be employed by a diverse group of industries, research laboratories and educational institutions
- pursue careers in traditional engineering, interdisciplinary areas, research and education
- pursue postgraduate education and advanced degrees

Undergraduate

The mechanical engineer is concerned with satisfying the needs of society using a combination of material, human and economic resources. Mechanical engineering covers a wide spectrum of activities in the engineering profession. These activities include the conversion and transmission of energy and associated power processes; the kinematic, dynamic, strength and wear considerations, as well as economic aspects of the development, design and use of materials, machines and processes; and the analysis, synthesis and control of entire engineering systems.

The mechanical engineering curriculum begins with a strong emphasis on mathematics, physics and chemistry. It continues with a concentration in engineering sciences, including solid and fluid mechanics; thermodynamics, heat and mass transport; materials; and systems analysis and control. It concludes with laboratory and design courses that demonstrate the ways in which scientific knowledge is applied in the design and development of useful devices and manufacturing processes.

The mechanical engineering program may be roughly subdivided into two-year groupings. In the first two years, the program emphasizes the fundamentals of mathematics and basic science that are essential for an understanding of most branches of engineering. In the last two years of the program, the curriculum emphasizes engineering science and design and provides technical electives in the following areas:

- thermodynamics
- heat transfer
- fluid mechanics
- solid mechanics
- power
- bioengineering
- dynamics and controls
- computer-aided design and manufacturing
- thermomechanical systems
- composite materials

To be awarded the BS in mechanical engineering, a student must complete a minimum of 128 semester hours of course work, must satisfy all university graduation requirements and maintain at least a 2.0 GPA in all mechanical engineering courses. All students are required to set up an appointment with the senior check-out advisor before registering for the last 30 hours of their degree program. The last 30 hours must be earned as a degree-seeking student in the College of Engineering and Applied Science at CU Denver.

Graduate

The Department of Mechanical Engineering offers graduate courses, a master of science (MS) degree program and a master of engineering (MEng) program. The PhD in mechanical engineering is offered through the Department of Mechanical Engineering, University of Colorado Boulder. The areas of research interest in which a student may undertake studies at the Denver campus include manufacturing processes, fluid mechanics, solid mechanics, bioengineering, energy thermodynamics and composite materials.

As a student in the MS or MEng program, you must meet with your graduate advisor before or during your first semester and design a sequence of elective courses that form a coherent program plan.

Requests for applications for graduate study in mechanical engineering should be addressed to:

CU Denver Department of Mechanical Engineering
Campus Box 112
P.O. Box 173364
Denver, CO 80217-3364

Applicants who are not citizens or permanent residents of the United States should make application through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217- 3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Concurrent Bachelor's/Master's Degrees

Students wishing to obtain a BS degree with a major in mechanical engineering and either the MS or the MEng degree in mechanical engineering may do so with up to 6 semester hours of 5000-level or above courses applying to both degrees. The 5000-level courses must meet the degree requirements for the graduate degree sought and must be suitable technical electives for the undergraduate degree. This option is open only for students seeking both degrees at CU Denver. Students must meet admission requirements to be accepted into the graduate program. Completion of two 5000-level courses does not guarantee admission into the graduate program. Please see an Engineering Student Services advisor for restrictions and guidelines.

PhD Program

The PhD in mechanical engineering is available through the Department of Mechanical Engineering at University of Colorado at Boulder. Denver campus faculty may serve as research advisors by individual arrangement.

Bachelor of Science

Mechanical Engineering BS

Typical Curriculum for BS (Mechanical Engineering—see note 1)

Freshman Year

First Semester

- CHEM 1130 - Engineering General Chemistry **gtPATHWAYS:**
- ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01 (*see note 2*)
- MECH 1025 - CAD and Graphics for Mechanical Engineering **gtPATHWAYS:**
- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1

Total: 15 Hours

Second Semester

- MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
- PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**

- PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
  Core Curriculum Electives (*see note 3*) (6 semester hours)

Total: 15 Hours

Sophomore Year

First Semester

- MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
- MECH 2023 - Statics **gtPATHWAYS:** *(see note 4)*
- PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
- PHYS 2341 - General Physics Lab II **gtPATHWAYS:**
  Core Curriculum Electives *(see note 3)* (6 semester hours)

Total: 18 Hours

Second Semester

- ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02
- MECH 3012 - Thermodynamics **gtPATHWAYS:**
- MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**
- MECH 2033 - Dynamics **gtPATHWAYS:** (*see note 4)*
- MECH 3030 - Electric Circuits and Systems **gtPATHWAYS:**
- MECH 3032 - Electric Circuits and Systems Lab **gtPATHWAYS:**

Total: 17 Hours

Junior Year

First Semester

- MECH 3010 - Elementary Numerical Methods and Programming **gtPATHWAYS:**
- MECH 3021 - Introduction to Fluid Mechanics **gtPATHWAYS:**
- MECH 3022 - Thermodynamics II **gtPATHWAYS:**
- MECH 3027 - Measurements **gtPATHWAYS:**
- MECH 3028 - Laboratory of Mechanical Measurements **gtPATHWAYS:**
- MECH 3043 - Strength of Materials **gtPATHWAYS:**

Total: 16 Hours

Second Semester

- MECH 3023 - System Dynamics I: Vibrations **gtPATHWAYS:**
- MECH 3024 - Introduction to Materials Science **gtPATHWAYS:**
- MECH 3031 - Fluids/Thermal Laboratory **gtPATHWAYS:**
- MECH 3034 - Properties of Engineering Materials **gtPATHWAYS:**
- MECH 3035 - Design of Mechanical Elements **gtPATHWAYS:**
- MECH 3042 - Heat Transfer **gtPATHWAYS:**
- MECH 3065 - Intermediate Dynamics **gtPATHWAYS:**

Total: 17 Hours

Senior Year

First Semester

- MECH 3145 - Manufacturing Processes Design **gtPATHWAYS:**
- MECH 4023 - System Dynamics II: Controls **gtPATHWAYS:**
- MECH 4035 - Senior Design I **gtPATHWAYS:**
  MECH Technical Electives *(see note 5)* (6 semester hours)

Total: 15 Hours

Second Semester

- MECH 4045 - Senior Design II **gtPATHWAYS:**
  MECH Technical Electives (6 semester hours)
  Core Curriculum Electives (*see note 3*) (6 semester hours)

Total: 15 Hours

Notes

1. Students enrolled prior to fall 2006 may choose either the new core curriculum or the old core curriculum.
2. The communication requirements include ENGL 1020 and ENGL 2030.
3. Common core requirements of the College of Engineering and Applied Science. Refer to the “Undergraduate Core Curriculum in Engineering” in this catalog or to the “Common Core Requirements” guide available from your advisor for further information.
4. CVEN 2121 and CVEN 3111 may be substituted for MECH 2023 and MECH 2033 respectively.
5. Not all courses may be offered every semester.

Program Total: 128 Hours

Students should check with departmental advisors to determine their degree requirements. The particular curriculum to be satisfied by each student is the one published in the catalog *current* at the time of their matriculation. For additional information, see the departmental advisor.

Students should refer to the section in this chapter on “Academic Policies” of the College of Engineering and Applied Science. In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior level courses and should have completed their junior-level mechanical engineering courses before starting their senior-level mechanical engineering electives. All students should see their advisors at least once each semester.

Master of Engineering

Mechanical Engineering MEng

► Graduate School Rules apply to this program

The master's of engineering (MEng) is an interdisciplinary degree program designed to meet the needs of those practicing engineers who wish to follow an integrated program of studies in engineering and allied subjects related to the individual student’s professional work. Students can combine advanced engineering course work with graduate-level non-engineering courses such as business administration, environmental sciences, social sciences, biological sciences or public administration.

Prospective students are required to present a well-defined objective in order to be admitted to the program. In consultation with faculty advisors, an academic program is developed to meet this objective.

An advisory committee will be appointed for each student by the department. The advisory committee that guides the student is responsible for approving the individual’s degree program and admission to candidacy, and approves the student’s written report and the awarding of the degree.

The requirements for admission are the same as those for the MS degree awarded through the College of Engineering and Applied Science. A minimum of 30 semester hours of academic work are required for the MEng degree. At least 15 of these hours must be at the 5000 level or above in mechanical engineering. A maximum of 12 semester hours may be taken outside of engineering. In addition to course work, a written report is required in the MEng program as a final project (3 semester hours). The report may be related to the student’s professional work. The report will be of the same

general quality as that required for the master of science thesis and must be defended orally. It may be based on work done for credit under independent study.

Master of Science

Mechanical Engineering MS

► Graduate School Rules apply to this program

For the master of science (MS) degree in mechanical engineering, students may choose between two plans with each plan totaling 30 semester hours. Students following Plan I (thesis option) take 24 semester hours of formal course work plus 6 semester hours of thesis work. Students following Plan II (project option) take 27 semester hours of formal course work plus a 3 semester hour final project requiring a report. Students following Plan I or Plan II must submit a proposal to their examination committee prior to the semester in which they register for their thesis or project semester hours, and the examination committee must approve the proposal for the thesis or project.

Students in either plan may choose one of three options. In the first two options, the student may choose to specialize in either thermal science or mechanics. The third option is the general mechanical engineering option.

The **thermal science option** requires 12 semester hours of course work in analytical methods, numerical methods, fluid mechanics and thermodynamics. The student then selects 9 semester hours of course work in approved electives from a selection of thermal science electives.

The **mechanics option** requires 12 semester hours of course work in analytical methods, numerical methods, elasticity and dynamics. The student then selects 9 semester hours of course work in approved electives from a selection of mechanics electives. For students following Plan I, both the thermal science and mechanics options allow the student to pick one approved 3-semester-hour elective not necessarily in the chosen specialty. For students following Plan II, both the thermal science and mechanics options allow the student to pick two approved 3-semester hour electives not necessarily in the chosen specialty.

The **general mechanical engineering option** requires the student to take 18 semester hours of required course work in analytical methods, numerical methods, fluid mechanics, thermodynamics, elasticity and dynamics. For students following Plan I, the general mechanical engineering option allows the student to pick two approved 3-semester hour electives. For students following Plan II, the general mechanical engineering option allows the student to pick three approved 3-semester hour electives.

College of Liberal Arts and Sciences

Dean

Daniel J. Howard; Professor of Biology

Associate Deans

Brenda J. Allen, Associate Dean for Planning and Initiatives; Professor of Communication
Laura M. Argys, Associate Dean for Research and Creative Activities; Professor of Economics
Jeffrey Franklin, Associate Dean for Undergraduate Curriculum and Student Affairs; Professor of English

Contact

Administration Office
North Classroom, Suite 5014
Phone: 303-556-2557
Fax: 303-556-4861

Undergraduate Advising Office
North Classroom, Suite 5014Phone: 303-556-2555
Fax: 303-556-6277

Mailing Address
College of Liberal Arts and Sciences
Campus Box 144
P.O. Box 173364
Denver, CO 80217-3364

http://clas.ucdenver.edu

Application Deadlines

Undergraduate
Fall—July 22
Spring—December 1
Summer—May 3

Graduate
Varies by department. See individual department sections of this chapter for deadlines.

The beauty of an education in the liberal arts is its simultaneous diversity and specialization, its combination of breadth and depth. Students in the College of Liberal Arts and Sciences at CU Denver specialize in a major such as chemistry, English or psychology while creating a foundation of knowledge through general education requirements. Having a broad background in the arts and sciences prepares you to begin your career or to change careers later, to pursue advanced study in a discipline or to study for a professional career such as law or medicine. We believe it also sets the stage for a rewarding and productive life overall. Pursuing a liberal arts curriculum not only increases your knowledge, it enables you to develop such skills as logical argumentation and clear expression, gain insights about relationships in nature and society, develop critical thinking and interpretive ability, solve complex problems rationally and heighten your aesthetic appreciation.

At the College of Liberal Arts and Sciences (CLAS), we coordinate undergraduate programs with our own graduate programs as well as CU Denver's professional schools, through which you can combine technical expertise with the broad critical and analytical skills essential to complex decision making. While our dedicated faculty have outstanding academic credentials, their greatest strength is their commitment to highly motivated students representing a broad range of age and experience. Their goal is not only to teach, but to instill in our students a lifelong love for learning and respect for free and independent thinking.

Our curriculum maintains traditionally high university academic standards while providing numerous flexible learning opportunities to meet our students' varied objectives. We offer opportunities to study urban programs, confront contemporary issues, participate in off-campus internships and make use of the city's resources. Advisory committees from the community work with CLAS departments and programs, allowing cultural, historical and environmental efforts in Denver to be supported and enhanced by our academic programs.

Liberal arts and sciences undergraduates receive either a BA or BS degree. Many go on to further study in some of the best graduate and professional schools around the country, while others begin their careers in a variety of positions in industry, commerce and government. Each area of study offers a wide variety of curricula, including traditional undergraduate major programs, interdisciplinary studies and pre-professional programs.

College of Liberal Arts and Sciences Educational Goals

The College of Liberal Arts and Sciences defines liberal education as including four major components:

1. Central elements of knowledge including:
    a. knowledge of the diversity and significant dimensions of human culture and a specific understanding of American culture, including its political and ethnic diversity
    b. aesthetic awareness and appreciation of the cultural contributions made to the human experience by the social sciences and humanities
    c. an understanding of the methods of inquiry and development of theory that form the basis of knowledge in the natural and physical sciences
2. Essential skills for analysis, writing, computation, communication and decision making
3. The development of a constructive orientation toward society through the enhancement of the individual's capacity to make informed and responsible choices based on reflective consideration of the democratic principles of due process, civil liberties and the balance between individualism and the common good
4. The ability to apply knowledge of the arts and sciences to society's specific needs

The college works to instill in students an understanding of these components through required skills and core courses and through the knowledge and skills required by each major program in the college.

Undergraduate Programs

MAJOR DEGREE PROGRAMS

Students can earn baccalaureate degrees (including areas of emphasis indented below the major areas) in the majors listed below.

Bachelor of Arts	***Bachelor of Science***
Anthropology	Biology
BA - MD Program	BS - MD Program
Communication	Chemistry
Economics	Mathematics
English	Actuarial Science
Creative Writing	Applied Mathematics
Film Studies	General Mathematics
Literature	Mathematics Education

English Writing

French

International Language and Culture for the Professions

Geography

Earth Science

Environmental Science

Environmental Studies

General

Urban Studies and Planning

History

Individually Structured Major

International Studies

Philosophy

Political Science

Politics and Public Policy

Psychology

Public Health

Sociology

Spanish

International Language and Culture for the Professions

Probability and Statistics

Physics

Biophysics and Medical Physics

Pure and Applied Physics

Psychology

Public Health

MINOR PROGRAMS

A college minor represents a concentration of content knowledge, but not to the extent afforded in a major. Minors are optional for liberal arts students, but are encouraged to broaden educational experience and enhance occupational skills. Students interested in a minor should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555, for information, or contact the department directly. A list of minors available to CLAS students follows:

Anthropology	Engineering	Mathematics
Astrophysics	English Literature	Philosophy
Biology	English Writing	Physics
Business	Environmental Sciences	Political Science
Chemistry	Ethics	Psychology
Chinese Studies	Ethnic Studies	Religious Studies
Communication	Film Studies	Social Justice
Computer Science	French	Sociology
Creative Writing	Geography	Spanish
Demography	Geology	Sustainability
Economics	German	Urban and Regional Planning
Educational Studies	History	Women's and Gender Studies
	Law Studies	

DOUBLE MAJORS

Students may graduate with more than one major by completing all requirements for each major.

DOUBLE DEGREES

Students may earn two undergraduate degrees in liberal arts or from two different schools or colleges of the University of Colorado simultaneously by fulfilling all requirements for both degrees. For example, the Business School and the College of Liberal Arts and Sciences have a double-degree program leading to a BS in business administration and a BA in the student's chosen major.

The College of Liberal Arts and Sciences requires that a student complete at least 90 liberal arts semester hours to be granted two bachelor's degrees. Students must complete a minimum of 150 semester hours applied toward the two degrees.

Students planning one of these multiple programs should consult with the CLAS Advising Office at the earliest possible date to get approval for a double-degree program.

SECOND DEGREES

Students who have been awarded a bachelor's degree (either from the college or elsewhere) may be granted a second bachelor's degree provided that (a) all general requirements for that degree have been met; (b) the major for the second bachelor's degree is different from the major for the first; and (c) the college and major department residence requirements are satisfied. A second degree from the college requires a minimum of 30 additional semester hours of credit.

Graduate Programs

Graduate degree programs offered by the faculty of the college through the Graduate School are listed below. Many degrees provide the opportunity for students to specialize in concentrations within the discipline; these are noted below the degree title.

Master of Arts (MA)

Anthropology

Research Concentrations: medical, archaeological,

biological, sustainable development and political

ecology

Communication

Concentrations: professional, academic

Economics

English

Concentrations: applied linguistics, literature,

rhetoric and the teaching of writing

History

Concentrations: European, global, public history,

United States

Master of Humanities (MH)

Master of Integrated Sciences (MIS)

Master of Science (MS)

Applied Mathematics

Biology

Chemistry

Environmental Sciences

Concentrations: air quality, ecosystems, environmental

health, environmental science, education, geospatial

analysis, hazardous waste, water quality

Master of Social Science (MSS)

Political Science

Concentration: politics and public policy

Psychology

Concentration: clinical psychology

Sociology

Spanish

Concentrations: community health science, international studies, social justice, society and environment, women's and gender studies

Doctor of Philosophy (PhD)

Applied Mathematics

Clinical Health Psychology

Health and Behavioral Sciences

Certificate Programs

The college offers undergraduate and graduate certificate programs that demonstrate proficiency in a specialized field of study. These programs differ from minor programs in that certificates may cross traditional disciplinary boundaries and are awarded independently of formal graduation.

Certificate programs are open to degree-seeking students as well as those who aren't seeking a degree but want to enhance their professional expertise, and require the completion of three to six related courses (9-19 semester hours). The list of certificate programs below has been approved by the college and will appear on the student's official University of Colorado transcript upon completion of all certificate requirements.

Information about certificate programs can be found in the coordinating department section of this catalog and the departmental Web sites, or by contacting the department directly.

Undergraduate Certificates

Applied German Language Skills (Modern Languages)

Applied Statistics (Mathematical and Statistical Sciences)

Biotechnology (Biology)

Graduate Certificates

Applied Statistics (Mathematical and Statistical Sciences)

Biotechnology (Biology)

Environmental Sciences

Cultural Diversity Studies (Ethnic Studies)	Six options: air quality, ecosystems, environmental health,
Ethics (Philosophy)	geospatial analysis, hazardous waste and water quality
Geographic Information Science (Geography/Environmental Sciences)	Historic Preservation (History)
Mediation (Communication)	Public Relations (Communication)
Public Relations (Communication)	Scientific Foundations of Technical Innovation (Physics)
Scientific Foundations of Technical Innovation (Physics)	Teaching English to Speakers of Other Languages (English)
Technical and Professional Communication (Communication)	Women's and Gender Studies (WGST Program)

Continuing and Professional Education (CPE)

Managing Director: Laurel Dodds
Telephone: 303-352-3728
E-mail: Laurel.Dodds@ucdenver.edu

The College of Liberal Arts and Sciences (CLAS) participates in the University's Continuing and Professional Education (CPE) programs, which include credit courses offered through extended studies during evenings, weekends and at off-campus sites. CPE also includes non-credit courses offered for continuing education units (C.E.U.s) or for professional development and personal enrichment. Information about the CLAS CPE program can be found at: http://www.ucdenver.edu/academics/colleges/CLAS/ContinuingEducation/Pages/ContinuingEducation.aspx

A full degree program, the MA in political science (politics and public policy option), is available as part of the CLAS CPE. This weekend program is offered by the Center for New Directions in Politics and Public Policy at two off-campus locations: Durango, CO and the University Center at Chaparral in Douglas County. See the New Directions Program page for further information.

Signature Areas

CLAS has developed a 12-year strategic plan (2008-2020) that includes five signature areas. Based on proposals prepared by faculty from across the college and university, these areas encompass interdisciplinary themes related to diverse contemporary issues, as their titles demonstrate:

- Colorado Center for Public Humanities
- Math and Science Learning and Education
- Social Justice
- Sustainability
- Women's and Gender Studies

Each signature area group has developed and begun to implement its vision. A managing director works with faculty and administrators from CLAS and other academic units to coordinate the development of interdisciplinary curricula, research projects, community outreach and academic programs. There are three minors which have been developed through the signature areas: social justice, sustainability and women's and gender studies. The CLAS website will announce activities and post updates about the signature areas at: http://www.ucdenver.edu/academics/colleges/CLAS/AboutUs/SignatureAreas/Pages/default.aspx

Undergraduate Policies and Procedures

Requirements for Admission

CLAS Advising Office: North Classroom, 4002
Telephone: 303-556-2555
Fax: 303-556-6277
Web site: http://www.ucdenver.edu/academics/colleges/CLAS/clas-advising/Pages/CLASAdvising.aspx

New Freshmen

Students planning to enter the College of Liberal Arts and Sciences must meet the requirements described in the Information for Undergraduate Students chapter of this catalog.

Transfer Students

Students who have attended another college or university are expected to meet general requirements for admission of transfer students as described in the Information for Undergraduate Students chapter.

Transfer students with at least 30 semester hours of transferrable credit who have been denied admission to the college by the Denver campus Office of Admissions, and who

have special circumstances not covered by the regular admission policies, may petition the CLAS Academic Standards Committee for provisional admission. The Academic Standards Committee requires evidence of academic performance before provisional admission is granted. Policies and procedures for the CLAS Academic Standards Committee are available through the CLAS Advising Office.

Grading Policies

The College of Liberal Arts and Sciences adheres to the University of Colorado grading policies found in the Registration and Records chapter of this catalog. The college also maintains specific grading policies for liberal arts students.

Incomplete Grades

When a student has special circumstances that make it impossible to complete course assignments, faculty members have discretion to award an incomplete grade. Effective January 1, 2009, all incomplete courses are now assigned a grade of Incomplete *(I)*. Incomplete grades are *not* awarded for poor academic performance or as a way of extending assignment deadlines. While not required, a CLAS course completion agreement form (available from the CLAS Advising Office) is strongly suggested when faculty and student agree on an incomplete grade.

To be eligible for an incomplete grade, students must:

- have successfully completed 75 percent of the course
- have special circumstances (verification may be required) that preclude the student from attending class and completing graded assignments
- make arrangements to complete missing assignments with the original instructor within one academic year

Students are allowed up to three semesters (one year) to complete the requirements for the incomplete, after which the *I* reverts to an *F* grade on the student's transcript. Any request to allow a grade change after the one-year period must be petitioned to the CLAS Academic Standards Committee.

Pass/Fail Grading Option

Students may select the pass/fail grading option for most courses. In addition to Downtown Campus policies covering the pass/fail grading option (see the Registration and Records chapter of this catalog), CLAS students must adhere to the following college pass/fail grading policies:

1. Courses in a student's major, minor and certificate may not be taken on a pass/fail basis.

2. Courses required to show proficiency may not be taken on a pass/fail basis: ENGL (core curriculum), MATH (core curriculum) and first two semesters of foreign language.
3. Courses used to satisfy the intellectual competencies section of the CU Denver core curriculum may not be taken on a pass/fail basis.
4. Courses in the knowledge area section of the CU Denver core curriculum may be taken on a pass/fail basis.
5. Courses used to satisfy CLAS graduation requirements may be taken on a pass/fail basis. (Exception: communicative skills, major/minor courses.)
6. Students must sign up by the drop/add deadline for the semester.

Repeated Courses

Students may re-register for any course. Both (all) courses remain on the transcript and both (all) grades are used to calculate the student's GPA. Course credit toward graduation is counted only once for a given course no matter how many times the course is repeated.

Academic Policies

Students are referred to the Registration and Records and University Policies chapters of this catalog for a description of academic policies that apply to all undergraduate students at CU Denver. [Graduate students are referred to the Graduate School Rules and the Graduate Policies and Procedures section below.] The policies that follow apply specifically to College of Liberal Arts and Sciences undergraduate students.

ACADEMIC ADVICE AND INFORMATION

Students in the college are expected to assume responsibility for planning their academic programs in accordance with college policies and major requirements. To assist students, the college maintains the CLAS Advising Office, North Classroom, 4002, 303-556-2555. Students are assigned to a college advisor in this office according to the students' last names and must meet with this advisor upon matriculation into the college. The CLAS Advising Office also has specialty college advisors in teacher education and health careers. The college advisor is responsible for advising students of college policies and requirements, and the certification of college requirements at graduation.

As soon as students have determined a major, they should meet with a major department advisor. The major department advisor will be responsible for the student's major advising and for certification of the completion of the major program at graduation.

Students planning to ultimately earn a degree from one of the professional schools should also see an advisor in that school or college.

EARLY ALERT

The University of Colorado Denver participates in a campuswide early alert program to identify undergraduate students needing assistance from academic and student service offices. Providing assistance early in the semester is very important to student success in their baccalaureate program. The College of Liberal Arts and Sciences is committed to actively participate in the program through a collaborative working relationship between faculty and academic advisors in the college.

The early alert program is designed for faculty to identify students in weeks five and six of the semester who need assistance because of academic performance, class participation and/or behavior issues. Assistance is provided to students identified by faculty through academic advising and through referrals to appropriate UC Denver student service offices.

Goals of the early alert program are to:

- increase student academic success
- improve student persistence and graduation rates
- increase communication between students and faculty
- increase communication between students and academic advisors
- increase student utilization of student service offices

Further information about the CU Denver early alert program is available from the Undergraduate Experiences Office at 303-556-6506.

ACADEMIC PROBATION AND SUSPENSION

Students at the university are expected to maintain progress in their degree program, as defined by being in “good academic standing.” Good academic standing requires minimally a cumulative grade point average (GPA) of 2.0 on all University of Colorado course work.

Academic Probation

- Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.
- Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via University-assigned email and postal letter) of their academic probation status.
- Students on academic probation will be required to complete the Academic Success Plan during their first semester on academic probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed Academic Success Plan before they will be allowed to register for the subsequent term.

- Students on academic probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on academic probation before they will be allowed to register.
- Academic probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing. Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students who fail to earn the 2.3 semester GPA during any semester while on academic probation will be placed on restricted academic probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on academic suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from academic probation and notified via university-assigned email that s/he is in academic good standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester while on academic probation will be placed on restricted academic probation.
- Students are informed in writing (via University-assigned email and postal letter) of their restricted academic probation status.
- Students on restricted academic probation will be allowed to enroll for a maximum of 6 credits or 2 classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on restricted academic probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.
- Students on restricted academic probation will not be able to register online; they will need to register for courses using a Schedule Adjustment Form, which must be submitted to the Service Center (North Classroom #1003) for processing.
- Restricted academic probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing. Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students on restricted academic probation who do not meet the minimum 2.3 semester GPA will be placed on academic suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours (whichever happens sooner) while on restricted academic probation will be placed on academic suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from restricted academic probation and notified via university-assigned email that s/he is in academic good standing.

Academic Suspension

- Students on restricted academic probation who do not meet the 2.3 minimum semester GPA will be placed on academic suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours (whichever happens sooner) while on academic probation will be placed on academic suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours (whichever happens sooner) while on restricted academic probation will be placed on academic suspension.
- Students are informed in writing via certified/registered letter of their academic suspension status.
- The minimum duration of academic suspension is for a period of one year (three semesters, including summer term). Students placed on academic suspension will be unable to take courses from any CU campus during this time.
- Should a student be placed on academic suspension while registered for the next semester, s/he will be administratively dropped from their courses by the University.
- A student's academic suspension status is permanently indicated on his/her official University of Colorado transcript.
- During the one-year academic suspension period, students who wish to return to the university should consider one (or both) of the following actions:

♦ Attend another regionally-accredited college/university.

Students who choose to attend another institution while on academic suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work.

Students should consult their academic advisor to discuss appropriate course work.

♦ Use the time off to directly address and resolve the factors that contributed to the academic difficulty.

- After the one-year suspension period has elapsed, students must petition the appellate committee (of the school or college they wish to enter) for readmission and meet and document at least one of the following criteria:

♦ Attendance at another regionally accredited college/university where they earned a minimum cumulative GPA of 2.75 in transferable credit.

♦ Explanation of their previous academic difficulty, demonstration of what has changed, and how this will allow them to now achieve and maintain good academic standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0).

- Students who choose to petition their college's appellate committee for readmission must submit their petitions by the following deadlines:

♦ For fall admission: June 1

♦ For spring admission: December 1

♦ For Maymester/summer admission: April 1

- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be readmitted on restricted academic probation. These students must meet the conditions of restricted academic probation every semester until their cumulative CU GPA is at least 2.0.

Second Suspension

- Students who are readmitted after their first academic suspension and fail to meet the conditions of restricted academic probation for a second time are placed on a second suspension for an indefinite period of time.
- Students on a second suspension may be readmitted to the University only by petition to the college's appellate committee.
- Students will not be considered for readmission unless they have demonstrated significant improvement in academic performance at the college/university level, and/or considerable and positive change in personal circumstances.

EARNING ACADEMIC CREDIT—SPECIAL OPTIONS

Students in the college may earn credit toward a degree for knowledge gained prior to enrollment in the college or for knowledge gained outside traditional college courses. Specific programs by which credit is awarded are described below. In addition, credit may be earned for ROTC.

General information regarding these options can be found in the "Transfer of College-Level Credit" section of the Information for Undergraduate Students chapter. Students should contact the CLAS Advising Office for specific details of these programs. For credit in a student's major or minor, the appropriate department must be consulted.

Advanced Placement/International Baccalaureate

Students who have taken advanced courses in high school and who have earned high scores on the Advanced Placement or International Baccalaureate standardized exams may be eligible for university credit. See the Information for Undergraduate Students chapter of this catalog under "Transfer of College-Level Credit" for additional information. Individual departments establish advanced placement criteria for credit. Students should contact the department advisor for specific details concerning advanced placement credit.

College Level Examination Program (CLEP)

College of Liberal Arts and Sciences students may earn university credit by examination in subject areas in which they have obtained college-level proficiency. The use of CLEP subject examinations toward major, minor or certificate requirements is subject to a separate evaluation by the faculty advisor in the department or program. To receive

academic credit from CLEP, students must present official test results to the Downtown Campus Office of Admissions. A maximum of 30 hours of CLEP credit will count toward the degree. See the “Transfer of College-Level Credit” in the Information for Undergraduate Students chapter of this catalog for additional information.

Credit by Examination

Students with sufficient experience and knowledge may receive credit for a specific course by taking a comprehensive examination given by the faculty. Students should consult the Registration and Records chapter of this catalog for more information.

Internships or Cooperative Education

Undergraduate students may seek credit from an employment experience that contains academic content and is sponsored by a CLAS faculty member. Internships are helpful for career exploration early in a student’s academic career or for job experience after developing academic content in the major.

Students must have a minimum 2.75 cumulative GPA in a minimum of 15 semester hours of CU Denver course work. A maximum of 3 semester hours of internship credit per semester and 9 semester hours overall are allowed toward the 120 semester hours applied toward graduation. Undergraduate students should contact the Experiential Learning Center for details about the internship contract and faculty sponsorship requirements.

Courses in the Professional Schools and in Physical Education

Students may count up to 24 semester hours of academic course work taken outside of liberal arts, such as business, engineering, architecture, journalism and education.

Up to 8 semester hours of activity courses in physical education will count toward the 120 hours required for the degree; these are included in the 24 semester hours allowed outside CLAS.

Independent Study

Qualified CLAS undergraduate students who seek to further their examination of knowledge outside the structured classroom are encouraged to register for independent study. Undergraduate independent study is a nonstructured, independent research project under the sponsorship and supervision of a faculty member. Students should consult with the faculty sponsor to discuss the project and initiate the independent study contract.

To qualify for independent study credit, students must have a declared major or minor in the discipline of the independent study project and a minimum cumulative CU Denver

GPA of 2.5. Those seeking senior level independent study must have a minimum junior standing and sufficient course work to allow independent research in the discipline.

Faculty seeking to sponsor an independent study project must have either instructor or tenure-track rank. Faculty seeking to sponsor an independent study project as part of an undergraduate honors project must be tenure-track rank.

Independent study projects are typically awarded credit on a 3:1 (4:1 in summer) basis for contact hours per week to semester hours. That is, a 3-semester-hour independent study project typically requires 9 hours of effort per week over the semester.

Graduation Requirements

Undergraduate students graduating from the College of Liberal Arts and Sciences must fulfill requirements for the college and for the major department. Residence requirements apply to both college and major department. A checklist of graduation requirements follows in this section.

Students are responsible for knowing the requirements for their degree and for fulfilling these requirements. Upon completion of the college and major requirements, the student will be awarded the appropriate degree.

General Requirements

- a minimum of 120 semester hours passed
- a minimum 2.0 cumulative GPA
- a minimum of 45 semester hours of upper-division work
- a minimum of 30 semester hours of CLAS course work with letter grades at the Downtown Campus
- fulfillment of all college and major requirements

CLAS CORE CURRICULUM AND GRADUATION REQUIREMENTS

Note: Not more than 24 hours outside the college (for example, business and engineering) can be applied toward the 120 hours required for the bachelor's degree.

General Education

The general education graduation requirements are established by the CLAS faculty and combine specific requirements from (1) the CU Denver core curriculum, (2) the CLAS graduation requirements and (3) foreign language proficiency.

Major Requirements

In addition to completing the college requirements outlined above, students must declare a major and fulfill all requirements of the major department. Department requirements

include at least 30 semester hours of work in the major with a minimum grade of *C* (2.0), of which at least 16 semester hours in the major are at the upper-division level. The GPA in the major must be at least 2.0.

The college places a maximum number of semester hours (required plus elective courses) in the major department, discipline or program as follows:

Degree	*Maximum Hours*
BA	48
BS	56

The department is responsible for determining when a student has successfully completed the major requirements and for certifying the completion to the dean of the college.

Declaration of Major

It is important that students declare a major as early as possible in order to receive proper advising toward departmental requirements. Students in the college must declare a major by the start of their junior year (greater than 60 hours). Transfer students to the college with junior or senior standing should declare a major in their first semester at CU Denver. Students are allowed to change their major at any time.

Residence Requirements

A minimum number of semester hours must be earned in residence in the College of Liberal Arts and Sciences. All students have college and major residence requirements. Students should check with their major department to ascertain residence requirements for the major.

Students transferring to the Denver campus must pay particular attention to residence requirements.

Residence credit hours are earned from CLAS courses taught by CU Denver faculty while the student is enrolled as a degree student in the College of Liberal Arts and Sciences.

All CLAS students must meet college residence requirements.

1. Students must earn a minimum of 30 residence semester hours.
2. For students who exceed the minimum 30-hour residence requirement, a minimum of 21 out of the last 30 semester hours applied toward graduation requirements must be in residence.

3. Departments maintain a residence requirement for the major, minor and certificates. Students should consult with a faculty advisor concerning departmental residence requirements.

Intent to Graduate

Students must submit their intent to graduate online application by the published deadline for the semester they expect to graduate. If the degree is not completed, they must resubmit the intent to graduate each subsequent semester until graduation. Failure to submit the intent to graduate will result in delayed graduation.

Graduation Application

Students are required to meet with their CLAS major and minor advisors at the beginning of the semester/term in which they plan to graduate to initiate the graduation verification process. CLAS advisors will distribute graduation applications to students who qualify, at which point their intent to graduate online application will be approved. The deadline for filing a graduation application with the CLAS Advising Office is the published last day to add courses in each semester. Failure to submit the intent to graduate and graduation application with the CLAS Advising Office will result in delayed graduation.

Academic Honors

College Honors

A student who performs superlatively in course work in the college will be awarded a bachelor's degree accompanied by the statement *with distinction*. To be eligible for graduation with distinction, a student must have completed a minimum of 45 semester hours at the University of Colorado (on any CU campus), including the final semester, with a GPA of at least 3.75. The 45 semester hours must be completed in the student's junior and senior years. A maximum of 6 out of the final 45 semester hours may be completed with a grade of *P* (on *P/F* option).

Departmental Honors

Departments in the college offer programs through which students can qualify for Latin honors: *cum laude, magna cum laude* or *summa cum laude*. Determination of the level of honors is made by the department. Detailed information can be obtained from the CLAS Advising Office or from the individual department.

Dean's List Criteria

CU Denver will use a fixed criterion across all colleges for determining eligibility for the Dean's List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete 9 hours in the semester, upon which to determine grade point average. These courses can be both within and outside of the college. Pooled courses will not be included in the calculation nor will they count toward the 9 hours required for consideration. The GPA required for inclusion in the Dean's List is 3.75.

In the summer semesters, students must complete 6 hours as a basis for inclusion in the Dean's List. Course inclusion is the same as in fall and spring semesters. The GPA required for Dean's List in summer is also 3.75.

Incompletes will not be considered in the calculation of minimum number of hours. The Dean's List will not be recalculated to include completed incompletes.

Colleges will collect data each semester on the number of students making the Dean's List.

Scholarships tied to Dean's Lists in individual colleges may have additional requirements.

Graduate Policies and Procedures

Admission to Graduate Programs

Each CLAS graduate program handles admissions to its master's or doctoral programs, and defines its own admission standards and procedures based upon the general Graduate School guidelines. Some departments process application files within the department and some have the Office of Admissions process application materials, so be sure to check with the department to which you are applying to learn their specific procedures and deadlines. A new online application process has been initiated for fall 2010 graduate admissions; go to https://soaprod.cusys.edu/degreeprog/applyDEGREEPROG_CUDEN/login.action to begin your online application.

The criteria for admission shall be based on a combination of the following: minimum 3.0 GPA, standardized examinations, prior professional experience, portfolios or other indicators. Regular admission to master's programs requires the completion of a bachelor's degree or master's degree from an accredited college or university at the time of matriculation or demonstration of the completion of work equivalent to that required of these degrees as specified by CU Denver.

Students are admitted as regular or provisional students. Students receiving provisional admission are subject to certain requirements set out by their programs for a probationary period, not to exceed two years. The requirements may be more stringent, but provisional students must complete each semester's course work with a GPA of 3.0 or higher on all work taken.

International students must meet all requirements for regular admission as well as the requirements of the CU Denver Office of International Affairs. These include: documentation in English or a certified English translation of the completion of a bachelor's degree, master's degree or the equivalent at the time of matriculation as evaluated by International Admissions; financial documents required by the CU Denver Office of Admissions; a certified English translation of all records and references not in English; TOEFL scores above 525. See the Information for International Students chapter for more information.

Transfer Credits

Up to 12 semester hours can be transferred in from another graduate program (including hours taken at CU Denver as a nondegree student with a grade of *B*- or better) and applied toward a CLAS master's degree; however, some programs allow fewer credits to be transferred. Courses taken while still an undergraduate student may be counted as pre-admission credits, but may not exceed 15 and cannot have been applied toward the undergraduate degree. Only courses numbered 5000 and above or classified as graduate level can be transferred. Up to 30 transfer semester hours or semester hours taken as a nondegree student may be applied toward a PhD degree. Courses taken more than 10 years prior to admission must be revalidated by the department or program.

Readmission

If less than one calendar year has passed since a student in good standing was last enrolled in courses at CU Denver, a student must only notify the program they wish to re-enter. If a student does not register for three consecutive terms, he/she needs to be readmitted. This requires the student to submit Part I of the graduate admission form to their department or program; they must also pay the application fee. Those who have not been active for more than four years must complete the full application process.

PhD students may apply for a time extension or leave of absence as long as the total time to complete the degree does not exceed 10 years. Up to one year of an approved leave of absence may be taken without reapplying to the program upon return.

Changing Degree Programs

Students changing degree programs need to be admitted by the new department. They must provide all items required of students applying for the first time, but may petition the program to which they were originally admitted to release their initial application materials to the new department. Any transfer of courses to the new degree program is at the discretion of the new department or program.

Advisors

Students should consult with their faculty advisors early and often. Each graduate program has a faculty coordinator who should be consulted about program requirements. This may be the same person as a student's faculty advisor. While students are strongly encouraged to meet with their faculty advisor every semester, they *must* meet with their faculty advisor and/or faculty coordinator at the beginning of their last semester to verify that all degree requirements have been met and to have their candidacy form approved and signed.

Graduate Courses

All courses that count toward a graduate degree must be approved by the degree-granting graduate program. At least 30 hours must be considered graduate rank (taught by graduate faculty). Eighteen hours are required at 5000-level or above with the remainder subject to departmental approval. Courses below the 4000-level can only be applied if taken beyond the 30-hour graduate minimum.

Students may use courses offered through the continuing and professional education program in the pursuit of graduate study only if they obtain proper academic approval from the graduate program.

Graduate students may take up to a total of 7.5 independent study semester hours (in a 30-hour program), or 25 percent of the total program hours, under the direct supervision of a faculty member and with the approval of the CLAS graduate coordinator. However, it is important that students check with their programs concerning the maximum number of independent study credit hours that may count toward their degree, as this number may vary. The minimum CU Denver GPA required to register for independent study credits is 3.0, and students must be admitted to a CLAS degree program. Each independent study project may be taken for 1-3 semester hours. Students use the special processing form to outline the project and how the grade is determined, which then must be approved by the supervising faculty member and CLAS graduate coordinator.

Graduate-level internship credit may be earned in some programs. Students must be admitted to a CLAS degree program, have completed a minimum of 6 semester hours and have a minimum 3.0 GPA. A maximum of 6 hours of internship credit is allowed, except where specified by the program (i.e., nonthesis clinical psychology). Students

should contact the Experiential Learning Center for details about the internship contract and faculty sponsorship requirements.

Minimum GPA

A minimum cumulative GPA of 3.0 in courses applied to a degree program is required. Grades of *B-* or better are accepted for most master's degree programs; however, some programs have more stringent grade requirements. Doctoral minimum grade is *B-*. Courses applied to a graduate degree may not be taken pass/fail.

Probation

A student whose cumulative GPA falls below 3.0 or who receives a grade lower than a *B-* will be placed on academic probation by the Graduate School dean. A registration stop will be placed on students at the time they are placed on probation. This stop keeps probationary students from registering until they meet with their departmental advisor to plan courses that will be taken; then the stop will be removed.

In the two semesters following placement on probation, the student is allowed to take only courses applicable to the degree and all grades must be at or above a *B* grade, or the student will be suspended. At the end of two semesters after being placed on probation, the student must raise his/her cumulative GPA to 3.0 or he/she will be suspended. A student may petition the Graduate School dean for an extension of the probationary period in extenuating circumstances.

Incomplete Grades

When a student has special circumstances that make it impossible to complete course assignments, faculty members have discretion to award an incomplete grade. Effective January 1, 2009, all incomplete courses are now assigned a grade of Incomplete *(I)*. Incomplete grades are *not* awarded for poor academic performance or as a way of extending assignment deadlines. While not required, a CLAS course completion agreement form (available from the CLAS Advising Office) is strongly suggested when faculty and student agree on an incomplete grade.

To be eligible for an incomplete grade, students must:

- have successfully completed 75 percent of the course
- have special circumstances (verification may be required) that preclude the student from attending class and completing graded assignments
- make arrangements to complete missing assignments with the original instructor within one academic year

Students are allowed three semesters (one year) to complete the requirements for the incomplete, after which the *I* reverts to an *F* grade on the student's transcript. Any

request to allow a grade change after the one-year period must be petitioned to the CLAS Academic Standards Committee.

Thesis/Project/Dissertation

Master's programs can be either thesis plan or nonthesis plan; nonthesis plans may include a project or report. Four to six thesis semester hours can be applied toward a master's program. Three to six project semester hours can be applied toward a master's program. Students may register for one or more thesis or project credits each semester up to the maximum.

For doctoral programs, a minimum of 5 hours and maximum of 10 hours of dissertation credit may be registered for in any semester. Students must receive approval from the CLAS graduate dean and the dean of the Graduate School to register for fewer than 5 dissertation hours.

Doctoral candidates must be registered for dissertation credit each fall and spring semester following successful completion of the comprehensive examination. Students on leave of absence, approved by the program and filed with the Graduate School, do not have to register for dissertation credits.

A student does not have to register for thesis or dissertation credits after a successful final examination and thesis defense even if the final version of the thesis/dissertation and the record of the final examination are submitted to the Graduate School at a later date.

Thesis/Dissertation Procedures

The thesis/dissertation must comply with specifications outlined in "Guidelines for Preparing Master's and Doctoral Theses," and have received a preliminary thesis format approval from the Graduate School. The student's faculty committee must approve the final draft of the thesis, three copies of which must be filed with the Graduate School before graduation. The thesis binding fee must be paid when the thesis is submitted to the Graduate School.

Research Protocol

Students doing research that involves gathering data from human subjects must have their research protocol approved by the Human Research Committee. Students doing research that uses animals in any form must have their research protocol approved by the Animal Care and Use Program.

Graduation Application

Master’s and doctoral graduate students initiate the graduation process through the CLAS Graduate Coordinator in the Graduate School, Lawrence Street Center, Suite 300. Both master’s and doctoral candidates must follow deadline dates published in the online CLAS Graduate Advising website and on sheets available from departmental graduate advisors or the Graduate School.

All graduate students must submit their intent to graduate online application the semester they intend to graduate, an application for admission to candidacy and a request for graduate examination/thesis defense.

Admission to Candidacy

The application for admission to candidacy form is available in the Graduate School, the student’s program office or online at the CLAS Graduate Advising website. This application must be signed by the student’s advisor and the program coordinator, certifying that the student’s work is satisfactory and that the program outlined in the application meets the requirements set for the student.

A student on probation is not eligible to be awarded a degree until s/he is removed from probation. A student with provisional admission status must be changed to regular admission status before admission to candidacy.

Intent to Graduate

Students must submit their intent to graduate online application by the published deadline for the semester they expect to graduate. If the degree is not completed, they must resubmit the intent to graduate each subsequent semester until graduation. Failure to submit the intent to graduate will result in delayed graduation.

Deadlines

The Graduate School deadlines (to file the application for admission to candidacy and intent to graduate, schedule and hold the comprehensive exam or thesis/project defense, submit thesis for format review, and turn in the final thesis) are published each semester and are available from the CLAS Dean's Office, departmental graduate advisors and the Graduate School. Deadlines and forms are also posted on the CLAS Graduate Advising website. It is the student’s responsibility to know and to adhere to these deadlines.

Comprehensive Examination or Thesis/Project/Dissertation Defense

Students must be registered when they take the comprehensive examination or defend the thesis or project. This can be accomplished by registering to take a regular course,

independent study/thesis/project credits or through candidate for degree registration. The examination may be oral, written or both.

The master's examination must be given by a committee of three members of the graduate faculty, all of whom sign an exam report form signifying that the student has passed the exam or defense. The committee chair must be a regular member of the Denver campus graduate faculty, and the other members must hold at least a special graduate faculty appointment. PhD dissertation defense committees include four graduate faculty members, one of whom is from outside the primary department and must unanimously approve the examination.

The record of the thesis defense must be approved by the student's faculty committee and filed with the CLAS Graduate Coordinator before graduation. In programs where the project/report defense counts as the comprehensive exam, this requirement applies to projects/reports as well. A student who fails the comprehensive final examination or defense may retake the examination only once.

Time Limits

Master's degree students admitted after January 2009 have a maximum of five years from the date of the start of course work after admission to the program to complete all degree requirements. This limit can be extended by a leave of absence approved by the student's graduate program. Students admitted prior to January 2009 have seven years to complete their master's degrees (according to previous Graduate School Rules).

Doctoral students have eight years from the date of the start of course work after admission to complete all degree requirements for a PhD (10 years with approved leave of absence).

Note: Individual graduate programs may have time limits that are more stringent.

Residency Requirements

A minimum of two semesters of work must be completed at CU Denver.

Academic Ethics and Petitions

Academic Ethics

[This information applies to both undergraduate and graduate students in the College of Liberal Arts and Sciences.]

As members of the CU Denver academic community, faculty and students accept the responsibility to maintain the highest standards of intellectual honesty and ethical

conduct in all forms of academic work. While most violations center around cheating or plagiarism, the CU Denver Academic Honor Code is more comprehensive and includes the following categories: plagiarism, cheating, fabrication and falsification, multiple submission, misuse of academic materials and complicity in academic dishonesty.

The CLAS Academic Ethics Committee, composed of faculty, students and staff, is charged with establishing academic ethics policies and, when necessary, evaluating ethics charges against students. Faculty and students should be familiar with the Academic Honor Code for the Denver campus (see the University Policies chapter) and the CLAS Academic Ethics Policies, available from the CLAS Advising Office, North Classroom, 4002, and online at the CLAS advising website.

Faculty who charge student(s) with a violation of the Academic Honor Code may lower a student's grade without review. If the faculty decision concerning the alleged violation affects the student's assignment or course grade, a letter to the student is required with copies to the Department Chair and the CLAS Associate Dean for Student Affairs. Students charged with an ethics violation are required to continue to participate in the class and may appeal the faculty decision to the CLAS Academic Ethics Committee. Students charged with a violation of the Academic Honor Code are encouraged to meet with an advisor in the CLAS Advising Office to review their rights and obtain assistance with procedures.

Petitioning for Exceptions to Standing Academic Policy

The CLAS Academic Standards Committee is responsible for the administration of the academic policies of the college as established by the faculty. This committee constitutes the bridge between the faculty in its legislative capacity and the students upon whom the legislation comes to bear. The committee is empowered to grant waivers of exemptions from and exceptions to the academic policies of the college. Students wishing to submit a petition to the committee should meet with an advisor in the CLAS Advising Office first to discuss the petition.

Students in the College of Liberal Arts and Sciences may appeal a grade. Every attempt is made to resolve grade disputes at the department level. However, unresolved grade issues may be appealed to the CLAS Academic Standards Committee and initiated through the CLAS Advising Office, North Classroom, 4002, 303-556-2555. Details of the grade appeal policies are available in the CLAS Advising Office.

The Office of the Registrar establishes deadlines each semester for registering, adding courses, dropping courses, selecting the pass/fail option and withdrawing from the university. These deadlines are clearly identified on the Registrar's website. Students seeking to waive these deadlines must petition the assistant/associate dean of the college. Instructions for deadline petitions are available from the CLAS Advising Office.

The Graduate Council reviews grievances related to procedural issues for graduate students that cannot be resolved at the college level.

Preparation for Professions

Completion of the undergraduate curriculum of the College of Liberal Arts and Sciences can prepare students for a number of careers in the professions. See below for information on preparation for those professions most frequently asked about by students in the college. Students seeking information about other professions should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555.

Law

Students intending to enter a school of law may major in any field while completing the bachelor's degree, since law schools do not typically specify course work entrance requirements. More important to law schools are methods of study, critical thinking and communication skills. Students interested in law school should consider the interdisciplinary minor in law studies (see Law Studies in the CLAS departmental descriptions). For further information, contact the CLAS Advising Office or one of the faculty advisors identified in the law studies minor.

Health Careers

The college has faculty health careers advisors to assist students in preparing for careers in the following:

- dentistry
- medicine
- osteopathy
- veterinary medicine

Course programs also have been developed within the college to prepare students for the following specific careers within the general area of health sciences:

- dental hygiene
- medical technology
- nursing
- optometry
- pharmacy
- physical therapy
- physician assistant
- podiatry

Because the prerequisites for these health career programs are continually changing, students interested in pursuing one of these careers should contact a health careers advisor at 303-556-4350 or 303-556-6218 for current requirements and for advising. See the Health Professions chapter of this catalog for further information.

Education

Liberal arts students seeking certification for teaching at the primary or secondary level must complete a baccalaureate degree plus approximately 40 semester hours of professional education required for licensure from the School of Education & Human Development.

Liberal arts students interested in a K–12 teaching career are encouraged to participate in the educational studies minor program or the K–12 teacher licensure program in collaboration with the School of Education & Human Development (see the Urban Community Teacher Education Program section).

Collegewide Interdisciplinary Programs

INTERDISCIPLINARY PROGRAMS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

Joint Degree Programs BA/MPA

The College of Liberal Arts and Sciences, in cooperation with the School of Public Affairs, offers students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. Participating major programs in CLAS include communication, economics, political science and sociology, as well as others.

Students in the BA/MPA program must fulfill all of the graduation requirements for the College of Liberal Arts and Sciences; maintain a 3.5 undergraduate GPA in CLAS and have completed 75 percent of their undergraduate program to be eligible for admission; and enroll formally in the programs through the CLAS Advising Office. Students admitted to the program begin taking graduate-level courses in public administration during their senior year. These courses will count toward the bachelor's degree as electives. For further information, contact the CLAS Advising Office, 303-556-2555.

Centers and Institutes

Center for Computational Mathematics

Director: Jan Mandel
Telephone: 303-556-4475
E-mail: Jan.Mandel@ucdenver.edu
Website: http://math.ucdenver.edu/ccm

The Center for Computational Mathematics was established to foster research in one of the discipline's most exciting new field. Through extensive ties with industry along the Front Range and government laboratories across the country, the center provides outstanding opportunities for motivated students to receive additional training and experience.

Center for Ethics and Community

Director: Candice L. Shelby
Telephone: 303-556-4803
E-mail: Candice.Shelby@ucdenver.edu

The Center for Ethics and Community seeks to strengthen ethics in schools, the community, universities and all professions. Certificate programs are available to members of the CU Denver community, as well as individuals outside the university.

Center for New Directions in Politics and Public Policy

Director: Kathryn Cheever
Telephone: 303-556-5950
E-mail: Kathryn.Cheever@ucdenver.edu
Website: clas.ucdenver.edu/newdirections/

The center’s programs are based on the notion that effectively addressing the public priorities of the 21st century requires that those working on matters of public interest possess a keen understanding of the political forces that guide or thwart the successful mobilization of resources and the achievement of constituent goals consistent with the public interest. Similarly, the need and opportunity for the active engagement—or leadership—of concerned citizens in the policymaking process is greater than ever before. Accordingly, students in any of the center’s academic programs will be representative of not only those working professionals in the public and nonprofit sectors, but also elected officials; community activists; interest-group stakeholders; educators from a wide range of demographic, occupational and personal backgrounds; and simply concerned citizens.

Center for Research in the Health and Behavioral Sciences

Director: Susan Dreisbach
Telephone: 303-556-6796
E-mail: Susan.Dreisbach@ucdenver.edu

The Center for Research in the Health and Behavioral Sciences (CRHBS) is dedicated to promoting research and community service in health issues facing the local Denver

area, Colorado, the nation and beyond. Research conducted by the allied CRHBS faculty is unique in integrating biomedical, public health and social science perspectives. Current external funding of research through CRHBS is focused on such topics as preventing HIV and STD transmission program evaluation. Research assistant and internship positions for students in the health and behavioral sciences doctoral program are commonly available through CRHBS.

Colorado Center for Public Humanities

Director: Philip Joseph
Telephone: 303-556-4648
E-mail: Philip.Joseph@ucdenver.edu
Website:
http://www.ucdenver.edu/academics/colleges/CLAS/Centers/publichumanities/Pages/index.aspx

The work of this center is oriented around two primary goals. First, as a think-tank, the center investigates the public value of the humanities disciplines in relation to historical change by sponsoring programs that help to clarify the roles that humanities-based scholarship can play within the region, the nation and the world more generally. Our second goal is to direct the engagements of humanities scholars toward extra-academic communities. In pursuing this objective, the center will support scholars whose research programs are designed to reach civic groups outside the university walls and to benefit from the involvement of these groups.

Fourth World Center for the Study of Indigenous Law and Politics

Director: Glenn T. Morris
Telephone: 303-556-2850
E-mail: Glenn.Morris@ucdenver.edu

The Fourth World Center for the Study of Indigenous Law and Politics was founded in 1984 as a resource commons of authoritative information on indigenous peoples' affairs. The major components of the center's educational project are:

- the creation and presentation of a university-level multidisciplinary curriculum focused on the study of indigenous peoples
- the publication of the *Fourth World Bulletin*, a journal on indigenous politics with a global concentration
- the development of university textbooks for the study of indigenous politics
- the presentation of public forums
- the presentation of testimony before international legal organizations

The center features a library, periodicals, audio and visual equipment and online news archives on current development issues surrounding "the Fourth World."

Shared Analytical Services Laboratory

Lab Manager: Jeff Boon
Telephone: 303-556-4520
E-mail: Jeffery.Boon@ucdenver.edu
Website: clas.ucdenver.edu/sasl/

The Shared Analytical Services Laboratory fosters and promotes disciplinary and interdisciplinary research in the environmental sciences. Faculty represent disciplines within the College of Liberal Arts and Sciences, as well as civil engineering. Services provided by the laboratory are available to all members of the university community, as well as to members of the public and private sectors through joint projects.

Smart-Girl Leadership Institute

Telephone: 303-556-2557
Website:
http://www.ucdenver.edu/academics/colleges/CLAS/FacultyProjects/Pages/community-programs.aspx

The Smart-Girl Leadership Institute is a prevention and enrichment program that trains college students to lead and inspire adolescent girls to make smart choices and become confident, capable and self-reliant women. CU Denver students earn credit while they build the skills to lead small groups of girls through a fun and effective curriculum.

Writing Center

Director: Justin J. Bain
Office: North Classroom, 4014
Telephone: 303-556-4845
Web site: clas.ucdenver.edu/writing/

The Writing Center provides free writing assistance to all members of the CU Denver community, including students, faculty, staff and alumni. Professional writing consultants are available to assist writers in one-on-one sessions. All consultations are by appointment; to schedule an appointment please visit our Web site.

In addition, the center hosts professional development workshops for graduate students and faculty; maintains a library of grammar handbooks, citation manuals and composition texts; and conducts informational class visits. For additional information on our services for students, see the listing in the Student Services chapter.

Departments and Programs

Anthropology

Chair: Stephen Koester
Program Assistant: Connie Turner
Office: Administration Building, 270
Undergraduate Advisor: David Tracer
Graduate Director: Christopher Beekman
Telephone: 303-556-3554
Fax: 303-556-8501
Website: clas.ucdenver.edu/anthropology/

Faculty

Professors:

Stephen Koester, PhD, University of Colorado

Tammy Stone, PhD, Arizona State University

David Tracer, PhD, University of Michigan

Associate Professors:

Christopher Beekman, PhD, Vanderbilt University

John Brett, PhD, University of California at San Francisco and Berkeley

Assistant Professors:

Sarah Horton, PhD, University of New Mexico

Charles Musiba, PhD, University of Chicago

Marty Otañez, PhD, University of California-Irvine

Julien Riel-Salvatore, PhD, Arizona State University

Instructor:

Tiffany Terneny, PhD, University of Texas-Austin

Adjunct Faculty:

David Ruppert, PhD, University of Arizona

Jean Scandlyn, PhD, Columbia University

Sue Woods, PhD, University of Colorado

Undergraduate

Anthropology is the study of human origins and evolution, the present conditions of human life and the prospects for the future. It considers human beings as biological and social entities and seeks to explain both diversities and commonalities of peoples and cultures. For undergraduates, anthropology provides a rich overview of human life. It also introduces them to a variety of skills and practical research methods anthropologists apply in laboratory and field studies of the ecological constraints on human existence, the cultural bases of individual and organizational behavior and the problems and circumstances relating to the maintenance of today's healthy, productive human action in general.

Anthropological training provides entry to a variety of careers in archaeology, museology, education, community service, public administration, public health, international affairs and business. The specific skills it provides are useful to students of environmental design, city planning, community development, the medical and nursing professions and allied health sciences, law, public affairs and secondary education.

REQUIREMENTS FOR MAJOR

Departmental Honors Requirements

Students wishing to graduate with departmental honors in anthropology must have a cumulative GPA of at least 3.5, with a 3.7 minimum GPA in anthropology for *cum laude* (3.8 for *magna cum laude* and 3.9 for *summa cum laude*), as well as prepare an honors thesis of high quality. They must also take ANTH 4810, Integrating Anthropology.

Interested students should inquire in the department no later than two semesters before graduation.

REQUIREMENTS FOR MINOR

Graduate

► Graduate School rules apply to this program

The unique intellectual challenge of anthropology is to integrate knowledge from many disciplines for a global understanding of cultural and biological diversity in the past and the present. Individual courses in cultural and biological anthropology and archaeology cut across lines of the humanities and social and natural sciences. Because of this integrative perspective on the human condition—and the training provided in objectively assessing cultural patterning and social interaction—anthropology graduates have a strong and versatile base for careers in a variety of fields. Graduates of our program get jobs as professional archaeologists; work in international NGOs as researchers in the health sciences and public health, as college teachers and in international development; while others have been very competitive in prestigious PhD programs (e.g., Berkeley, Pennsylvania, McMasters, Oxford).

Specialties and Tracks

CU Denver's Department of Anthropology provides an outstanding graduate education in anthropology, giving students a broad yet thorough grounding in the three major subfields of anthropology, as well as specialized instruction in one or more research orientations in which department faculty have substantial expertise. The graduate faculty in anthropology are particularly known for their research and publications in medical anthropology; microfinance; human growth and development; experimental economics; visual anthropology; social and cultural factors in HIV and hepatitis; ethnicity; political economy; southwestern, Mexican and Neanderthal archaeology; and urban and community anthropology. Across the specializations there is a strong emphasis on research design and methodology, providing students concrete job-related skills. Area studies emphases include Latin America, East Africa, and the US Southwest. Students also have opportunities to study abroad, to participate in one of several field schools, and to gain international research experience.

Topical Concentrations

- medical anthropology
- archaeological studies
- biological anthropology
- sustainable development and political ecology

ANTHROPOLOGY MA PLANS OF STUDY

Application Process

Application is open to holders of a BA, BS or higher degree in any field, and we welcome applications from individuals pursuing particular interests and careers, especially those related to one of the areas of concentration noted above. The departmental deadline for receipt of all application materials is **February 15** for admission in the following fall.

Acceptance to the program is competitive and based on:

- an undergraduate record of good quality (3.0 GPA or higher for all undergraduate studies)
- prior training in anthropology
- GRE scores (verbal, analytic and quantitative)
- three letters of recommendation
- a statement of the applicant's purpose in pursuing the degree
- two copies of transcripts from all undergraduate/graduate institutions attended

If you have no prior anthropology training, we encourage you to gain the necessary background as a nondegree student before applying to the graduate program. Prior training required in anthropology corresponds to that required for the minor, consisting of approximately 18 semester hours and including introductory courses in biological/physical anthropology, cultural anthropology and archaeology. Students with exceptional qualifications may be admitted without prior anthropology training but will be required to make up deficiencies without graduate credit during the course of their graduate study.

Financial Aid

The department offers limited tuition assistance, teaching assistantships and research assistantships for graduate students on a semester-by-semester basis. Appointment is competitive and is typically based on a student's academic credentials, GRE scores and preparation in anthropology. Contact the department for details. For information on grants, federal work-study programs, scholarships and loans, contact the UC Denver financial aid office.

Bachelor of Arts

Anthropology BA

Students majoring in anthropology for the BA degree must declare such by the time they have completed 60 semester hours. Majors must complete a minimum of 40 semester hours in anthropology with a grade of *C* (2.0) or better in each course. At least 24 hours

must be at the upper-division level and a minimum of 21 semester hours must be taken from CU Denver faculty. (Note that most upper-division courses have lower-division prerequisites.)

Program Requirements

Required Anthropology Courses

- ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3
- ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1
- ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
- ANTH 3101 - Foundations of Cultural Anthropology **gtPATHWAYS:**
- ANTH 3301 - World Prehistory **gtPATHWAYS:**
- ANTH 3512 - Human Evolution **gtPATHWAYS:**

Total: 20 Hours

Anthropology Electives

Recommended courses:

- ANTH 4050 - Quantitative Methods in Anthropology **gtPATHWAYS:**
- ANTH 4810 - Integrating Anthropology **gtPATHWAYS:**

Total (minimum): 20 Hours

Major Total: 40 Hours

Non Degree

Anthropology Minor

A minimum of 18 semester hours in anthropology must be completed with an average of *C* (2.0) or better. Nine of the 18 hours must be upper division and 9 hours must be taken from CU Denver faculty.

Program Requirements

Required Courses

Choose a minimum of three courses from the following:

- ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3
- ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1
- ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
- ANTH 3101 - Foundations of Cultural Anthropology **gtPATHWAYS:**
- ANTH 3301 - World Prehistory **gtPATHWAYS:**
- ANTH 3512 - Human Evolution **gtPATHWAYS:**

Total: 9-11 Hours

Elective Courses

Total: 7-9 Hours

Minor total: 18 Hours

Master of Arts

Anthropology, MA

► Graduate School Rules apply to this program.

Plans of Study

MA students may pursue the thesis or non-thesis option.

- **Thesis Option:** A thesis is characterized by three factors: 1) it is based in a research question or problem; 2) it involves original research; 3) there is a fully developed research proposal. A thesis can also encompass a range of format alternatives to the traditional thesis (e.g. article submitted for publication to a peer-reviewed journal, or a video production, internship or museum exhibit, each generally accompanied by a companion paper developing a theoretical or problem-oriented question). The thesis option requires 30 semester hours, including 4-6 hours of thesis.
- **Non-Thesis Option:** This track is defined by additional course work in lieu of a thesis. The non-thesis option requires 36 semester hours of course work.

Thesis Option

The thesis is a major requirement for those in the MA in anthropology thesis track. The thesis should demonstrate the student's ability to apply knowledge and skills gained from the anthropology department's curriculum. A desirable goal for an excellent thesis would be a work of sufficient rigor and quality that it could be considered for publication. Original data collection ("fieldwork") is recommended but not required for the thesis. Analysis of secondary data—whether quantitative, qualitative, visual or other formats—is perfectly acceptable as long as the research is informed by a clearly articulated research question and under-girded by a research proposal.

The traditional thesis is a single document that often incorporates a literature review, definition of a problem, discussion of methods to address the problem, the subsequent research activity and results. However, the student may design a thesis with different emphases, in consultation with their advisor. For example, the goal may instead be a more compact paper submitted to a peer-reviewed journal. Other thesis plans may combine some research activity such as a video production, museum exhibit or an internship, with an accompanying paper. Students pursuing the thesis option must develop a topic and research proposal that specifies their plans in the semester after their completion of 18 credit hours.

The thesis must be defended before a committee of three faculty, at least two of whom need to be on the Department of Anthropology faculty (which includes senior instructors and research faculty). The structure of the thesis is largely determined by the University of Colorado Denver Graduate School Rules; i.e., a thesis must conform to the rules.

1. For the thesis, students must prepare a full research proposal which must be approved by their thesis chair before beginning their research. This proposal must be completed by the semester after the student has completed 18 credit hours. Sections of the proposal should include, at a minimum:
    a. Introduction and statement of the problem: Should include a one sentence statement of the problem on the first page, and a discussion of its significance (i.e., why is it important that this topic be researched).
    b. Literature review covering theoretical and topical material.
    c. Research design and methods including a data analysis plan.

Note: Wenner-Gren and National Science Foundation both provide good models and templates for the research proposal. Those in the medical anthropology track might want to consider following the NIH model, depending the nature of their research questions and career goals.

2. All students proposing to work with humans or data on modern humans must apply for and receive approval from the Human Subjects Research Committee before they begin their research. Note: most of the material for the application will be drawn from the research proposal.
3. The draft thesis must be reviewed and approved as "defensible" by the student's thesis committee faculty chair before a thesis defense date can be set.

Defensible means the chair has reviewed the draft and suggested changes have been made.

a. The draft sent to the student's committee must be substantively complete: All references must be in the text and properly formatted in a references cited section; there should be no "track changes" comments in the text; the text should be formatted according to Graduate School requirements.
b. Given the complexity of faculty and student schedules, consultation on a defense date should be done as far in advance as possible.
c. There must be a minimum of three weeks between the agreed-upon date for the defense and distribution of the draft thesis defined as defensible by the student's chair. If you would like feedback from your committee members before the defense, you should plan to distribute the thesis at least 4 weeks before the defense date.

Note: If you intend to graduate the same semester you defend your thesis, you must schedule, successfully defend, and complete all recommended changes in accordance with CU Denver Thesis and Dissertation Guidelines. This effectively translates to having the thesis completed and "defensible" before the middle of the semester.

Non-Thesis Option

The non-thesis option allows students to pursue their own educational goals through the selection of additional courses that fit their interests. We strongly encourage students who choose this option to consider an internship position arranged around an area of expertise or the development of a skill-set. The internship may be in a governmental agency or non-governmental organization in Colorado, the U.S. or internationally. Successful completion of an internship will be acknowledged on the transcript of the MA program. The decision to pursue the non-thesis option should be made by the semester following the completion of 18 credit hours.

Additional Information

Students must maintain an overall GPA of 3.0 to remain in good standing and receive a grade of *B*- or better in a course to have it count toward graduation. The Graduate School on the Downtown Campus allows up to five years to complete a master's degree, but students are strongly discouraged from spending more than four years. While it is possible to finish the MA in two years, most of our students work part-time, which limits the time they can dedicate to the program; most finish within three years. Four semesters must be taken in residence at CU Denver. All students are required to pass a written comprehensive examination, taken after core course work has been completed.

Some students may benefit from adding a specific skills-based certificate program onto their graduate program. For example: archaeology students may wish to gain expertise in Geographic Information Systems through the GIS certificate offered through the Department of Geography and Environmental Sciences, while medical anthropology students may benefit from the certificate in public health offered through the School of

Public Health or the environmental health certificate through the Master of Science in Environmental Sciences program. Graduate-level courses in certificate programs can often fulfill elective requirements in the anthropology program.

One doctoral program at CU Denver campus that may be of particular interest to graduates of the anthropology MA program is the PhD in Health and Behavioral Sciences offered through the Department of Health and Behavioral Sciences. It is highly interdisciplinary and a natural extension of a master's degree in anthropology.

Course Requirements

Your graduate anthropology education begins by taking ANTH 5810, Integrating Anthropology, plus two core courses each from two subdisciplines of Anthropology. After completing this core, you will select from among the specialized elective courses in the research concentrations described in more detail below. You will work closely with an advisor in selecting the range of courses appropriate both to a problem orientation and to your career objectives.

Required core courses (18 semester hours)

Required in fall of first year:

- ANTH 5810 - Integrating Anthropology **gtPATHWAYS:**

All students must complete or demonstrate competence in the following:

- ANTH 5053 - Quantitative Methods in Anthropology **gtPATHWAYS:**

Choose two of the following three sets of core courses (Students are not required to take these courses sequentially)

Archaeology

- ANTH 6307 - Contemporary Perspectives in Archaeology **gtPATHWAYS:**
- ANTH 6317 - Archaeological Research Design and Analysis **gtPATHWAYS:**

Biological

- ANTH 6503 - Biological Anthropology Core: The Fossil Record **gtPATHWAYS:**
- ANTH 6513 - Biological Anthropology Core: Modern Human Variation **gtPATHWAYS:**

Cultural

- ANTH 6063 - Qualitative Research Design and Methods **gtPATHWAYS:**
- ANTH 6103 - Current Theory in Ethnography **gtPATHWAYS:**

Research Concentrations (8-18 semester hours)

You will round out your program by selecting from the diverse range of courses offered in the department according to your particular interests in anthropology, your career goals and your plans for future graduate study. You may take courses in one or more concentrations. The courses listed are suggestions only; you must work closely with your advisor in constructing your particular program of study.

MEDICAL ANTHROPOLOGY

Medical anthropology is a subdiscipline of anthropology that includes the study of all aspects of health, illness and disease in human communities and populations. It draws on all of the perspectives that distinguish anthropology as a unique discipline: the analysis of human evolution and adaptation; cultural development, expressions and variability; and historical change and continuity. Medical anthropology takes as its subject a broad range of specific topics, including the study of health care systems, factors that affect the distribution and determinants of disease in populations, maternal and child health, nutrition and food habits, human development, political ecology, health policy and language and communication in health care contexts. Faculty in the department emphasize the applied dimensions of medical anthropology, preparing students for careers in public health, health care and health sciences research. Courses in the department are complemented by electives in other departments (sociology, biology, psychology, history, geography), programs on the Denver campus (health administration, public affairs, education) and programs at the Anschutz Medical Campus (Schools of Medicine, Public Health, Dental Medicine, Pharmacy and Nursing).

Courses

- ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
- ANTH 5030 - Ethnobiology **gtPATHWAYS:**
- ANTH 5040 - Anthropology of Food and Nutrition **gtPATHWAYS:**
- ANTH 5060 - Evolutionary Medicine **gtPATHWAYS:**
- ANTH 5090 - Political Economy of Drugs **gtPATHWAYS:**
- ANTH 5150 - Human Biocultural Adaptability **gtPATHWAYS:**
- ANTH 5230 - Anthropology and Community Based Participatory Research **gtPATHWAYS:**
- ANTH 5260 - Human Reproductive Ecology **gtPATHWAYS:**
- ANTH 5300 - Migrant Health **gtPATHWAYS:**
- ANTH 5560 - Human Ecology **gtPATHWAYS:**
- ANTH 5600 - Medical Anthropology **gtPATHWAYS:**
- HBSC 7310 - Environmental Epidemiology **gtPATHWAYS:**

Note: Students are also strongly encouraged to take elective courses in public health, epidemiology and biostatistics, which are available in the Department of Biometrics and Preventive Medicine on the Anschutz Medical Campus. See the Health Professions chapter of this catalog for further information.

ARCHAEOLOGY

The archaeological studies program concentrates on the study of past human societies using archaeological data collected in field and museum settings. While a quantitative and scientific approach is emphasized, the theoretical perspectives employed also draw heavily from political economy and cultural ecology. The department offers a variety of theoretical, methodological and area courses, which may be supplemented by others in the geography and environmental sciences and history departments. Internships are available in local museums and historic preservation offices in the Denver metropolitan area.

Courses

- ANTH 5210 - Archaeology of the American Southwest **gtPATHWAYS:**
- ANTH 5320 - Archaeology of Mexico and Central America **gtPATHWAYS:**
- ANTH 5330 - Lithic Analysis **gtPATHWAYS:**
- ANTH 5380 - Archaeology of Hunters-Gatherers **gtPATHWAYS:**
- ANTH 5400 - Archaeology of Power and Inequality **gtPATHWAYS:**
- ANTH 5570 - Landscape Archaeology **gtPATHWAYS:**
- ANTH 5580 - Neanderthals and the Origin of Modern Humans **gtPATHWAYS:**
- ANTH 5910 - Field Experience in Archaeology **gtPATHWAYS:**
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**
- GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
- HIST 5231 - History in Museums **gtPATHWAYS:**
- HIST 5232 - Historic Preservation **gtPATHWAYS:**
- HIST 5234 - Introduction to Public History **gtPATHWAYS:**

BIOLOGICAL ANTHROPOLOGY

The biological anthropology concentration is concerned with modern human biological diversity and the past evolutionary history that has led to such diversity. Students in this concentration develop a firm understanding of the evolutionary processes that lead to physical and behavioral variation in humans and nonhuman primates. The concentration also emphasizes the theoretical and quantitative methods used to explore and explain this variation. Students may take courses in diverse areas including evolutionary biology, genetics, ecology, ethnobiology, epidemiology, nutrition, medical anthropology, paleoanthropology, paleontology and primatology. Because biological anthropology is

multidisciplinary in nature, students are encouraged to consider courses offered outside the department.

Courses

- ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
- ANTH 5030 - Ethnobiology **gtPATHWAYS:**
- ANTH 5040 - Anthropology of Food and Nutrition **gtPATHWAYS:**
- ANTH 5060 - Evolutionary Medicine **gtPATHWAYS:**
- ANTH 5150 - Human Biocultural Adaptability **gtPATHWAYS:**
- ANTH 5500 - Advanced Issues in Human Evolution **gtPATHWAYS:**
- ANTH 5520 - Human Biological Variation **gtPATHWAYS:**
- ANTH 5530 - Anthropological Genetics **gtPATHWAYS:**
- ANTH 5550 - Primate Comparative Anatomy **gtPATHWAYS:**
- ANTH 5560 - Human Ecology **gtPATHWAYS:**
- ANTH 5580 - Neanderthals and the Origin of Modern Humans **gtPATHWAYS:**
- ANTH 5640 - Darwinian Approach to Human Behavior **gtPATHWAYS:**
- BIOL 5074 - Human Reproductive Biology **gtPATHWAYS:**
- BIOL 5134 - Human Genetics **gtPATHWAYS:**
- BIOL 5494 - Population and Evolutionary Genetics **gtPATHWAYS:**
- HBSC 7031 - Human Ecology and Environmental Adaptation **gtPATHWAYS:**
- HBSC 7310 - Environmental Epidemiology **gtPATHWAYS:**

SUSTAINABLE DEVELOPMENT AND POLITICAL ECOLOGY

This concentration provides a critical, multicultural and multidisciplinary perspective on issues of development and resource conservation, with a strong emphasis on the integration of theoretical knowledge with field-based training opportunities. Three major themes are addressed within this concentration:

1. the types of resource management systems present in the world and their relationship to particular ecosystems
2. the types of knowledge systems and ideas associated with this diverse array of resource management systems, environmental knowledge and theoretical perspectives
3. the culture of institutions—ranging from small-scale NGOs to the World Bank—that design and implement conservation and development

A central goal of this emphasis is to provide students with the information, opportunities and resources required for pursuing a wide variety of career options in conservation and/or development. In addition to offering the following courses, the department encourages students to develop a specialized skill in conjunction with other departments and schools, including areas such as GIS mapping (geography), ecology (biology/anthropology), legal and policy issues (political science, School of Public

Affairs), land use (geography, School of Public Affairs) and research/evaluation methodologies (anthropology).

Courses

- ANTH 5030 - Ethnobiology **gtPATHWAYS:**
- ANTH 5070 - Culture of Development and Globalization **gtPATHWAYS:**
- ANTH 5170 - Culture and the Environment **gtPATHWAYS:**
- ANTH 5180 - The Nature of Power **gtPATHWAYS:**
- ANTH 5220 - Community in Global Context **gtPATHWAYS:**
- ANTH 5230 - Anthropology and Community Based Participatory Research **gtPATHWAYS:**
- ANTH 5450 - Development and Conservation: Contemporary Issues **gtPATHWAYS:**
- ANTH 5460 - Development and Conservation: Theory and Practice **gtPATHWAYS:**
- ANTH 5570 - Landscape Archaeology **gtPATHWAYS:**
  Other courses in consultation with faculty advisor.

DEGREE TOTAL HOURS

Thesis Option: 30 Hours (including 4-6 hours of thesis)

Non-Thesis Option: 36 Hours

Chemistry

Chair: Mark R. Anderson
Program Assistant: Laura Cuellar
Office: North Classroom, 3002
Telephone: 303-556-4885
Fax: 303-556-4776
Website: clas.ucdenver.edu/chemistry/

Faculty

Professors:

Larry G. Anderson, PhD, Indiana University

Mark R. Anderson, PhD, University of Wisconsin

Robert Damrauer, PhD, Massachusetts Institute of Technology

Douglas Dyckes, PhD, Case Western Reserve University

James H. Hageman, PhD, University of California, Los Angeles

John A. Lanning, PhD, University of Tennessee

Associate Professors:

Doris R. Kimbrough, PhD, Cornell University

Xiaotai Wang, PhD, University of Virginia

Assistant Professors:

Karen Knaus, PhD, Cleveland State University

Hai Lin, PhD, University of Science and Technology of China

Yong Liu, PhD, University of Michigan

Scott Reed, PhD, University of Oregon

Jefferson Knight, PhD, Yale University

Instructors:

Margaret Bruehl, PhD, Northwestern University

Priscilla Burrow Crocker, PhD, University of Colorado

Undergraduate

Why study chemistry? A practical reason is that our highly technical society faces many problems that can be solved through an understanding of the science of chemistry and its methods of solving problems. A more intangible reason is that chemistry is central to

a variety of other disciplines and that many problems ultimately will have chemical solutions.

At the undergraduate level, students can prepare for:

1. careers in chemical and medical laboratories
2. careers in nursing, medical technology, dental hygiene and other health-oriented fields
3. post-baccalaureate programs in chemistry, biology, biochemistry, medicine, physical therapy and dentistry.

At the graduate level, an MS degree program is offered. Students with MS degrees have job opportunities in research and technical laboratory services. In addition, flexible programs can be designed to combine chemical knowledge and skills with other interests of the MS-level student (e.g., biology or environmental science).

REQUIREMENTS FOR MAJOR

BS/MS PROGRAM

Departmental Honors

Qualified students are encouraged to participate in the chemistry honors program. Three levels of honors are awarded by the Downtown Campus. To earn *cum laude* honors in chemistry, a student must satisfy one of the following criteria: (1) an overall GPA of 3.2 or better and a chemistry GPA of 3.5 or better; or (2) an overall GPA of 3.2, a chemistry GPA of 3.2 or better, and six hours of CHEM 4840, Independent Study, spread over a minimum of two semesters. To earn *magna cum laude* or *summa cum laude* honors in chemistry, a student must satisfy each of the following criteria: an overall GPA of 3.2 or better, a chemistry GPA of 3.5 or better; six hours of CHEM 4840, Independent Study, spread over a minimum of two semesters with a GPA of 3.1 or better; and presentation of a thesis on the independent study research to a faculty advisory committee. The committee decides if *magna cum laude* or *summa cum laude* honors are to be awarded.

REQUIREMENTS FOR MINOR

Graduate

The MS degree offered at CU Denver is a broad-based chemistry degree that allows students to take courses and do research in the following basic fields: analytical, biochemistry, inorganic, organic, physical or environmental chemistry.

The MS program is available to both full- and part-time students. The chemistry faculty strive to ensure that students receive excellent advising and supervision of work. Students enrolled in the program have an opportunity to be appointed as laboratory

teaching assistants. Research activities on the part of the chemistry faculty provide opportunities for graduate students to obtain research assistantships.

CHEMISTRY MS

BS/MS PROGRAM

Bachelor of Science

Chemistry BS

Requirements for Major

Students must declare their major by the time they have completed 60 semester hours. The chemistry major requires 45 semester hours in chemistry. Transfer students must take at least 14 upper-division chemistry hours, including CHEM 4128, 4518 or 4538, in residency at CU Denver. A student who has declared a chemistry major at CU Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. Normally, no more than 3 additional hours of transfer credits will be allowed. The minimum grade in chemistry courses is *C*- (1.7) and a minimum chemistry GPA of 2.0 is required in chemistry and ancillary required courses. All majors must successfully complete the following core:

TRADITIONAL CHEMISTRY MAJOR

Required Chemistry Courses

- CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
- CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
- CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
- CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
- CHEM 3011 - Inorganic Chemistry **gtPATHWAYS:**
- CHEM 3111 - Analytical Chemistry **gtPATHWAYS:**
- CHEM 3118 - Analytical Chemistry Laboratory **gtPATHWAYS:**
- CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**
- CHEM 3418 - Organic Chemistry Laboratory I **gtPATHWAYS:**
- CHEM 3491 - Honors Organic Chemistry II **gtPATHWAYS:**
- CHEM 3498 - Honors Organic Chemistry Laboratory II **gtPATHWAYS:**
- CHEM 4121 - Instrumental Analysis **gtPATHWAYS:**
- CHEM 4128 - Instrumental Analysis Laboratory **gtPATHWAYS:**

- CHEM 4511 - Physical Chemistry I **gtPATHWAYS:**
- CHEM 4518 - Physical Chemistry Laboratory I **gtPATHWAYS:**
- CHEM 4521 - Physical Chemistry II **gtPATHWAYS:**
- CHEM 4538 - Physical Chemistry II Laboratory **gtPATHWAYS:**

And one of the following two courses:

- CHEM 3018 - Inorganic Chemistry Laboratory **gtPATHWAYS:**
- CHEM 4828 - Biochemistry Lab **gtPATHWAYS:**

Total Required Courses: 45 Hours

Required Ancillary Courses

- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
- MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
- MATH 3511 - Mathematics of Chemistry **gtPATHWAYS:**
- PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
- PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
- PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
- PHYS 2341 - General Physics Lab II **gtPATHWAYS:**

Total Required Ancillary Courses : 22 Hours

Recommended Electives

- CHEM 3018 - Inorganic Chemistry Laboratory **gtPATHWAYS:**
- CHEM 3810 - Biochemistry **gtPATHWAYS:**
  -OR-
- CHEM 4810 - General Biochemistry I **gtPATHWAYS:**
- CHEM 4700 - Environmental Chemistry **gtPATHWAYS:**
- CHEM 4820 - General Biochemistry II **gtPATHWAYS:**
  Any CHEM 5000-level lecture class (3-4 semester hours)

Total Electives: 14-16 Hours

Chemistry Major Total: 81-83 Hours

Students interested in the chemistry major should consult regularly with a chemistry advisor. A complete description of the chemistry major’s program may be obtained in the Department of Chemistry office or department website.

Qualified majors are strongly urged to participate in independent study or departmental honors programs.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society for the professional training of chemists. For ACS certification, students are required to take inorganic laboratory and at least one semester of biochemistry. No course with a grade of less than *C* (2.0) can be applied toward ACS certification. Students should check with a chemistry advisor for details. CU Denver maintains an ACS chapter of student affiliates.

Bachelor of Science/Master of Science

Chemistry BS/MS

While students are completing a BS degree in chemistry, they may also complete some of the requirements for an MS degree in chemistry under the following guidelines:

- The student must apply and be accepted for participation in the BS/MS program prior to completion of the BS degree and be advised by both the undergraduate and graduate advisors.
- Up to 9 semester hours of graduate-level course work may be taken as an undergraduate and applied toward the MS degree. This course work may not be applied toward the BS degree or ACS certification requirements for the BS degree.
- Up to 3 semester hours of independent study (research) may be applied toward the graduate degree if that research is expanded and continued for a portion of the master's thesis research. This requires approval of the student's graduate research advisor in chemistry, the chemistry graduate program director and the CLAS associate dean for graduate studies.
- The chemistry department will waive the requirement for qualifying examinations in each area of chemistry for which the student has completed the undergraduate sequence of courses and laboratories at the Downtown Campus with grades of *B* or better for each course.
- The student must apply for and be admitted to the graduate program in chemistry beginning the semester immediately following completion of the BS degree in chemistry at the Downtown Campus.

This program allows undergraduate students who have begun their research as undergraduates to complete up to 12 semester hours (with approval of the graduate dean) toward the 30 semester hours required for a Plan I MS degree in chemistry while they are still completing their BS degree. This makes it possible for students to complete an MS degree in chemistry in only one year beyond the BS degree in chemistry. Students entering the program through the BS/MS program option must fulfill all of the requirements of the Plan I or Plan II graduate programs.

Non Degree

Chemistry Minor

The objective of the chemistry minor is to provide broad introductory course work and laboratory experience to science majors without the more technical mathematical and chemical prerequisites required of the chemistry major. The chemistry minor is open to all CLAS students and should prove beneficial for science majors, pre-professional health science majors and students seeking science education certification.

Course work and grade requirements that must be satisfied to obtain a chemistry minor include:

- a minimum of 20 semester hours of chemistry courses, including at least 10 at the upper division level
- upper-division course work must include three of the six subdisciplines that comprise chemistry: analytical, biochemistry, inorganic, organic, physical and environmental chemistry
- a minimum 2.0 GPA for chemistry courses taken at CU Denver
- all chemistry minor courses must be taken for a letter grade rather than with the pass/fail grading option
- to satisfy the department residency requirement, a minimum of 7 upper-division hours of chemistry must be taken at the Denver campus

Course Requirements

All upper division chemistry courses at CU Denver will satisfy course work requirements for the minor. Furthermore, the Department of Chemistry offers courses that have minimum chemistry and mathematics prerequisites and should be considered for the chemistry minor degree. Choose from the following suggested courses, or other electives approved by your chemistry minor advisor.

Analytical

- CHEM 3111 - Analytical Chemistry **gtPATHWAYS:**
- CHEM 3118 - Analytical Chemistry Laboratory **gtPATHWAYS:**

Biochemistry

- CHEM 3810 - Biochemistry **gtPATHWAYS:**

Organic

- CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**
- CHEM 3418 - Organic Chemistry Laboratory I **gtPATHWAYS:**
- CHEM 3421 - Organic Chemistry II **gtPATHWAYS:**
- CHEM 3428 - Organic Chemistry Laboratory II **gtPATHWAYS:**
- CHEM 3498 - Honors Organic Chemistry Laboratory II **gtPATHWAYS:**

Inorganic

- CHEM 3011 - Inorganic Chemistry **gtPATHWAYS:**

Physical

Course selections to be announced.

Environmental

- CHEM 4700 - Environmental Chemistry **gtPATHWAYS:**

MINOR TOTAL: 20 HOURS (minimum)

To register your minor in chemistry, please visit the CLAS advising office in NC 4002. After establishing your minor status, you are encouraged to meet with the chemistry minor advisor, Professor Mark Anderson in NC 3002C.

Master of Science

Chemistry MS

► Graduate School Rules apply to this program

Requirements for Admission

Students must meet the Downtown Campus Graduate School admission requirements with specific chemistry requirements as follows:

- Undergraduate GPA of at least 3.0.
- Undergraduate major in chemistry essentially equivalent to the one offered at UC Denver (see the undergraduate requirements), including two semesters of organic, analytical and physical chemistry with laboratories and one semester of inorganic chemistry. No student will be admitted to the graduate program who is not within two classes of meeting the undergraduate requirements.

- GRE examination is recommended, as is the advanced chemistry GRE examination.
- International students have additional admission requirements concerning immigration status, proof of financial responsibility and acceptable TOEFL scores.
- Failure to meet the full admission standards may lead to provisional admission.

Prospective students are encouraged to contact the graduate program director or visit the chemistry department website for additional details concerning the chemistry program, admission procedures, financial assistance and faculty research interests.

General Program Requirements

At the heart of the graduate program is a set of four core graduate courses in the fields of analytical, inorganic, organic and physical chemistry. A student must qualify in order to register for any core graduate class, either by passing a qualifying examination in that field or by passing the equivalent undergraduate class in that area at UC Denver with a grade of *B* (3.0) or better. All entering students are required to qualify in all four core fields. The qualifying requirements must be completed during the first year in the graduate program. Individual core classes may have additional prerequisites.

Depending on the program option that she/he selects, a student will be required to pass either three (Plan I) or all four (Plan II) of the graduate core courses with no grade in a core course below *B*- (2.7).

The remaining course work for the degree will consist of regular graduate offerings in chemistry, a limited number of which may be substituted by approved classes in related fields. In particular, students interested in interdisciplinary areas, such as biochemistry or environmental chemistry, are encouraged to take cognate courses outside the chemistry department. The chemistry graduate program director must approve in advance any graduate class taken outside the department that is to count toward the degree. All students are required to annually submit an updated program plan for approval and to have their progress evaluated by the graduate program director.

Specific Degree Requirements

There are two options for obtaining a master's degree from the Department of Chemistry: Plan I, the thesis option, and Plan II, the course work emphasis option. All students must complete at least 3 semester hours of master's report (CHEM 6960). A student is allowed to participate in the thesis option only after the successful completion of the master's report with the proposed advisor, and upon the mutual agreement of both the student and advisor that the student is prepared to work on a master's thesis. Students who select the course work emphasis option may petition to have up to 3 additional semester hours of master's report research substitute for an equivalent number of course work hours.

Plan I. Thesis Option

Plan I is a research-oriented program involving a minimum of 30 semester hours with the following requirements:

- 21-23 semester hours of formal course work, including three of the four graduate core courses
- 4-6 semester hours of CHEM 6950, Master's Thesis research; successful completion of the thesis research includes the presentation of the results at a departmental seminar
- 3 semester hours of CHEM 6960, Master's Report research
- a grade of *B*- (2.7) or better in all courses completed: *B*- (2.7) or better in all core courses
- a cumulative GPA of 3.0 or better in all courses taken as a graduate student
- an acceptable formal thesis consistent with the guidelines of the Graduate School
- successful oral defense of the master's thesis before a committee of at least three graduate faculty members, two of whom must be tenure track faculty members in the chemistry department
- compliance with all Graduate School Rules
- all work must be completed within five years of completion of the first graduate class in the department

Plan I thesis research must be conducted under the direct supervision of a tenure-track faculty member of the Downtown Campus Department of Chemistry. Plan I students must take a minimum of 15 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take one or two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

Plan II. Course Work Emphasis Option

Plan II is a course work-oriented program involving a minimum of 33 semester hours with the following requirements:

- 27-30 semester hours of formal course work, including all four graduate core courses
- at least 3 (but not more than 6) semester hours of CHEM 6960, Master's Report, research
- a grade of *B*- (2.7 or better in all courses completed; *B*- (2.7) or better in all core courses
- a cumulative GPA of 3.0 or better in all courses taken as a graduate student
- a final research report
- presentation of the research project in a final seminar
- successful defense of the project before a committee of at least three graduate faculty members, one of whom must be a tenure-track faculty member in the chemistry department

- compliance with all Graduate School Rules
- all work must be completed within five years of completion of the first graduate class in the department

A Plan II student may petition the graduate program director to substitute up to 3 semester hours of master's report (CHEM 6960) research, beyond the required minimum, for an equivalent number of semester hours of formal course work. Approval will be perfunctory for research performed with the support and under the direct supervision of a faculty member in the Department of Chemistry. Plan II students must take a minimum of 24 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take up to two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

Chinese Studies

Director: Kuan-Yi Rose Chang
Faculty Advisors:
Kuan-Yi Rose Chang, Plaza 118X, 303-556-2434
Ji Chen, Lawrence Street Center 390K, 303-556-6611
Xiaojia Hou, King Center 560, 303-556-8315
Stephen C. Thomas, King Center 520, 303-556-5259
Office: Modern Languages, Plaza 118X
Telephone: 303-556-2434
Website:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/ModernLanguages/Programs/Pages/Minors.aspx

This innovative program offers specialized study of China through course work in the related disciplines of language, anthropology, history, geography, literature, political science and business. China's economic and political presence is increasingly prominent in the United States. According to a recent national survey, Chinese is the fastest-growing foreign language in American colleges and universities. CU Denver is uniquely positioned to make use of its location as the cultural, economic and political center of the Rocky Mountain region and of its diverse, well-trained and highly qualified faculty to offer a course of interdisciplinary studies related to China.

The increasing prominence of China in world affairs has made knowledge of Chinese language and cultures a valuable asset in numerous fields. Today, career opportunities abound for Chinese studies graduates in government, international business, banking and financial services, law, medicine, journalism and graduate study in sinology. The breadth of the program's course offerings, coupled with the resources of the faculty,

ensures that its graduates will be especially well prepared for any of these professional pursuits.

The program in Chinese studies offers a host of study abroad opportunities throughout the academic year and every summer. UC Denver has on-going programs at the China Agricultural University in Beijing. Study abroad programs of two weeks to one year in length may be arranged, and program faculty can help students enroll in intensive Chinese language programs. Students pursuing the minor in Chinese language and area studies are encouraged to complete the program with a period of residence and study in a Chinese-speaking region.

REQUIREMENTS FOR CHINESE STUDIES MINOR

Non Degree

Chinese Studies Minor

The minor requires a total of 21 semester hours. A minimum of 15 semester hours must be taken from Denver campus faculty. All courses must be completed with a grade of *C* (2.0) or better.

Requirements for the Minor

Required Courses

- * CHIN 1000 - China and the Chinese **gtPATHWAYS:** GT-AH1
- CHIN 1010 - Beginning Chinese I **gtPATHWAYS:**
- CHIN 1020 - Beginning Chinese II **gtPATHWAYS:**

Total: 13 Hours

**Note:* CHIN 1000 should be taken toward the beginning of the minor.

Additional Courses

An additional 8 hours of course work should be selected from the following list of courses:

- ANTH 4000 - Special Topics in Anthropology **gtPATHWAYS:**
- CHIN 2110 - Second Year Chinese I **gtPATHWAYS:**
- CHIN 2120 - Second Year Chinese II **gtPATHWAYS:**
- CHIN 3200 - Contemporary Chinese Society and Culture **gtPATHWAYS:**

- FINE 4750 - Arts of China **gtPATHWAYS:**
- GEOG 3160 - Geography of China **gtPATHWAYS:**
- HIST 4420 - Traditional China: China to 1600 **gtPATHWAYS:**
- HIST 4421 - Modern China **gtPATHWAYS:**
- PSCI 4186 - East Asia in World Affairs **gtPATHWAYS:**
- PSCI 4615 - Politics and Government of China **gtPATHWAYS:**
- PSCI 4726 - Russian and Chinese Foreign Policy **gtPATHWAYS:**
- PHIL 3666 - Asian Philosophies and Religions **gtPATHWAYS:**
- PHIL 3981 - Chinese Philosophy and Culture **gtPATHWAYS:**

China-related travel study, taken under the following course numbers:

- ANTH 4995 - Travel Study **gtPATHWAYS:**
- CHIN 3995 - Travel Study **gtPATHWAYS:**
- COMM 4995 - Travel Study **gtPATHWAYS:**
- PSCI 4995 - Travel Study **gtPATHWAYS:**

Total: 8 Hours

Minor Total: 21 Hours

Note: New courses may not appear in the course description section of this catalog. Contact the department for further information.

Communication

Chair: Stephen J. Hartnett
Associate Chair: Barbara Walkosz
Graduate Advisor: Lisa Keränen
Program Assistant: Michelle Medal
Undergraduate Advisor: E. J. Yoder
Internship Coordinator: Suzanne Stromberg
Office: Plaza Building, 102
Telephone: 303-556-2591
Fax: 303-556-6018
Website: clas.ucdenver.edu/communication/

Faculty

Professors:

Brenda J. Allen, PhD, Howard University

Sonja K. Foss, PhD, Northwestern University

Barbara Walkosz, PhD, University of Arizona

Associate Professors:

Larry Erbert, PhD, University of Iowa

Stephen J. Hartnett, PhD, University of California at San Diego

Lisa Keränen, PhD, University of Pittsburgh

James F. Stratman, PhD, Carnegie-Mellon University

Omar Swartz, PhD, Purdue University

Assistant Professors:

Hamilton Bean, PhD, University of Colorado

Instructors:

Yvette Bueno-Olson, PhD, University of Miami

Wanda Lakota, MA, University of Denver

Diann Logan, MA, University of Colorado

Kathleen Pounders, MA, University of Colorado

Suzanne Stromberg, MA, Regent University

E. J. Yoder, PhD, University of Denver

The Department of Communication seeks to enrich understanding of the roles of communication in everyday life, organizational settings and public affairs. While the roots of the discipline trace back to the ancient arts of philosophy, rhetoric and aesthetics, its contemporary practices speak to the opportunities and dilemmas of participating in a globalized, mediated and multicultural society.

The department's classes are organized in nine pathways, including community service and public affairs, legal communication, health communication, mass media, human resources and organizational communication, mediation and conflict resolution, political

communication and government, technical communication and public relations and advertising.

Across these pathways, students are encouraged to merge theoretical studies with practical applications, including in-service learning courses, travel study, internships, social justice projects and other experiential modes of learning. The Department of Communication therefore provides students the skills, knowledge and opportunities to use communication to help create a more humane and civil world.

Undergraduate

REQUIREMENTS FOR MAJOR

Academic Honors

Academic honors are conferred at graduation on students whose achievements are above those required for the bachelor's degree. Three levels of honors are available to students. *Cum laude* honors may be earned by communication majors with a cumulative GPA of 3.0 and a GPA of 3.5 in 39 hours of communication courses. *Magna cum laude* and *summa cum laude* honors require the completion of a semester-long project during the senior year. Additional information about academic honors may be obtained from the undergraduate advisor in communication.

Undergraduate Internships

Internships are opportunities for students to work in communication-related positions in the community and to receive academic credit for that work. These internships provide a way for students to maximize their communication background and their understanding of concepts, theories, models and frameworks within the communication discipline.

To qualify to register for internships in communication, undergraduate students must be communication majors and have a cumulative GPA of 2.75.

Students typically receive 3 hours of academic credit for a one-semester internship in which they work between 15 and 30 hours a week. Communication majors may complete up to 6 hours of internship credit (CMMU 3939).

For further information about internships, contact Suzanne Stromberg at 303-556-6662 or Suzanne.Stromberg@UCDenver.edu.

MINOR IN COMMUNICATION

Undergraduate Certificates

UNDERGRADUATE CERTIFICATE IN MEDIATION

UNDERGRADUATE CERTIFICATE IN PUBLIC RELATIONS

UNDERGRADUATE CERTIFICATE IN TECHNICAL AND PROFESSIONAL COMMUNICATION

Grade and Residency Requirements for Certificates

A grade of *B* or better must be earned in each course completed as part of the certificate (*B-* is not acceptable). All semester hours for a certificate must be earned at CU Denver.

Graduate

Grade Requirements

Students must maintain a GPA of 3.0 or higher across all courses applied to a graduate degree or to a graduate certificate.

Course Transfer Policy

A maximum of 6 semester hours of relevant graduate course work may be transferred from another university. Students cannot receive credit for transferred courses in which less than a *B* grade was earned. Course work transferred from another university must be approved by the director of the MA program.

Time Limits for Completion of Degree

Students have seven years from the date of the beginning of their course work to complete all requirements for a master's degree in communication.

MASTER OF ARTS IN COMMUNICATION

Application Procedures for U.S. Citizens

Students must submit the following materials to apply for admission to the MA program:

- letter of application explaining career plans and reasons for interest in the degree
- graduate admission application
- application for graduate admission—part II
- three letters of recommendation, preferably from university faculty (those writing the recommendations must use the request for recommendation form and their own letterhead stationery)
- two official transcripts from every college or university attended
- resume or *vita*

- writing sample
- GRE scores
- $50 application fee (nonrefundable)

Application forms are available from the communication department program assistant or the department's website.

The deadline for application for the fall semester is April 1, for spring semester October 1. All application materials should be sent to:

Program Assistant
University of Colorado Denver
Department of Communication
Campus Box 176; P. O. Box 173364
Denver, CO 80217-3364

Application Procedures for International Students

Students who are not U.S. citizens should begin the process of application to the MA program in communication by contacting the Office of International Affairs at UC Denver. This office will assist students in compiling their application materials, which then are submitted to the communication department. International students should not apply to the communication department directly. See the Information for International Students chapter for further information.

Graduate Certificates

GRADUATE CERTIFICATE IN PUBLIC RELATIONS

Grade and Residency Requirements for Certificates

A grade of *B* or better must be earned in each course completed as part of the certificate (*B*- is not acceptable). All semester hours for a certificate must be earned at CU Denver.

Bachelor of Arts

Communication BA

Requirements for Admission

Undergraduates must declare their intention to major in communication by the time they have completed 60 semester hours; they must apply to the communication department to be accepted as majors.

Program Requirements

The communication major requires that students take a total of 39 hours of course work in communication, 18 of which must be taken in residence at CU Denver. At least 21 of the 39 hours must be upper division. Students must achieve a grade of *C* (2.0) or higher to receive credit for a course in the major and must maintain a minimum GPA of *C+* (2.75) in their communication courses.

Students must complete 12 credits (4 courses) from the menu of core classes; they must complete at least 24 credits (8 classes) from the menu of electives; they must also complete at least 3 credits (1 class) from the menu of "exit" classes.

Core Courses

- COMM 1011 - Fundamentals of Communication **gtPATHWAYS:** GT-SS3
- COMM 1021 - Fundamentals of Mass Communication **gtPATHWAYS:** GT-SS3
- COMM 2020 - Communication, Citizenship, and Social Justice **gtPATHWAYS:**
- COMM 2050 - Business and Professional Speaking **gtPATHWAYS:**
- -OR- COMM 2101 - Presentational Speaking **gtPATHWAYS:**

Total: 12 Hours

Electives

Skill Area Electives

In addition to the four communication core courses, students are required to complete at least 24 credits (8 classes) from among the department's nine pathways, which include community service and public affairs, legal communication, health communication, mass media, human resources and organizational communication, mediation and conflict resolution, political communication and government, technical communication and public relations and advertising. Students may use the pathways to help craft a program of study, but *they are not required to do so*; the pathways are simply suggestions for ways to organize courses that will prepare students for careers.

Total: 24 Hours

Upper Division Elective

"Exit" Course—majors are required to complete at least one "exit" class that concludes their course of study with a special experience focused on high-level research, community engagement, international travel or workplace experience. Students may choose from the following courses:

- COMM 3939 - Internship **gtPATHWAYS:**

- COMM 4040 - Communication, Prisons, and Social Justice **gtPATHWAYS:**
- COMM 4282 - Environmental Communication **gtPATHWAYS:**
- COMM 4500 - Health Communication **gtPATHWAYS:**
- COMM 4510 - Usability Testing **gtPATHWAYS:**
- COMM 4620 - Health Risk Communication **gtPATHWAYS:**
- COMM 4688 - Senior Seminar: Transitioning from College to Career **gtPATHWAYS:**
- COMM 4995 - Travel Study **gtPATHWAYS:**

Total: 3 Hours

Major Total: 39 Hours

For more information, see the faculty advisor and the department's website.

Certificate

Mediation Undergraduate Certificate

Mediation entails a third-party intervention designed to assist parties in managing conflict. Trained mediators are impartial process experts who learn to utilize communication and conflict philosophy and theories to increase the probability of more favorable outcomes between parties in conflict. The undergraduate certificate is designed for communication majors or any student interested in developing practical skills in alternative dispute resolution. The courses in this certificate focus on alternative dispute processes that include strategies for managing conflict in personal, public, legal, political, governmental and corporate contexts.

Certificate Requirements

The undergraduate certificate in mediation requires 12 semester hours (four courses).

Core Courses

Students take three core courses:

- COMM 4262 - Mediation **gtPATHWAYS:**
- COMM 4255 - Negotiations and Bargaining **gtPATHWAYS:**
- COMM 4260 - Communication and Conflict **gtPATHWAYS:**

Total: 9 Hours

Elective

Stuudents take one elective chosen from:

- COMM 4140 - Argumentation **gtPATHWAYS:**
- COMM 4282 - Environmental Communication **gtPATHWAYS:**
- COMM 4681 - Communication Issues in Trial Court Practices and Processes **gtPATHWAYS:**

Total: 3 Hours

Certificate Total: 12 Hours

Students may be allowed to take courses other than those on this list to fulfill the requirements for the certificate, if those courses better fit their professional goals.

Public Relations Graduate Certificate

Public Relations has been defined as the management function that entails planning, research, publicity, promotion and collaborative decision-making to help any organization's ability to listen to, appreciate and respond appropriately to those persons and groups whose mutually beneficial relationships the organization needs to foster as it strives to achieve its mission and vision. The graduate certificate in public relations is designed to provide students with the principles and theories that guide the work of public relations practitioners in commercial, public and non-profit contexts.

The graduate certificate in public relations is designed for working professionals who already have earned bachelor's degrees but who would like to enhance or upgrade their skills in the area of public relations. Non-degree students who enroll in the MA program following completion of the certificate may transfer up to 12 hours of credits earned for the certificate into credits for the MA degree. The certificate also is designed for students enrolled in a CU Denver master's program, including the Department of Communication's MA program. For such students, the certificate can be completed as part of or in addition to the course work required for the master's degree (recipients of the undergraduate certificate in public relations are ineligible to complete this certificate).

Certificate Requirements

The graduate certificate in public relations requires four courses (12 semester hours):

- COMM 5240 - Organizational Communication **gtPATHWAYS:**
- COMM 5635 - Principles of Public Relations **gtPATHWAYS:**
- COMM 5640 - Advanced Public Relations **gtPATHWAYS:**

- COMM 5665 - Principles of Advertising **gtPATHWAYS:**

Total: 12 Hours

Students may be permitted to take courses other than those listed above to fulfill the requirements for the certificate if those courses fit their professional goals better (CMMU 5635, Principles of Public Relations may not be substituted, however). Requests for approval of substitute courses, including an explanation for the substitution, must be made in writing to Hamilton Bean.

Grade and Residency Requirements

A grade of *B* must be earned in each course completed as part of the certificate. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures and Additional Information

Students should apply for the graduate certificate in public relations after the completion of the required courses. To apply, students must complete the certificate application and return it to Dr. Hamilton Bean in his mailbox in room 102-A of the Plaza Building or mail to Department of Communication; P. O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student.

Students who are not already enrolled at CU Denver must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions in the annex of the CU Building.

Additional information about the graduate certificate in public relations may be obtained from Dr. Hamilton Bean, Department of Communication, Plaza 102-V, 303-352-3876, Hamilton.Bean@ucdenver.edu.

Public Relations Undergraduate Certificate

Public relations has been defined as the management function that entails planning, research, publicity, promotion and collaborative decision-making to help any organization’s ability to listen to, appreciate and respond appropriately to those persons and groups whose mutually beneficial relationships the organization needs to foster as it strives to achieve its mission and vision. The undergraduate certificate in public relations is designed for undergraduate communication majors who wish to demonstrate to

potential employers that they possess skills and knowledge in the area of public relations. It also is useful for non-degree-seeking working professionals without bachelor's degrees who plan to enter or re-enter the workplace and who seek to acquire the skills and knowledge necessary to perform public relations in their professional environments.

Certificate Requirements

The undergraduate certificate in public relations requires 12 semester hours (four courses). Students must complete the following three courses:

- COMM 4635 - Principles of Public Relations **gtPATHWAYS:**
- COMM 4640 - Advanced Public Relations **gtPATHWAYS:**
- COMM 4665 - Principles of Advertising **gtPATHWAYS:**

Additionally, students choose one course from the following:

- COMM 3680 - Mass Communication Skills **gtPATHWAYS:**
- COMM 4240 - Organizational Communication **gtPATHWAYS:**

Total: 12 Hours

Students may be permitted to take courses other than those listed above to fulfill the requirements for the certificate if those courses fit their professional goals better (CMMU 4635, Principles of Public Relations may not be substituted, however). Requests for approval of substitute courses, including an explanation for the substitution, must be made in writing to Hamilton Bean.

Grade and Residency Requirements

A grade of *B* must be earned in each course completed as part of the certificate. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures and Additional Information

Students should apply for the undergraduate certificate in public relations after the completion of the required courses. To apply, students must complete the certificate application and return it to Dr. Hamilton Bean in his mailbox in room 102-A of the Plaza Building or mail to Department of Communication; P. O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student.

Students who are not already enrolled at CU Denver must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions in the annex of the CU Building.

Additional information about the undergraduate certificate in public relations may be obtained from Dr. Hamilton Bean, Department of Communication, Plaza 102-V, 303-352-3876, Hamilton.Bean@ucdenver.edu.

Technical and Professional Communication Undergraduate Certificate

The undergraduate certificate in technical and professional communication is designed for several types of students:

- working adults who are employed or who are seeking employment in the field of technical communication but who are not seeking an undergraduate degree
- students who are majoring in communication and want to enhance their technical communication abilities
- students pursuing a major other than communication who want to enhance their technical communication abilities

Students enrolled in this certificate receive state-of-the-art training in core professional skills, including technical writing, technical editing and web design. The certificate is especially helpful for those who plan to enter (or re-enter) the workplace and who want to acquire the knowledge and skills necessary to contribute to technical documentation projects.

Certificate Requirements

The undergraduate certificate in technical and professional communication requires 12 semester hours (four courses), as follows:

Required Core

- COMM 3120 - Technical Communication **gtPATHWAYS:**

Electives

Students must complete any three of the following courses:

- COMM 4120 - Writing Technical Reports **gtPATHWAYS:**

- COMM 4290 - Web Design **gtPATHWAYS:**
- COMM 4300 - Multimedia Authoring **gtPATHWAYS:**
- COMM 4410 - Science Writing **gtPATHWAYS:**
- COMM 4805 - Graphics **gtPATHWAYS:**

Total: 12 Hours

Grade and Residency Requirements

A grade of *B* or higher must be earned in each course completed as part of the Certificate (a grade of *B*-is not acceptable). All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures

Students should apply for the undergraduate certificate in technical and professional communication **after the completion of the required courses.** To apply, students must complete the certificate application.

The form should be returned to Jim Stratman, located in the Plaza Building, room 102-F, or put in his mailbox in room PL 102-A, or mailed to him at the Communication Department; Campus Box 176, P. O. Box 173364; Denver, CO 80217-3364. Once the certificate is processed, it will be mailed to the student unless other arrangements have been made by the student to pick up the certificate from the program assistant in PL 102C.

Students need to be registered at the University of Colorado Denver as full-time students, part-time students or as non-degree students in order to register for these classes. To apply as a non-degree student, fill out the Application for Non-Degree Admission. Return the form, along with your fee, to the Office of Admissions in the Annex of the CU Building, located at the corner of 14th and Larimer.

Additional Information

Additional information about the undergraduate certificate in technical and professional communication may be obtained from the director of the technical communication program, Jim Stratman, Department of Communication, Plaza Building, room 102-F, 303-556-2884, James.Stratman@ucdenver.edu

Non Degree

Communication Minor

Knowledge in any area of study, whether in business, politics, biology or sociology, means little unless it can be communicated effectively. The minor in communication is designed to provide students who are not communication majors with knowledge and skills in communication that are useful in any discipline or profession.

The minor in communication requires 18 semester hours, with 12 hours of required courses and 6 hours of electives.

Requirements

Core Courses

- COMM 1011 - Fundamentals of Communication **gtPATHWAYS:** GT-SS3
- COMM 2020 - Communication, Citizenship, and Social Justice **gtPATHWAYS:**
- COMM 2101 - Presentational Speaking **gtPATHWAYS:**
- -OR- COMM 2050 - Business and Professional Speaking **gtPATHWAYS:**
- COMM 4200 - Persuasion **gtPATHWAYS:**

Total: 12 Hours

Elective Courses

In addition to the four courses specified above, students must take two upper-division courses (3000 level or above) to be selected with the aid of the undergraduate advisor in communication.

Total: 6 Hours

Minor Total: 18 Hours

Grade and Residency Requirements for Minors

A grade of *C* (2.0) or better must be earned in each course completed as part of the minor. No more than 6 of the semester hours for the minor may be transferred from another university.

Master of Arts

Communication MA

► Graduate School rules apply to this program

The master of arts in communication is a generalist degree designed to enhance students' intellectual and professional growth through the understanding and practice of effective communication. The degree is structured both to build a solid foundation and to allow students to specialize in one of two areas:

1. The Professional Track – Communication Management
2. The Academic Track – Doctoral Preparation

Both areas blend research, theory and practice to prepare students to meet the challenges of the twenty-first century.

Degree Requirements

Students have two options for completing the MA degree in communication: the professional track and the academic track.

Professional Track

The professional track requires the completion of 33 hours of graduate course work (5000 level or above). As explained below, students have the option of taking 6 hours of 4000-level courses. In this situation, a student will take 27 hours of graduate credit and 6 hours of 4000-level (undergraduate) course work. The requirements for course work are as follows:

Required Course

- COMM 6013 - Introduction to Graduate Work in Communication **gtPATHWAYS:** (recommended to be taken the first semester of graduate course work; offered only in the fall semester)

Total: 3 Hours

Methods Courses

Most methods courses are offered every other year. The second methods course may be taken outside of the communication department with the approval of the student's advisor.

Choose two:

- COMM 5011 - Research Methods: Quantitative **gtPATHWAYS:**
- COMM 5022 - Critical Analysis of Communication **gtPATHWAYS:**
- COMM 5221 - Research Methods: Qualitative **gtPATHWAYS:**
- COMM 5205 - Empirical Research Methods for Communication **gtPATHWAYS:**

Total: 6 Hours

Graduate Seminars

In addition to the above core requirements, students must take four graduate seminars from the Department of Communication. Graduate seminars are 5000- or 6000-level courses.

Total: 12 Hours

Electives

Students must complete four electives. A minimum of two of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least two of the four electives must be communication courses; the remaining two electives may be taken from outside of the Department of Communication.

Total: 12 Hours

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

Track Total: 33 Hours

Academic Track

The academic track is distinguished from the professional track in that it requires the completion of a substantial academic writing project or projects. The academic track requires the completion of 33-34 hours of graduate course work. At least 27 of these hours must be at the 5000 or 6000 level; 6 hours (two courses) may be at the 4000 level. The requirements for course work are as follows:

- COMM 6013 - Introduction to Graduate Work in Communication **gtPATHWAYS:** (recommended to be taken the first semester of graduate course work; offered only in the fall semester)

Total: 3 Hours

Methods Courses

Most methods courses are offered every other year.

Choose two:

- COMM 5011 - Research Methods: Quantitative **gtPATHWAYS:**
- COMM 5022 - Critical Analysis of Communication **gtPATHWAYS:**
- COMM 5221 - Research Methods: Qualitative **gtPATHWAYS:**
- COMM 5205 - Empirical Research Methods for Communication **gtPATHWAYS:**

Total: 6 Hours

Graduate Seminars

In addition to the above core requirements, students must take four graduate seminars from the communication department. Graduate seminars are 5000- or 6000-level courses. The four courses must be approved by the student's advisor.

Total: 12 Hours

Electives

Students must complete four electives. A minimum of two of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least two of the electives must be communication courses; the remaining two may be taken from outside of the communication department. If a thesis is presented, the thesis credits will substitute for one elective course requirement.

Total: 9-12 Hours

(9 hours for thesis students; 12 for non-thesis)

Thesis

Students either must present a major paper for publication (no additional course credit) or complete a thesis for 4 semester hours. Credit for a thesis may substitute for one elective course requirement.

Total: 4 Hours

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

Track Total: 33-34 Hours

Economics

Chair: Buhong Zheng
Program Assistant: Christine Lukvec
Office: Lawrence Street Center, 460
Telephone: 303-315-2030
Fax: 303-315-2048
Website: econ.ucdenver.edu/home/

Faculty

Professors:

Laura M. Argys, PhD, University of Colorado

Steven G. Medema, PhD, Michigan State University

Daniel I. Rees, PhD, Cornell University

W. James Smith, PhD, University of Colorado

Buhong Zheng, PhD, West Virginia University

Associate Professors:

Steven R. Beckman, PhD, University of California Davis

Brian Duncan, PhD, University of California at Santa Barbara

Assistant Professors:

Shu Lin, PhD, University of Oklahoma

Hani Mansour, PhD, University of California at Santa Barbara

Haichun Ye, PhD, University of Oklahoma

Economics is the science of decision making. The rigorous and general approach that characterizes economics lends itself to a remarkably wide field of practical application. Economists are noted for major contributions in a number of fields including government policy, taxation, law, regulation, political economy, international trade and finance, international and U.S. development, marketing, environmental studies, medical policy, portfolio management and banking. The broad and rigorous training of economics majors accounts for their significant demand in virtually every industry and government agency. Economics provides excellent preparation for advanced graduate study as well. Recent studies indicate that economics is a preferred degree for prestigious MBA programs and law schools.

Undergraduate

REQUIREMENTS FOR MAJOR

REQUIREMENTS FOR MINOR

Honors in Economics

Students wishing to earn departmental honors in economics should consult with their advisor no later than the beginning of their senior year.

Cum laude will be awarded to students who complete an economics major with a 3.5 GPA in all upper-division (3000+) courses in economics taken at CU Denver, with a minimum of eight such courses, and either two additional electives in economics beyond those required for the major, taken at the 4000 or higher level, or an acceptable honors thesis. The thesis must be approved by a three-member committee of department faculty and will include a presentation of the results to that committee. Students should register for the thesis, using ECON 4850 as the course number, as a 3-semester hour independent study, in addition to the regular requirements for the major.

Magna cum laude will be awarded to students who complete an economics major with a 3.7 GPA in all upper-division (3000+) courses in economics taken at CU Denver, with a minimum of eight courses, and who complete an acceptable honors thesis.

Summa cum laude will be awarded to students who complete an economics major with a 3.88 GPA in all upper-division (3000+) courses in economics taken at CU Denver, with a minimum of eight courses, and who complete an outstanding honors thesis.

In order to be recognized in the graduation program as “Honors Pending,” a draft of the thesis must be submitted to the chair of the committee four weeks prior to the end of the semester. The oral presentation and other requirements must be completed one week before graduation.

In order to be recognized in the graduation program with the specific honors degree being conferred, e.g., *summa*, *magna*, etc., students must turn in the completed final copy of the honors thesis four weeks prior to the end of the semester, along with meeting other requirements by the week before graduation. Otherwise, recognition will come with the diploma after graduation.

Students who do not have an advisor should contact the department for assignment to an advisor. Students should meet with their advisor at least twice a year.

Graduate

The MA program in economics at CU Denver is directed toward two groups: (1) those who look on the MA as a key to career development in business or government service, and (2) those who desire to go on to pursue the PhD in economics or related fields.

The strong quantitative emphasis of the department's MA program is ideally suited for the pursuit of both these goals. Students are steeped in econometric theory and its applications from the beginning of the program, receiving broad exposure both to the tools of econometric analysis and the application of these tools to a wide range of economic phenomena. The applications involve extensive exposure to the professional literature in various applied fields and a research seminar in which each student will undertake a sophisticated applied research project under faculty supervision.

Students are allowed a great deal of flexibility in choosing their elective courses. Possibilities include advanced quantitative courses in economics, advanced field courses in economics (e.g., money and banking, international economics), business courses and advanced mathematics courses (which are particularly useful for those who wish to pursue the PhD in economics). All of this is intended to give students the opportunity to complement their extensive quantitative training with additional knowledge and skills that will best enhance their prospects upon graduation.

MASTER OF ARTS IN ECONOMICS

MA ECONOMICS/MS FINANCE DUAL DEGREE

MA ECONOMICS/MPA PUBLIC ADMINISTRATION

Bachelor of Arts

Economics BA

Requirements for Major

Students majoring in economics for the BA degree must declare such by the time they have completed 60 semester hours and complete a minimum of 40 semester hours in economics. The minimum grade in each CU Denver economics course is a *C*- (1.7), except that one *D*- in one economics elective is allowed. A GPA of 2.5 in economics courses taken at CU Denver is required to graduate. No pass/fail grades may count toward the major.

Program Requirements

Required Economics Courses

- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
- ECON 3801 - Introduction to Mathematical Economics **gtPATHWAYS:**
- ECON 3811 - Statistics with Computer Applications **gtPATHWAYS:**
- ECON 4071 - Intermediate Microeconomic Theory **gtPATHWAYS:**
- ECON 4081 - Intermediate Macroeconomic Theory **gtPATHWAYS:**
- ECON 4091 - History of Economic Thought **gtPATHWAYS:**
- ECON 4811 - Introduction to Econometrics **gtPATHWAYS:**

Total: 25 Hours

Electives

Economics Courses

Any five 3-semester-hour courses taken in economics may satisfy this requirement, other than internships and independent studies which require the approval of the department chair.

Political Science Course

One political science course. Suggested courses include but are not limited to PSCI 1101, American Political System, and PSCI 3022, Introduction to Comparative Politics.

Electives Total: 18 Hours

Major Total: 43 Hours

Graduating seniors must submit the three best papers that the student wrote in any three separate courses taken in the Department of Economics for the outcomes assessment

of the economics program. The three papers should be handed in at one time in a folder to the economics office, before the first day of the month in which the student plans to graduate.

At least six of the major courses (18 semester hours), including at least three courses out of ECON 3801, 4071, 4081, 4091 and 4811, must be taken from economics faculty at CU Denver.

Once a student has enrolled at CU Denver, no courses in the major may be taken outside the economics department without permission from the undergraduate advisor. No math is formally required, except for the college algebra prerequisite for ECON 3801. Students desiring a recommendation to a graduate school in economics, however, should consult with economics faculty regarding additional mathematics courses.

Non Degree

Economics Minor

Students minoring in economics must complete a minimum of 15 semester hours in economics. All course work must be completed at CU Denver or the Department of Economics reserves the right to test the student's competence in the material covered. No grade below *C*- will be counted toward the minor requirements.

Courses

- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
  —plus—
  Three upper-division electives in economics: **9 semester hours**
  (ECON 3100 - Economics of Race and Gender is acceptable)

Total: 15 Hours

At least two upper-division courses must not overlap with courses required in the student's major program.

Master of Arts

Economics MA

► Graduate School Rules apply to this program

Admissions Advisor: Brian Duncan (brian.duncan@ucdenver.edu)
Schedule Advisor: Dan Rees (daniel.rees@ucdenver.edu)

Requirements for Admission

- general requirements of the Graduate School (including a 3.0 undergraduate cumulative GPA)
- three letters of recommendation
- 15 semester hours of undergraduate economics (including theory and quantitative methods); variations to be discussed with graduate advisor
- acceptable GRE scores
- two official transcripts from all colleges attended
- international students must submit TOEFL scores

Degree Requirements

The MA degree requires the completion of 30 semester hours of course work, of which 21 hours are core requirements. Each student's plan will be worked out in conjunction with the graduate advisor.

Core Courses

All courses must be completed with a grade of B- or better.

- ECON 5073 - Microeconomic Theory **gtPATHWAYS:**
- ECON 5083 - Macroeconomic Theory **gtPATHWAYS:**
- ECON 5803 - Mathematical Economics **gtPATHWAYS:**
- ECON 5813 - Econometrics I **gtPATHWAYS:**
- ECON 5823 - Econometrics II **gtPATHWAYS:**
- ECON 6053 - Seminar In Applied Economics **gtPATHWAYS:**
- ECON 6073 - Research Seminar **gtPATHWAYS:**

Total: 21 Hours

Electives

Three elective courses

Total: 9 Hours

Degree Total: 30 Hours

Economics/Public Administration MA/MPA Dual Degree

► Graduate School Rules apply to this program

Admissions Advisor: Brian Duncan (brian.duncan@ucdenver.edu)
Schedule Advisor: Dan Rees (daniel.rees@ucdenver.edu)

The fields of public administration and economics are inextricably linked. Economists provide much of the theory and analytic foundation that administrators use to evaluate and implement policy. Given that the capital of the state of Colorado is in Denver, there is great need for administrators that fully understand methods of program evaluation and have the theoretical background needed to forecast how individuals and institutions will respond to new proposals. Similarly, good theory and practice must take into account how the proposals will be implemented and results interpreted. Both administrators and economists need to be engaged in constructive dialogue for either to be fully effective.

Students interested in completing the dual degree in economics and public administration *must apply separately* to each program, meet the admission requirements of each program, and *be accepted by* each program. If one program accepts a student for the dual degree but the other program does not, then the student may not graduate under the dual degree program. It is possible for students currently admitted to one program to learn about the dual degree and choose to apply after admission to either economics or the School of Public Affairs (SPA). Both degrees must be completed in the same semester to take advantage of the dual degree program.

Admission Requirements

Deadlines for Application:	**Fall**	**June 1**

	Spring	**December 1**

Applicants must:

- Meet all general requirements of the Graduate School (including a 2.50 undergraduate grade-point average).
- Submit three letters of recommendation (at least two of your letters of recommendation should come from individuals who are familiar with your scholarly record)
- Submit two copies of official transcripts from all colleges attended
- Have completed 15 credit hours of undergraduate economics (including intermediate microeconomic theory and intermediate macroeconomic theory)
- Have completed courses in calculus and statistics
- All applicants, international and domestic, must submit GRE scores regardless of prior degrees, course work, or work experience. **The institution code for CU Denver is 4875**. Most students admitted to the MA program score 690 or above on the quantitative section of the GRE, but there is not a minimum GRE cutoff score.
- International students must submit TOEFL scores. The required minimum score is 197 (computer-based TOEFL), 71 (IBT-based TOEFL), 525 (paper-based TOEFL), or 6.0 (IELTS). **The institution code for CU Denver is 4875**.

The Department of Economics accepts late applications after these official deadlines. However, there is no guarantee that a late application will be processed in time for the start of the semester. Students are encouraged to apply well before the application deadline.

International students who apply after the June 1 or November 1 deadline may not have time to obtain a student visa. Being admitted to the MA program in economics does not guarantee that a student will receive a student visa in time for the start of the semester. International students who are admitted to the MA program, but fail to obtain a visa in time, may defer admission for up to one year. All questions about student visas should be directed to the Office of International Education.

Course Requirements

The requirements for the dual degree in economics and public administration include completing 21 credit hours in ECON and 27 credit hours in public administration course work (48 total credit hours).

Core Courses

- ECON 5073 - Microeconomic Theory **gtPATHWAYS:**
- ECON 5083 - Macroeconomic Theory **gtPATHWAYS:**

- ECON 5803 - Mathematical Economics **gtPATHWAYS:**
- ECON 5813 - Econometrics I **gtPATHWAYS:**
- ECON 5823 - Econometrics II **gtPATHWAYS:**
- PUAD 5001 - Introduction to Public Administration and Public Service **gtPATHWAYS:**
- PUAD 5002 - Organizational Management and Behavior **gtPATHWAYS:**
- PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**
- -OR- PUAD 5004 - Economics and Public Finance **gtPATHWAYS:**
- PUAD 5005 - The Policy Process and Democracy **gtPATHWAYS:**
- PUAD 5006 - Leadership and Professional Ethics **gtPATHWAYS:**
- ECON 6073 - Research Seminar **gtPATHWAYS:**
- -OR- PUAD 5361 - Capstone Seminar **gtPATHWAYS:**

Core Total: 33 Hours

Electives

If the student takes ECON 6073, then 3 hours of elective credits must come from economics and 12 hours from public administration.

If the student takes PUAD 5361, then 6 hours of elective credits must come from economics and 9 hours from public administration.

All elective courses must be at the 5000 level and above.

Electives Total: 15 Hours

Dual Degree Total: 48 Hours

Master of Science in Finance/Master of Arts in Economics

Economics/Finance MA/MS Dual Degree

► Graduate School Rules apply to this program

Admissions Advisor: Brian Duncan (brian.duncan@ucdenver.edu)
Schedule Advisor: Dan Rees (daniel.rees@ucdenver.edu)

For students interested in combining the quantitative skills of an economics degree with the specific applications of a business degree, we offer an MA economics/MS finance dual degree. This 42-semester-hour program is offered jointly with the Business School. It is a "dual" degree, meaning that students who complete the program earn two master's degrees: MA in economics and MS in finance. Students must be admitted separately to both the MA program in economics and MS program in finance; they may apply to both programs at the same time or apply to the economics program first, and then to the finance program at the end of their first semester, or vice versa. Both programs must be completed in the same semester to take advantage of the dual degree program. Further information about this program can be obtained from either the Department of Economics or the Business School. Click here for admissions information for economics.

The dual degree program is intended to create highly-skilled research professionals with considerable econometric skill as well as familiarity with their chosen financial institutions. Given the similarity in course work within the two programs, there can be considerable time savings for the student. Essentially, the program allows students to complete the two programs that separately would require 60 hours of course work with 42 hours of combined course work.

Degree Requirements

Core Courses

- ECON 5073 - Microeconomic Theory **gtPATHWAYS:**
- ECON 5083 - Macroeconomic Theory **gtPATHWAYS:**
- ECON 5803 - Mathematical Economics **gtPATHWAYS:**
- ECON 5813 - Econometrics I **gtPATHWAYS:**
- ECON 5823 - Econometrics II **gtPATHWAYS:**
- ECON 6073 - Research Seminar **gtPATHWAYS:**
- BUSN 6640 - Financial Management **gtPATHWAYS:**
- FNCE 6300 - Macroeconomics and Financial Markets **gtPATHWAYS:**
- FNCE 6330 - Investment Management Analysis **gtPATHWAYS:**

Total: 27 Hours

Electives

Four 6000-level finance elective courses: **12 semester hours**

One 5000-level or above economics elective course: **3 semester hours**

Total: 15 Hours

Dual Degree Total: 42 Hours

Educational Studies / Teacher Licensure

K–12 Teachers Licensure

CU Denver offers an undergraduate teacher licensure program through a collaboration between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students in the undergraduate licensure program earn (1) a broad knowledge background and content specialization in the College of Liberal Arts and Sciences and (2) pedagogy principles and classroom experience in the teacher education program through the School of Education & Human Development. When students have satisfactorily completed requirements, they simultaneously earn their baccalaureate degree, BA or BS, and teacher licensure for the state of Colorado.

The CU Denver undergraduate teacher licensure program offers licensure in the following areas with the allowed liberal arts majors:

Elementary Education Licensure *

BA—Individually Structured Major

Secondary English Licensure *

BA—English with Literature emphasis

Secondary Foreign Language Licensure

BA—French

BA—Spanish

Secondary Social Studies Licensure

BA—History

BA—Political Science

Secondary Mathematics Licensure

BS—Mathematics

* Elementary Education and English licenses have optional additional endorsements in linguistically diverse education.

Students seeking undergraduate K–12 teacher licensure begin in the College of Liberal Arts and Sciences to complete the CU Denver core curriculum, content course work for both the major and licensure and an education internship. Admission to the teacher education program in the School of Education & Human Development is competitive and requires students to do the following:

- attain a minimum 2.75 cumulative undergraduate GPA
- complete 120 hours of supervised experience with children through an approved internship
- complete all general education requirements
- complete all course work in the major
- complete all teacher education admission requirements

Interested students should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555, and ask to speak to the education academic advisor about undergraduate teacher licensure.

See the description of Undergraduate Teacher Licensure on the School of Education & Human Development (SEHD) Urban Community Teacher Education program page for more information.

EDUCATIONAL STUDIES MINOR

Non Degree

Educational Studies Minor

The preparation of high-quality K–12 teachers is dependent on both content knowledge and teaching methodologies. The College of Liberal Arts and Sciences, in cooperation with the School of Education & Human Development, offers an educational studies minor to assist undergraduate students unable to fit licensure course work into their bachelor's degree and to prepare them for the graduate-level licensure programs.

The CLAS educational studies minor is flexible in design and individually tailored for each student to complete some content requirements required for admission into the graduate-level teacher licensure programs at UC Denver. The educational studies minor requires course work in psychology and human development, democratic schooling principles, a K–12 internship and undergraduate course work required for licensure outside college and major requirements.

The educational studies minor is open to all Downtown Campus undergraduate students. For more information, students should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555.

English

Chair: Nancy Ciccone
Program Assistant: Francine Olivas-Zarate
Office: 1015 9th Street Park
Telephone: 303-556-2584
Fax: 303-556-2959
Website: clas.ucdenver.edu/english/

Faculty

Professors:

Jeffrey Franklin, PhD, University of Florida

Susan Linville, PhD, University of Colorado

Bradford K. Mudge, PhD, University of Texas, Austin

Richard VanDeWeghe, PhD, Michigan State University

Associate Professors:

Joanne Addison, PhD, Purdue University

Pompa Banerjee, PhD, University of Massachusetts

Nancy Ciccone, PhD, University of California, Berkeley

Michelle Comstock, PhD, Purdue University

Colleen Donnelly, PhD, University of Washington

Philip Joseph, PhD, State University of New York, Buffalo

Catherine A. Wiley, PhD, University of Wisconsin, Madison

Cynthia Wong, PhD, University of Wisconsin, Milwaukee

Ian Ying, PhD, University of Arizona

Jake York, MFA, PhD, Cornell University

Assistant Professors:

Brian Barker, PhD, University of Houston

Teague Bohlen, MFA, Arizona State University

Jennifer S. Davis, MFA, University of Alabama

Rodney Herring, PhD, University of Texas, Austin

Gillian Silverman, PhD, Duke University

Amy Vidali, PhD, University of Washington

English majors learn to acquire and synthesize information and to present their ideas and opinions skillfully. They find employment in fields in which the sophisticated use of language is necessary for achievement and advancement. Many graduates go on to postgraduate study, not only in writing, film studies and literature, but to schools of medicine, law, education, journalism and business.

Undergraduate

English

Undergraduates wishing to major in English must declare the major and option by the time they have completed 60 semester hours. The English major allows a student to choose from one of three options: literature, creative writing or film studies. Students interested in a double major must choose one option in English as well as the English writing major and are required to complete 21 different courses (63 hours).

ENGLISH MAJOR

ENGLISH WRITING MAJOR

BA in English With Secondary Teacher Licensure

Students seeking secondary English teacher licensure may pursue a BA in English with a restricted literature option. This enables them to complete their English major as well as fulfill requirements for licensure at the undergraduate level. See the description of

Undergraduate Teacher Licensure on the School of Education & Human Development (SEHD) Urban Community Teacher Education program page for more information.

Departmental Honors

Latin honors may be earned by participating in the department's honors program. Students with a 3.5 GPA in English are encouraged to begin the program in their junior year. The program requires additional course work (1-3 hours) and affords students the opportunity to work individually with the professor of their choice. Detailed information is available in the English department office.

Minors

The Department of English also offers four separate minors. No courses taken for a minor may be counted toward an English major.

Literature Minor

Writing Minor

Creative Writing Minor

Film Studies Minor

Graduate

MA IN ENGLISH

Certificates

The English department also offers a graduate certificate in teaching English to speakers of other languages.

Teaching of English to Speakers of Other Languages (CTESOL)

Additional Information

For additional information on majors, options, minors and certificates call the Department of English office at 303-556-2584.

Bachelor of Arts

English BA

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing. Careful study of the use of the English language also should help a student to resist the misuse and corruption of language in politics, the media and elsewhere. Students who complete the program in English are expected to have mastered the ability to express their ideas in clear and succinct prose.

Requirements for the English Major

Students majoring in English must present a total of 39 hours in the literature, film studies and/or creative writing options (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of *C* (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in English must be taken from English faculty at CU Denver. Students planning to major in English must consult with an advisor as soon as possible. Students may choose only one of the three options in the English major.

LITERATURE OPTION

REQUIRED COURSES

- ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
- ENGL 3001 - Critical Writing **gtPATHWAYS:**
- ENGL 4999 - Literary Studies Senior Seminar **gtPATHWAYS:**

Total: 9 Hours

AREA REQUIREMENTS

Choose one course from each area below. No course is repeatable.

Historical Survey

- ENGL 4080 - History of English **gtPATHWAYS:**

- ENGL 4166 - History of American Poetry **gtPATHWAYS:**
- ENGL 4200 - History of the English Novel I **gtPATHWAYS:**
- ENGL 4210 - History of the English Novel II **gtPATHWAYS:**
- ENGL 4230 - The American Novel **gtPATHWAYS:**
- ENGL 4236 - The American Short Story **gtPATHWAYS:**
- ENGL 4300 - History of British Drama **gtPATHWAYS:**
- ENGL 4320 - History of Poetry in English **gtPATHWAYS:**
- ENGL 4350 - History of American Drama **gtPATHWAYS:**

Old English, Medieval Language and Literature

- ENGL 4400 - Old English I **gtPATHWAYS:**
- ENGL 4500 - Medieval Literature **gtPATHWAYS:**
- ENGL 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
- ENGL 4730 - Chaucer **gtPATHWAYS:**

Renaissance, Restoration and 18th Century British Literature

- ENGL 3661 - Shakespeare **gtPATHWAYS:**
- ENGL 4520 - English Renaissance **gtPATHWAYS:**
- ENGL 4530 - Milton **gtPATHWAYS:**
- ENGL 4540 - Restoration and the 18th Century **gtPATHWAYS:**

Eighteenth- and Nineteenth-Century British Literature

- ENGL 4200 - History of the English Novel I **gtPATHWAYS:**
- ENGL 4210 - History of the English Novel II **gtPATHWAYS:**
- ENGL 4560 - English Romanticism **gtPATHWAYS:**
- ENGL 4580 - The Victorian Age **gtPATHWAYS:**

American Literature

- ENGL 3700 - American Literature to the Civil War **gtPATHWAYS:**
- ENGL 3750 - American Literature after the Civil War **gtPATHWAYS:**
- ENGL 4166 - History of American Poetry **gtPATHWAYS:**
- ENGL 4230 - The American Novel **gtPATHWAYS:**
- ENGL 4236 - The American Short Story **gtPATHWAYS:**
- ENGL 4350 - History of American Drama **gtPATHWAYS:**

Modern and Contemporary Literature

- ENGL 3450 - Twentieth Century Women Writers **gtPATHWAYS:**
- ENGL 3480 - Modern Drama **gtPATHWAYS:**
- ENGL 4250 - Twentieth Century Fiction **gtPATHWAYS:**
- ENGL 4460 - Contemporary World Literature **gtPATHWAYS:**

- ENGL 4600 - Modernism **gtPATHWAYS:**

Total: 18 Hours

REQUIRED ELECTIVES

Choose any four English courses: two at the 3000 or 4000 level, and two at any level.

Total: 12 Hours

Literature Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

CREATIVE WRITING OPTION

REQUIRED COURSES

- ENGL 2154 - Introduction to Creative Writing **gtPATHWAYS:**
- ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies **gtPATHWAYS:**
- -OR- ENGL 3939 - Internship **gtPATHWAYS:**

Total: 9 Hours

AREA REQUIREMENTS

Complete all courses in **either** poetry or fiction.

Poetry

- ENGL 3020 - Poetry Workshop **gtPATHWAYS:**
- ENGL 3050 - Fiction Workshop **gtPATHWAYS:**
- ENGL 4025 - Advanced Poetry Workshop **gtPATHWAYS:**
- ENGL 4160 - Poetics **gtPATHWAYS:**
- -OR- ENGL 4800 - Special Topics in Creative Writing **gtPATHWAYS:** (poetry form)

Choose one course from the following:

- ENGL 4080 - History of English **gtPATHWAYS:**
- ENGL 4166 - History of American Poetry **gtPATHWAYS:**

- ENGL 4320 - History of Poetry in English **gtPATHWAYS:**

Fiction

- ENGL 3020 - Poetry Workshop **gtPATHWAYS:**
- ENGL 3050 - Fiction Workshop **gtPATHWAYS:**
- ENGL 4055 - Advanced Fiction Workshop **gtPATHWAYS:**
- ENGL 4800 - Special Topics in Creative Writing **gtPATHWAYS:** (fiction form)

Choose one course from the following:

- ENGL 4200 - History of the English Novel I **gtPATHWAYS:**
- ENGL 4210 - History of the English Novel II **gtPATHWAYS:**
- ENGL 4230 - The American Novel **gtPATHWAYS:**
- ENGL 4236 - The American Short Story **gtPATHWAYS:**

Area Requirements Total: 15 Hours

REQUIRED ELECTIVES

Choose any five 3000 or 4000 level English courses.

Recommended:

- ENGL 3001 - Critical Writing **gtPATHWAYS:**
- ENGL 3416 - Magazine Writing **gtPATHWAYS:**

Electives Total: 15 Hours

Creative Writing Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

FILM STUDIES OPTION

The film studies option within the English major is designed to prepare students for a range of professional careers in areas such as screenwriting, film criticism, video production and the teaching of film, as well as those students who plan to pursue graduate programs in film studies. Required courses give students a strong grounding in film history, verbal and visual narrative, and the critical terms and techniques used in both film and literary analysis. Electives give students the option of emphasizing either the creative approach or the critical approach to moving-image media, or a combination of the two. The film studies option also affords students the opportunity to create video productions using state-of-the-art digital video and editing equipment and the possibility of airing their productions on cable TV. Offered in cooperation with the College of Arts & Media (CAM), the film studies option can be completed entirely on the Auraria Campus.

REQUIRED COURSES

- ENGL 2250 - Introduction to Film **gtPATHWAYS:**
- ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
- ENGL 3070 - Film History I **gtPATHWAYS:**
- ENGL 3080 - Film History II **gtPATHWAYS:**
- ENGL 4420 - Film Theory and Criticism **gtPATHWAYS:**

Total: 15 Hours

AREA REQUIREMENTS

Choose eight courses. Students may take courses in all areas. Eighteen of the 24-hour minimum must be at the 3000/4000 level. Production courses must be taken through the College of Arts & Media (CAM). Equivalent screenwriting courses may also be taken through CAM. [Courses marked by an asterisk are repeatable if taken as a different genre/director/topic.]

A. Critical Studies

- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film **gtPATHWAYS:** GT-AH2
- ENGL 3001 - Critical Writing **gtPATHWAYS:**
- * ENGL 3075 - Film Genres **gtPATHWAYS:**
- * ENGL 3085 - Film Directors **gtPATHWAYS:**
- ENGL 3200 - From Literature to Film **gtPATHWAYS:**
- * ENGL 3300 - Topics in Film **gtPATHWAYS:**
- * ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:** (film and media-focused only; e.g., Film and Rhetoric)
- * ENGL 4770 - Topics in English: Film and Literature **gtPATHWAYS:** (film and media-focused only)
- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies **gtPATHWAYS:**
  Any 3000- or 4000-level literature course with ENGL prefix

B. Screenwriting

- ENGL 2390 - Writing the Short Script **gtPATHWAYS:**
- ENGL 2415 - Introduction to Movie Writing **gtPATHWAYS:**
- ENGL 3415 - Screenwriting Workshop **gtPATHWAYS:** (repeatable once)
- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies **gtPATHWAYS:**

C. Production

- TFVP 1050 - Video Production/Post-Production I **gtPATHWAYS:**
- FILM 2050 - Film/Video Prod/Post II **gtPATHWAYS:**

Total: 24 Hours

Film Studies Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

College Core Courses for English Majors

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the CLAS Core Curriculum/Graduation Requirements chart. Check the online schedule for specific course offerings.

Electives

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Six hours earned in the internship/cooperative education program may be counted toward the major.

Return to Department of English

English Writing BA

Especially designed for future writers, the writing major offers a wide range of intensive writing experiences combining such areas as rhetoric, professional, general and creative writing.

Requirements for the English Writing Major

Students majoring in writing must present a total of 39 hours for the major (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of *C* (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in writing must be taken from English faculty at CU Denver. Students planning to major in writing should consult with an advisor as soon as possible. This major is also available online. [Courses marked by an asterisk are repeatable when title/content differ.]

Required Courses

- ENGL 2070 - Grammar, Rhetoric and Style **gtPATHWAYS:**
- ENGL 2154 - Introduction to Creative Writing **gtPATHWAYS:**
- -OR- ENGL 2250 - Introduction to Film **gtPATHWAYS:**
- ENGL 3084 - Multimedia Composition **gtPATHWAYS:**
- ENGL 3154 - Technical Writing **gtPATHWAYS:**
- -OR- ENGL 3170 - Business Writing **gtPATHWAYS:**
- ENGL 3160 - Language Theory **gtPATHWAYS:**
- -OR- ENGL 4080 - History of English **gtPATHWAYS:**
- ENGL 4180 - Argumentation and Logic **gtPATHWAYS:**
- * ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:**
- ENGL 4991 - Senior Seminar in Writing **gtPATHWAYS:** (Seniors only)

Total: 24 Hours

Area Requirements

Students may concentrate their studies in one of three areas: professional writing, teaching English as a second language, or interdisciplinary language studies.

PROFESSIONAL WRITING

Choose three (9 hours):

- ENGL 3154 - Technical Writing **gtPATHWAYS:**
- -OR- ENGL 3170 - Business Writing **gtPATHWAYS:**
- ENGL 3416 - Magazine Writing **gtPATHWAYS:**
- ENGL 3939 - Internship **gtPATHWAYS:**
- ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:** (professional writing topic)
- ENGL 4280 - Proposal and Grant Writing **gtPATHWAYS:**
- ENGL 4995 - Senior Writing Project **gtPATHWAYS:**

Electives (6 hours)

Choose any two English 3000-4000 level courses (writing, literature, film, creative writing).

Total Professional Writing Area: 15 Hours

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TEACHING ENGLISH AS A SECOND LANGUAGE

Choose three (9 hours):

- ENGL 3160 - Language Theory **gtPATHWAYS:**
- ENGL 3939 - Internship **gtPATHWAYS:**
- ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:** (TESOL topic)
- ENGL 4601 - Principles and Practices of Second Language Acquisition **gtPATHWAYS:**
- ENGL 4995 - Senior Writing Project **gtPATHWAYS:**

Electives (6 hours)

Choose any two English 3000-4000 level courses (writing, literature, film, creative writing).

Total Teaching English as a Second Language Area: 15 Hours

INTERDISCIPLINARY LANGUAGE STUDIES

Students pursuing interdisciplinary language studies may choose any five writing or workshop courses offered by the Department of English. In addition, students may also choose writing-intensive courses offered by other departments with prior approval of an English advisor.

Total Interdisciplinary Language Studies Area: 15 Hours

Major Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

College Core Courses for English Writing Majors

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the UC Denver Core Curriculum and CLAS Graduation Requirements chart. Check the online schedule for specific course offerings.

Electives

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Up to 6 hours earned in the cooperative education program may be counted toward the major.

Return to Department of English

Certificate

Teaching of English to Speakers of Other Languages (CTESOL)

Program Description

To meet the increasing needs of individuals seeking advanced training in teaching English as a second language, the English department at CU Denver offers a graduate certificate in the teaching of English to speakers of other languages (CTESOL).

The certificate program is designed to build the necessary skills to teach English as a second language through focused preparation. It is primarily aimed at native speakers of English who want to teach overseas, but may serve the needs of international students wanting to teach English in their home country or other countries.

Upon successful completion of the program, CTESOL participants will be able to:

- Discuss the theoretical basis of second language instruction
- Demonstrate a variety of effective ESL teaching techniques
- Explain, in pedagogically relevant ways, the linguistic structures of the English language

Curriculum

The curriculum consists of 12 semester hours (9 semester hours of required courses, and three semester hours of electives). The required courses must be taken at CU Denver. A GPA of 3.0 or better is required for all graduate courses.

Required Courses

- ENGL 5171 - Language Theory **gtPATHWAYS:**
- ENGL 5601 - Principles and Practices of Second Language Acquisition **gtPATHWAYS:**
- ENGL 5651 - Second Language Writing **gtPATHWAYS:**

Total: 9 Hours

Elective Courses

- ENGL 5093 - Teaching of Writing **gtPATHWAYS:**
  or an alternative elective approved by the program advisor

Total: 3 Hours

Total: 12 Hours

Additional Information

LENGTH OF TIME
The course of study will typically last one academic year, including the summer session.

WHEN YOU MAY BEGIN
You may begin in any semester. There is no fixed deadline for application for admission.

PREREQUISITES

All applicants must have a bachelor's degree or the equivalent, with a 3.0 GPA, to be accepted to the program. Graduate students at CU Denver will also be permitted to apply for the certificate while they are concurrently completing another graduate degree. Permission may not be granted to graduate students in applied linguistics.

Non-native speakers of English are required to submit an official TOEFL (Test of English as a Foreign Language) report showing a score of at least 580. Those who score below 580 but above 525 on the TOEFL may be admitted conditionally to the program. Under these conditions, students will have their English language skills assessed by the faculty of the program immediately after they arrive on campus to determine whether further courses are needed to develop English language proficiency. After assessment, the students may be assigned to full-time language study in an intensive English program, permitted to take graduate-level classes on a conditional basis along with further designated language study or permitted to begin graduate study without further restrictions.

CONTACT INFORMATION
Hongguang (Ian) Ying, Associate Professor
Office: 1050 Ninth Street Park, Room 100
Phone: 303-556-6728
E-mail: Hongguang.Ying@ucdenver.edu

Non Degree

Creative Writing Minor

The creative writing minor gives students the opportunity to complement their area of major study with experience writing and reading poetry or fiction.

Students minoring in creative writing must complete a total of 15 hours. None of the required courses may be taken pass/fail. Only courses completed with a grade of *C* (2.0) or better may be counted toward the minor. All upper-division courses must be taken with CU Denver English faculty. Students should take ENGL 1020 before beginning the minor. Courses in a minor cannot be counted toward the English major or English Writing major; consult an English advisor for substitutions.

Courses

Required Courses

- ENGL 2154 - Introduction to Creative Writing **gtPATHWAYS:**
- ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
- ENGL 3020 - Poetry Workshop **gtPATHWAYS:**
- -OR- ENGL 3050 - Fiction Workshop **gtPATHWAYS:**

Total: 9 Hours

Area Requirements

Choose one corresponding poetry or fiction course:

- ENGL 4025 - Advanced Poetry Workshop **gtPATHWAYS:**
- ENGL 4055 - Advanced Fiction Workshop **gtPATHWAYS:**
  ENGL 3____ Writing Workshop (3000-level not previously taken)

Total: 3 Hours

Elective in Genre of Specialization

Poetry: Students who have taken ENGL 3020, choose one from the following:

- ENGL 4160 - Poetics **gtPATHWAYS:**
- ENGL 4166 - History of American Poetry **gtPATHWAYS:**
- ENGL 4320 - History of Poetry in English **gtPATHWAYS:**

Fiction: Students who have taken ENGL 3050, choose one from the following:

- ENGL 4200 - History of the English Novel I **gtPATHWAYS:**

- ENGL 4210 - History of the English Novel II **gtPATHWAYS:**
- ENGL 4230 - The American Novel **gtPATHWAYS:**
- ENGL 4236 - The American Short Story **gtPATHWAYS:**

Total: 3 Hours

Minor Total: 15 Hours

Film Studies Minor

The film studies minor offers students the opportunity to gain an informed understanding of the sophisticated medium of film, its language and history. Courses cover critical writing about cinema, creative screenwriting, the evolution of Hollywood movies, international cinema and film in its cultural context. The film studies minor makes a valuable complement to a range of undergraduate majors.

Students must complete a total of 15 hours for the film studies minor. None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of *C* (2.0) or better may be counted toward the minor. A minimum of 9 hours must be taken with CU Denver faculty. Students are also advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division topics in film courses. No more than two online film studies courses can be counted toward the minor. Courses in a minor cannot be counted toward the English major or English Writing major; consult an English advisor for substitutions. [Courses marked by an asterisk are repeatable if taken as a different genre/director/topic.]

Courses

Required Courses

- ENGL 2250 - Introduction to Film **gtPATHWAYS:**
- ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
- ENGL 3070 - Film History I **gtPATHWAYS:**
- -OR- ENGL 3080 - Film History II **gtPATHWAYS:**

Total: 9 Hours

Electives

Choose two:

- ENGL 2415 - Introduction to Movie Writing **gtPATHWAYS:**
- ENGL 3070 - Film History I **gtPATHWAYS:**
- -OR- ENGL 3080 - Film History II **gtPATHWAYS:**
- * ENGL 3075 - Film Genres **gtPATHWAYS:**
- * ENGL 3085 - Film Directors **gtPATHWAYS:**
- ENGL 3200 - From Literature to Film **gtPATHWAYS:**
- * ENGL 3300 - Topics in Film **gtPATHWAYS:**
- ENGL 4420 - Film Theory and Criticism **gtPATHWAYS:**
- * ENGL 4770 - Topics in English: Film and Literature **gtPATHWAYS:** (film topics only)

Total: 6 Hours

Total: 15 Hours

Literature Minor

This program is designed for students who are interested in the study of English literature but who have elected to major in another area. The recommended series of courses allows students to become acquainted with some of the methods of literary study and with a number of the most important literary works.

The literature minor allows students to complement their area of major study with systematic experience in literature.

Students minoring in literature must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of *C* (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with CU Denver English faculty. Courses in a minor cannot be counted toward the English major or English Writing major; consult an English advisor for substitutions.

Courses

Required Courses

- ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
- ENGL 3001 - Critical Writing **gtPATHWAYS:**

Total: 6 Hours

Area Requirements

Any three upper division courses listed for the English major, Literature Option area requirements.

Total: 9 Hours

Minor Total: 15 Hours

Writing Minor

The writing minor allows students to complement their area of major study with systematic experience in writing.

Students minoring in writing must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of *C* (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with CU Denver English faculty.

Students are encouraged to take ENGL 1020 and ENGL 2030 before beginning the minor. Courses in a minor cannot be counted toward the English Major or English Writing major; consult an English advisor for substitutions.

Courses

Required Courses

- ENGL 2070 - Grammar, Rhetoric and Style **gtPATHWAYS:**
- ENGL 3084 - Multimedia Composition **gtPATHWAYS:**
- ENGL 4180 - Argumentation and Logic **gtPATHWAYS:**

Total: 9 Hours

Distributed Course

Choose one course from the following:

- ENGL 3154 - Technical Writing **gtPATHWAYS:**

- ENGL 3170 - Business Writing **gtPATHWAYS:**
- ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:** (non-repeatable)

Total: 3 Hours

Elective

One 3000- or 4000-level course.

Total: 3 Hours

Minor Total: 15 Hours

Master of Arts

English MA

► Graduate School Rules apply to this program

Program Director: Michelle Comstock
Telephone: 303-556-8479
E-mail: Michelle.Comstock@ucdenver.edu

The department offers three programs in the English MA degree: 1) the literature program increases students' knowledge of English and American literature and also their familiarity with a variety of critical methodologies; 2) the rhetoric and teaching of writing program introduces students to the theory, research and pedagogy underlying contemporary instruction in secondary and college composition; 3) the applied linguistics program introduces students to the principles, practices and concerns of teaching English to adults whose first language is not English.

Students concurrently pursuing a master's in education can count up to 6 hours of education courses toward their MA in English with their English advisor's permission.

Contact the graduate program director for more information on these programs.

Requirements for Admission

Applicants for any of the programs described above must submit all application materials by either the spring, summer or fall deadline. The deadline for summer or fall admission is April 1; the deadline for spring is October 1. Complete applications for all three programs must include the following:

- a completed University of Colorado graduate application
- two copies of all graduate and undergraduate transcripts, and for any nondegree courses previously taken
- three letters of recommendation in which the recommender specifically addresses the candidate's ability to pursue successfully the program chosen
- recent scores on the GRE, including the analytical, verbal and quantitative portions. GRE score average should be 600 or higher. Analytical writing score should be 4 or higher.
- evidence of a 3.0 GPA in previous courses
- a one-page statement of purpose
- 10-page critical writing sample

In addition to these requirements, applicants for the literature program must have successfully completed 24 semester hours in English courses (graduate or undergraduate), excluding courses in composition, creative writing or speech. At least 15 of these semester hours must be at the upper-division level.

Transfer of Credits from Other CU Campuses

Students admitted to graduate study in English may complete all of their course requirements for the MA degree at UC Denver. Up to 9 semester hours (total) may be transferred from the University of Colorado Boulder, University of Colorado Colorado Springs or other graduate program; however, such transfer requires the written approval of the specific program coordinator. Only 9 semester hours of courses taken at CU Denver before acceptance into the program can be counted toward the degree. Further, work already applied toward a graduate degree received at the University of Colorado or at another institution cannot be transferred toward another graduate degree of the same level at CU Denver. (For other rules concerning transfer of graduate credits, see the Graduate School Rules.) For more information, contact the graduate program director at 303-556-8479.

Degree Requirements

The literature program requires 33-34 semester hours; the rhetoric and teaching of writing program requires 31 hours; the applied linguistics program requires 30-31 hours. Students must receive a *B-* or above in all courses counted toward the MA degree.

Literature Program

This program provides a general knowledge of English and American literature, a familiarity with the range of theoretical approaches and critical methodologies, and an opportunity to take courses in film studies and ethnic and world literature.

GENERAL REQUIREMENTS

- Satisfactory completion of all required course work
- Satisfactory completion of the MA comprehensive exam OR thesis submission and defense
- Demonstrated fourth-semester proficiency in a foreign language. Old English or Latin will also satisfy this requirement
- Compliance with all graduate school policies and requirements

COURSE REQUIREMENTS (33 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted. A minimum of 9 semester hours must be taken at the 6000 level.

REQUIRED COURSES

- ENGL 5100 - Literary Research and Writing **gtPATHWAYS:**
- ENGL 6001 - Critical Theory in Literature and Film **gtPATHWAYS:**

Total: 6 Hours

AREA REQUIREMENTS

Choose seven courses at the 5000/6000 level which fulfill seven <u>different</u> areas from the following 9 areas:

1. Classics
2. Medieval literature
3. Renaissance literature
4. Restoration and 18th-century literature
5. Romanticism
6. American literature, pre-1900
7. Victorian literature
8. American literature or film, post-1900
9. British modernism/ 20th-century British literature or film

Any graduate literature/film course will fulfill at least one of these areas. Each area can be satisfied by several different courses periodically offered. Historical surveys count within the most appropriate area based on the syllabus. Courses in film, world literature, ethnic literature and women's literature generally fulfill one of the 20th-century areas.

Total: 21 Hours

ELECTIVES

Choose one of the following:

- ENGL 5093 - Teaching of Writing **gtPATHWAYS:**
- ENGL 5913 - Practicum in Language and Rhetoric **gtPATHWAYS:**
  An ENGL 5000- or 6000-level literature or film course

Total: 3 Hours

THESIS OR NON-THESIS OPTIONS

Non-Thesis Option

Students not writing a thesis must take the MA comprehensive exam. Prior to the exam, students may take ENGL 6920. Directed Readings

for 1-3 semester hours to help them prepare for the exam, but this is not required. However, the 33-hour course requirement must be met through electives if directed readings or project/independent study credits are not taken.

Students must be registered during the semester in which they take the MA comprehensive exam, which can be met by signing up for candidate for degree (CAND 5940-900) if all course work is completed.

Thesis Option

Students must submit a proposal for a thesis to the graduate program director for permission to proceed to the thesis.

- ENGL 6950 - Master's Thesis **gtPATHWAYS:** (4-6 hours)
  For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 3-6 Hours

LANGUAGE REQUIREMENT

Students must demonstrate fourth-semester proficiency in a foreign language. Old English or Latin also satisfies this requirement.

Literature Program Total: 33-34 Hours

Rhetoric and Teaching of Writing Program

In this program, you'll study rhetorical and language traditions and apply that knowledge to the teaching of writing. Knowledge of multicultural dimensions of literacy will help you understand the rich cultural complexity of the modern classroom. This program also focuses on developing your own writing and editing skills to fulfill your professional role as a teacher-writer.

COURSE REQUIREMENTS (31 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted.

REQUIRED COURSES

- ENGL 5080 - History of the English Language **gtPATHWAYS:**
- -OR- ENGL 5171 - Language Theory **gtPATHWAYS:**
- ENGL 5093 - Teaching of Writing **gtPATHWAYS:**
- ENGL 5150 - Research Methods **gtPATHWAYS:**
- ENGL 5190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:**
- ENGL 5651 - Second Language Writing **gtPATHWAYS:**
- ENGL 6002 - Rhetorical Theory **gtPATHWAYS:**

Total: 18 Hours

AREA OF CONCENTRATION

Chosen by the student and approved by the student's advisor, three courses are taken in an area of concentration which may be in virtually any field that complements the required core and that meets the student's goals in the program. Representative areas include but are not limited to literature, technical communication, reading, English as a second language and communication. ENGL 5913. Practicum in Language and Rhetoric may be included among these nine hours.

Total: 9 Hours

THESIS

ENGL 6950. Master's Thesis
For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 4-6 Hours

Rhetoric and Teaching of Writing Total: 31 Hours

Applied Linguistics Program

If you want a thorough grounding in the principles and practice of teaching English to non-native adult users of English with a special focus on the discourses of the classroom and on teaching second-language writers, this program is a good choice.

GENERAL REQUIREMENTS

Foreign Language: Students must demonstrate fourth semester proficiency in a foreign language prior to graduation; assessment of proficiency depends on the language to be demonstrated.

Internship: Those students who are not teaching adult ESL students at the time of their course work will be required to take a 3–6 credit internship in an area language school, workplace or high school/college ESL program, either through the Experiential Learning Center or by arrangement with the program coordinator.

COURSE REQUIREMENTS (30 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted.

REQUIRED CORE COURSES

- ENGL 5093 - Teaching of Writing **gtPATHWAYS:**
- ENGL 5150 - Research Methods **gtPATHWAYS:**
- ENGL 5171 - Language Theory **gtPATHWAYS:**
- ENGL 5601 - Principles and Practices of Second Language Acquisition **gtPATHWAYS:**
- ENGL 5651 - Second Language Writing **gtPATHWAYS:**
- ENGL 5913 - Practicum in Language and Rhetoric **gtPATHWAYS:**
  -OR- an ENGL elective approved by the student's advisor

Total: 18 Hours

ELECTIVES: LANGUAGE OR RHETORIC COURSES

Choose two:

- ENGL 5080 - History of the English Language **gtPATHWAYS:**
- ENGL 5190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:**
- ENGL 6002 - Rhetorical Theory **gtPATHWAYS:**

Total: 6 Hours

SYNTHESIS OPTIONS

Students may choose from the following two options:

Comprehensive Exam or Portfolio Exam

Students will take a comprehensive exam or portfolio exam in their last semester. Students selecting this option must take two elective courses (6 hours) approved by their advisor.

Thesis

ENGL 6840. Independent Study (3 hours)

ENGL 6950. Master's Thesis (4-6 hours)

For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 6-7 Hours

Applied Linguistics Total: 30-31 Hours

Additional Information

Candidate for Degree: Graduate students must be registered for at least one credit hour during the semester in which they graduate. Those who have completed all required courses and requirements may register for candidate for degree: CAND 5940, section 900. CAND 5940 carries no course credit, but you are billed for one credit of tuition and $10 in fees.

Teaching Assistantships: Graduate students who receive a teaching assistantship must take the following course in the fall during their first semester as a teaching assistant.

ENGL 5913. Practicum in Language and Rhetoric

Dual Degrees: Students concurrently pursuing a MA in education can count up to six hours of education courses toward their MA in English, with their English graduate advisor's permission.

Ethnic Studies

Director: Donna C. Langston
Program Assistant: Jennifer L. Williams
Office: Lawrence Street Center, 480
Telephone: 303-315-3616
Fax: 303-315-3610
Website: clas.ucdenver.edu/ethnic/

Faculty

Professor:

Donna C. Langston, PhD, University of Washington

Assistant Professor:

Faye Caronan, PhD, University of California

Paula Espinoza, PhD, University of Colorado

Rachel E. Harding, PhD, University of Colorado

Senior Instructors:

Paul Encinias, PhD, University of Colorado

Dennis Green, MSS, University of Colorado

Lecturers:

Jackie Benton

Lisa Calderon

Khushnur Dadabhoy

Peggy Lore

Danny Martinez

Omar Montgomery

Brittany Vuong-Sandoval

Elyse Yamauchi

The ethnic studies minor is designed to help students majoring in the liberal arts and sciences develop a sophisticated and broad understanding of ethnicity and its role in contemporary American society. It provides students with the theories and concepts needed to comprehend and interpret relations between and among ethnic groups in the United States. Students are better prepared to live and work in a pluralistic society when educational institutions foster a positive learning environment in which differences

contained within various U.S. communities can be studied not as a social problem, as is often the case, but for their history of struggles and contributions.

The interdisciplinary nature of the ethnic studies program curriculum provides students the opportunity, through academic investigation, to develop a greater understanding of the cultural pluralism of the present day United States and to acquire skills needed in professional and social service fields. This multidisciplinary, comparative approach to contemporary and historical research methodologies provides the basis for students to analyze the diverse social, economic, political and cultural facets of ethnic groups in the United States. Special emphasis is given to new perspectives that recover the history, creative expression and voices previously excluded by the traditional approaches to higher education.

Courses offered under the minor reflect prevailing thought in ethnic studies, draw parallels between various groups in the United States and link the studies of their country of origin with current and historical research on race and ethnic relations in the United States. These courses reflect critical analyses of the dominant perspectives through which ethnic groups have been described and perceived. Also investigated are the intersections of ethnicity with structures of political, educational, gender, business and economic, social and cultural power, all of which are emphasized through the study of materials and works by and about previously excluded groups. The cultural processes through which ethnic groups have sustained or altered their cultural identities are emphasized, as well as the pressures faced by members of various ethnic groups to maintain traditional values and conform to mainstream U.S. society.

REQUIREMENTS FOR THE MINOR

UNDERGRADUATE CERTIFICATE IN CULTURAL DIVERSITY STUDIES

Certificate

Cultural Diversity Studies Undergraduate Certificate

The undergraduate certificate in cultural diversity studies is designed to appeal to undergraduate students with a background in any major. It will allow students to demonstrate to potential employers that they possess the multicultural skills and knowledge necessary to succeed in the workplace. Students will enroll in department courses that focus on the historical context in which race and culture have emerged in the United States.

This certificate is also targeted to nondegree-seeking professionals who seek to acquire multicultural knowledge and the skills necessary to ensure their success in professional

environments. Students will be encouraged to think critically about race and race relations. Their expanded understandings of the implications of race and culture in work environments will ensure employers that they offer the highest quality employees opportunities in employment or advancement.

A certificate in cultural diversity studies offers students an enduring intellectual value based on classic articles, book excerpts and scholars who have shaped the study and understanding of race and ethnicity in contemporary society. Our courses provide the opportunity for students to encounter many of the greatest thinkers in race and ethnicity firsthand. Course curriculum includes carefully edited selections from the works of the most distinguished observers of race and ethnicity, past and present. Students will appreciate the broad range of coverage, the logic of course organization and the accessibility of material covered.

The undergraduate certificate in cultural diversity studies requires 12 semester hours (four courses).

Certificate Requirements

Required Course

- ETST 2000 - Introduction to Ethnic Studies **gtPATHWAYS:** GT-SS3

Total: 3 Hours

Electives

Choose three courses from any ethnic studies department courses, including the following:

- ETST 2155 - African American History **gtPATHWAYS:** GT-HI1
- ETST 2294 - Race and the Media **gtPATHWAYS:**
- ETST 3254 - Race and Ethnicity in the Inner City **gtPATHWAYS:**
- ETST 3297 - Social History of Asian Americans **gtPATHWAYS:**
- ETST 3396 - History of the American Indian **gtPATHWAYS:**
- ETST 3704 - Culture, Racism and Alienation **gtPATHWAYS:**
- ETST 4558 - Chicano and Latino Politics **gtPATHWAYS:**

Total: 9 Hours

Certificate Total: 12 Hours

There are crosslisted courses in a variety of departments, including history, political science and sociology. Any crosslisted course is acceptable. You must register for it under ETST numbers. A complete listing of department offerings and crosslisted courses can be obtained every semester from the ethnic studies department web page or by calling our office at 303-315-3616 for a copy.

A minimum grade of *B-* must be earned in each of the four courses completed as part of the certificate. All credits for the certificate must be earned at CU Denver.

Additional information about the undergraduate certificate in cultural diversity studies may be obtained from ethnic studies Director Donna Langston, Lawrence Street Center, 480, 303-315-3616, Donna.Langston@ucdenver.edu.

Non Degree

Ethnic Studies Minor

Requirements for the Minor

The minor in ethnic studies offers students the opportunity to enhance and broaden the body of knowledge acquired in their chosen majors and to apply it in a variety of careers involving intercultural relations. Students are required to complete 18 semester hours (6 courses) in ethnic studies with a grade of *C* or better. These hours are to be taken with CU Denver faculty (any exception needs to be approved by the ethnic studies advisor). At least 9 of the required 18 hours must be in courses numbered 3000 or above.

The 18 hours required for the minor must be distributed as follows:

Core Courses

- ETST 2000 - Introduction to Ethnic Studies **gtPATHWAYS:** GT-SS3

Total: 3 Hours

Additional Courses

Select four upper- or lower-division ETST courses from the following four focal U.S. racial/ethnic groups

Asian-Americans
African-Americans
American Indians
Chicanos/as and Latinos/as

Total: 12 Hours

Elective

ETST elective course of your choice.

Total: 3 Hours

Minor Total: 18 Hours

Geography and Environmental Sciences

Chairs: Brian Page
Program Assistant: Sue Eddleman
Office: North Classroom, 3621
Telephone: 303-556-2276
Fax: 303-556-6197
Website: clas.ucdenver.edu/ges/

Faculty

Professors:

Anne Chin, PhD, Arizona State University

Professors Emeritus:

Wesley E. Le Masurier, PhD, Stanford University

John G. Weihaupt, PhD, University of Wisconsin, Milwaukee

Associate Professors:

Frederick B. Chambers, PhD, Arizona State University

Brian Page, PhD, University of California, Berkeley

Deborah S. K. Thomas, PhD, University of South Carolina

John W. Wyckoff, PhD, University of Utah

Assistant Professors:

Casey Allen, PhD, Arizona State University

Peter Anthamatten, PhD, University of Minnesota

Rafael Moreno-Sanchez, PhD, Colorado State University

Gregory Simon, PhD, University of Washington

Bryan S. Wee, PhD, Purdue University

Senior Instructors:

Jon Barbour, PhD, University of California, Davis

Rudi Hartmann, PhD, Technical University of Munich

Instructors:

Amanda Weaver, MA, University of Texas, Austin

Ryan Sincavage, MS, University of Colorado

Lecturers:

James Fleming

Jeanne Mayne

Peter Timm

James Tindall

Undergraduate

Geography is a science that focuses on the spatial analysis of human/physical patterns and processes. Geographers attempt to identify the factors affecting the distribution of people and their activities on the surface of the earth and to provide meaningful solutions to problems faced by societies. This discipline is an ideal major for the liberal arts student, providing exposure to the concepts and techniques utilized in investigating the physical sciences, environmental and sustainability issues, socioeconomic problems and planning policies.

The program offers a distinctive curriculum that combines a broad and integrative scientific education with state-of-the-art training in geo-spatial analysis (e.g., computer mapping, GIS, remote sensing). The program is designed to provide the student interested in physical, social or environmental geography with the background necessary for obtaining a rewarding career in government (federal, state, local) or private industry, as well as preparing students for graduate study.

REQUIREMENTS FOR GEOGRAPHY MAJOR

Certificate

GEOGRAPHIC INFORMATION SCIENCE CERTIFICATE

Departmental Honors

The criteria for *cum laude* shall be a GPA of 3.6 in all courses at CU Denver (a minimum of 30 semester hours for transfer students) and an honors thesis that demonstrates independent research skills. The criteria for *magna cum laude* shall be a GPA of 3.75 in all CU Denver courses and a superior honors thesis. The criteria for *summa cum laude* shall be a GPA of 3.9 in all CU Denver courses and a truly exceptional honors thesis. The GPA alone shall serve only as a minimum criterion for each of the three levels of honors. Evaluation of the honors thesis shall be the deciding criterion for the level that is granted. The department expects that the award of *summa cum laude* would be a rare occurrence reserved for students who demonstrate extraordinary academic promise.

Admission to the honors program and the awarding of departmental honors shall be subject to faculty approval.

Minors

REQUIREMENTS FOR ENVIRONMENTAL SCIENCES MINOR

REQUIREMENTS FOR GEOGRAPHY MINOR

REQUIREMENTS FOR GEOLOGY MINOR

REQUIREMENTS FOR URBAN AND REGIONAL PLANNING MINOR

Graduate

MASTER OF SCIENCE IN ENVIRONMENTAL SCIENCES

Certificate

GRADUATE CERTIFICATE IN ENVIRONMENTAL SCIENCES

Bachelor of Arts

Geography BA

Requirements for Major in Geography

Students must declare a major by the time they have completed 60 semester hours of course work. The geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty. Five degree options are available for the major in geography: general, environmental science, environmental studies, urban studies and planning and earth science. Total semester-hour requirements vary among the five options, but all options require a minimum of 24 hours of upper-division credit. In addition, for each option, at least 15 semester hours must be taken at CU Denver.

- Option 1—General Geography
- Option 2—Environmental Science
- Option 3—Environmental Studies
- Option 4—Urban Studies and Planning
- Option 5—Earth Science

Option 1—General Geography

Option Advisors: Frederick B. Chambers and Brian Page

OPTION 1 REQUIREMENTS

Lower division

- GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
- GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
- GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

- GEOG 3232 - Weather and Climate **gtPATHWAYS:**
- GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
- GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
- -OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 18 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses, **including at least one course from each of the following subfields**:

Physical Geography

- GEOG 3240 - Colorado Climates **gtPATHWAYS:**
- GEOG 3302 - Water Resources **gtPATHWAYS:**
- GEOG 4010 - Landscape Geochemistry **gtPATHWAYS:**
- GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
- GEOG 4240 - Principles of Geomorphology **gtPATHWAYS:**
- GEOG 4270 - Glacial Geomorphology **gtPATHWAYS:**

Human Geography

- ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
- GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2
- GEOG 2202 - Natural Hazards **gtPATHWAYS:** GT-SS2
- GEOG 3300 - Population and Resources in the World Environment **gtPATHWAYS:**
- GEOG 3430 - Geography of Tourism **gtPATHWAYS:**
- GEOG 3501 - Geography of Health **gtPATHWAYS:**
- GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
- -OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
- GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
- -OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
- GEOG 4350 - Environment and Society in the American Past **gtPATHWAYS:**

- -OR- GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
- GEOG 4420 - The Politics of Nature **gtPATHWAYS:**
- -OR- GEOG 5420 - The Politics of Nature **gtPATHWAYS:**
- GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
- -OR- GEOG 5640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
- GEOG 4680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**
- -OR- GEOG 5680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**
- GEOG 4710 - Disasters, Climate Change, and Health **gtPATHWAYS:**

Regional Geography

- GEOG 1102 - World Regional Geography **gtPATHWAYS:** GT-SS2
- GEOG 3100 - Geography of Colorado **gtPATHWAYS:**
- GEOG 3120 - Geography of Europe **gtPATHWAYS:**
- GEOG 3130 - Central America and the Caribbean **gtPATHWAYS:**
- GEOG 3140 - Geography of South America **gtPATHWAYS:**
- GEOG 3150 - Middle East **gtPATHWAYS:**
- GEOG 3160 - Geography of China **gtPATHWAYS:**

Techniques for Geographical Analysis

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
- GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**
- GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- -OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- -OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- -OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- GEOG 4220 - Environmental Impact Assessment **gtPATHWAYS:**
- -OR- GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**

- -OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- -OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

Total: 18 Hours

OPTION TOTAL: 36 HOURS

Option 2—Environmental Science

Option Advisor: Frederick B. Chambers

Option 2 allows geography majors to concentrate on course work in environmental science.

ANCILLARY COURSES

Option 2 students must take one general biology and one general chemistry course (both with labs), OR a sequence of either (BIOL 2051 and 2061 with labs or CHEM 2031 and 2061 with labs). If applying to the MS in Environmental Sciences program, students must have taken both sequences. Course choices with descriptions are below:

- BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
- *and* BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1 (4 semester hours total), followed by:
- BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
- *and* BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1 (4 semester hours total)

- CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
- *and* CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1 (4 semester hours total), followed by:
- CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
- *and* CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1 (5 semester hours total)

OPTION 2 REQUIREMENTS

Lower division

- ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1

- GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
- GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
- -OR- ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
- GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

- GEOG 3232 - Weather and Climate **gtPATHWAYS:**
- GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
- -OR- GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
- -OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
- GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
- -OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 22 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Environmental Science

- GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
- GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
- -OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**

Plus one class from the following list:

- ENVS 3082 - Energy and the Environment **gtPATHWAYS:**
- ENVS 5030 - Environmental Geology **gtPATHWAYS:**
- GEOG 3240 - Colorado Climates **gtPATHWAYS:**
- GEOG 4010 - Landscape Geochemistry **gtPATHWAYS:**
- GEOG 4240 - Principles of Geomorphology **gtPATHWAYS:**
- GEOG 4270 - Glacial Geomorphology **gtPATHWAYS:**

Upper-Division Environmental-Oriented Biology or Chemistry (3 Hours)

One upper-division biology or chemistry course related to the student's environmental science interest must be taken as part of the environmental science option.

Techniques for Environmental Analysis

Quantitative methods (choose one course from the following):

- GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
- -OR- GEOL 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
- MATH 2830 - Introductory Statistics **gtPATHWAYS:** GT-MA1
- PSYC 2090 - Statistics and Research Methods **gtPATHWAYS:**
- SOCY 3121 - Statistics **gtPATHWAYS:**

Geo-Spatial Analysis (choose one course from the following):

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- -OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- -OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- -OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- -OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**

Total: 18 Hours

OPTION TOTAL: 40 HOURS

Option 3—Environmental Studies

Option Advisors: Rafael Moreno and Deborah Thomas

Option 3 gives geography majors the opportunity to concentrate on the topic of human-environmental interaction, emphasizing environmental policy, sustainability and social issues.

OPTION 3 REQUIREMENTS

Lower division

- ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1
- ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
- GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
- GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

- GEOG 3232 - Weather and Climate **gtPATHWAYS:**
- GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
- GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
- -OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 22 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Environmental Studies

Choose three courses from the following:

- GEOG 3300 - Population and Resources in the World Environment **gtPATHWAYS:**
- GEOG 3302 - Water Resources **gtPATHWAYS:**
- GEOG 3501 - Geography of Health **gtPATHWAYS:**
- GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
- -OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
- GEOG 4350 - Environment and Society in the American Past **gtPATHWAYS:**
- -OR- GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
- GEOG 4420 - The Politics of Nature **gtPATHWAYS:**
- -OR- GEOG 5420 - The Politics of Nature **gtPATHWAYS:**
- GEOG 4680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**
- -OR- GEOG 5680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**

Environmental Policy and Planning

Choose two courses from the following:

- GEOG 4220 - Environmental Impact Assessment **gtPATHWAYS:**
- -OR- GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- -OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- GEOG 4260 - Natural Resource Planning and Management **gtPATHWAYS:**
- -OR- PUAD 5631 - Seminar in Environmental Politics and Policy **gtPATHWAYS:**
- GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**

- -OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
- GEOG 4440 - Science, Policy and the Environment **gtPATHWAYS:**
- -OR- GEOG 5440 - Science, Policy and the Environment **gtPATHWAYS:**
- GEOG 4710 - Disasters, Climate Change, and Health **gtPATHWAYS:**
- PUAD 5633 - Seminar in Natural Resource and Environmental Health Law **gtPATHWAYS:**

Techniques for Environmental Analysis

Choose one course from the following:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
- GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**
- GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- -OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- -OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- -OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- -OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

Community/Professional Experience

(optional but highly recommended)

- GEOG 3939 - Internship **gtPATHWAYS:**
- -OR- GEOG 4995 - Travel Study **gtPATHWAYS:**

Total: 18 Hours

OPTION TOTAL: 40 HOURS

Note: Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internships may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

Option 4—Urban Studies and Planning

Option Advisors: Brian Page and Amanda Weaver

Option 4 allows geography majors to concentrate on social and spatial aspects of metropolitan growth and change. Students are given the opportunity to take advanced planning courses in their junior and senior years.

OPTION 4 REQUIREMENTS

Lower Division

- GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
- GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
- GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2
- GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

- GEOG 3232 - Weather and Climate **gtPATHWAYS:**
- GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
- GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
- -OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 21 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Urban Studies, both of the following (4000 or 5000 level):

- GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
- -OR- GEOG 5640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
- GEOG 4680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**
- -OR- GEOG 5680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**

Urban Planning (choose three courses from the following list):

- GEOG 4000 - Planning Methods I **gtPATHWAYS:**
- -OR- URPL 5510 - Planning Methods I **gtPATHWAYS:**
- GEOG 4220 - Environmental Impact Assessment **gtPATHWAYS:**
- -OR- GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- -OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- GEOG 4260 - Natural Resource Planning and Management **gtPATHWAYS:**
- -OR- URPL 6653 - Natural Resource Planning and Management **gtPATHWAYS:**
- GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
- -OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
- GEOG 4400 - Regional Economic Development **gtPATHWAYS:**
- -OR- URPL 6671 - Regional Economic Development **gtPATHWAYS:**
- GEOG 4630 - Transportation Planning I: Transport Network Analysis **gtPATHWAYS:**
- -OR- URPL 6673 - Transportation Planning I: Network Analysis **gtPATHWAYS:**
- GEOG 4670 - Transportation Planning II: Urban Transportation Planning **gtPATHWAYS:**
- -OR- URPL 6674 - Transportation Planning II **gtPATHWAYS:**
- GEOG 4710 - Disasters, Climate Change, and Health **gtPATHWAYS:**
- URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**

Techniques for Urban Analysis

Choose one course from the following:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
- GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**
- GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- -OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- -OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**

- -OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- -OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**

Community/Professional Experience

(optional but highly recommended)

- GEOG 3939 - Internship **gtPATHWAYS:**
- -OR- GEOG 4995 - Travel Study **gtPATHWAYS:**

Total: 18 Hours

OPTION TOTAL: 39 HOURS

Note: Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internship may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

Option 5—Earth Science

Option Advisor: Ryan Sincavage

Option 5 allows geography majors to concentrate on studying natural and physical processes within and on the surface of the planet.

OPTION 5 REQUIREMENTS

Lower division

- ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
- -OR- GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
- GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1
- GEOL 1082 - Physical Geology: Internal Processes **gtPATHWAYS:** GT-SC1
- GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

- GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
- -OR- GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
- -OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
- GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
- -OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 20 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Earth Science

- GEOG 3232 - Weather and Climate **gtPATHWAYS:**
- GEOG 4240 - Principles of Geomorphology **gtPATHWAYS:**
- GEOL 3011 - Mineralogy **gtPATHWAYS:**
- GEOL 3421 - Sedimentation and Stratigraphy **gtPATHWAYS:**

Plus one of the following courses:

- GEOG 3240 - Colorado Climates **gtPATHWAYS:**
- GEOG 4010 - Landscape Geochemistry **gtPATHWAYS:**
- GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
- GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- -OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- GEOG 4270 - Glacial Geomorphology **gtPATHWAYS:**
- GEOL 3032 - Geology of Colorado **gtPATHWAYS:**
- GEOL 4030 - Environmental Geology **gtPATHWAYS:**
- -OR- ENVS 5030 - Environmental Geology **gtPATHWAYS:**
- GEOL 4111 - Field Methods In Geology **gtPATHWAYS:**
- GEOL 4402 - Unsaturated Zone Hydrology **gtPATHWAYS:**

Techniques for Earth Science Analysis

Choose one course from the following:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- -OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- -OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
- -OR- GEOL 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
- GEOL 4111 - Field Methods In Geology **gtPATHWAYS:**

Total: 20 Hours

OPTION TOTAL: 40 HOURS

Senior Exit Examination

All majors are required to take a senior exit examination based on required courses in the discipline.

Certificate

Environmental Sciences Graduate Certificate

The graduate-level certificate in environmental sciences has seven options: air quality, ecosystems, environmental health, environmental science education, geospatial analysis, hazardous waste and water quality. Each option comprises four courses and is designed to approach an environmental issue from various disciplines. To earn a certificate, students are required to satisfactorily complete the courses in the option of their interest. These courses may be taken as electives within an MS degree program or through nondegree admission. Students must have the prerequisites for each course and must meet the requirements listed. Contact the option advisor for the particular option of interest before starting. A certificate will be issued upon proof of satisfactory completion of the courses. For an MS degree, students must coordinate the option courses with electives in their program. The listings of courses in each option are in the electives section of the master's program information.

Geographic Information Science Undergraduate Certificate

GISci Certificate Advisor: Rafael Moreno

Office: North Classroom, 3524

Telephone: 303-352-3762

E-mail: rafael.moreno@ucdenver.edu

The intention of this certificate is to provide undergraduates with a mechanism for demonstrating capabilities in spatial techniques in the social and/or physical sciences. The focus of this certificate is on a broad array of geotechniques, including geographic information systems, remote sensing, cartography and statistics, which give students additional analytical skills to take into the workplace or on to graduate school. This certificate is designed for geography majors as well as nonmajors.

Upon successful completion of the certificate, students will be able to:

- understand basic theoretical underpinnings of spatial analysis
- apply geo-spatial technologies to real-world problems
- have a basic knowledge of how to operate at least three types of software used for spatial analysis

Students must have a 3.0 GPA in all approved geographic technology courses to earn the certificate. The certificate will be awarded when the student graduates with the bachelor's degree. For those who already have a bachelor's degree, the certificate will be awarded upon completion of the program.

Application

Students may begin the program in any semester or during the summer by making arrangements with Dr. Rafael Moreno, the GISci certificate coordinator, and completing and signing the **Application for GISci Certificate .** This should be done once you have elected to pursue the certificate. Those who are not current students must apply for non-degree admission (go to Information for Undergraduate Students and click on Nondegree Students link at top of page) before registering for any classes.

Curriculum

To obtain the certificate, students must complete four core courses, one elective, and a 1-hour independent study, totaling 16 hours. Although the four core courses may be taken in any order, it is advisable to begin with GEOG 4081/5081, Introduction to Cartography and Computer Mapping, since this course familiarizes students with many key concepts used in the other classes. Of the four core requirements, only the statistics class has prerequisites, including algebra and introductory calculus. Because of the technical nature of the GIS and remote sensing course work, however, some mathematical experience is desirable prior to beginning the program. All core courses are offered on a yearly basis. Any alterations to the program MUST be approved by the GISci Coordinator.

Course Requirements

Core Courses:

- GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**
- -OR- GEOG 5081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**
- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
  (May also take as GEOL 4060 or 5060)
- GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
- -OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**
- GEOL 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
- -OR- GEOL 5770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
  OR equivalent course approved by the GISci Certificate Coordinator

Total: 12 Hours

Lab Requirement (to be taken at the end of the program):

Independent Study in GEOG or GEOL with a geographic technology professor (Moreno, Thomas, Wyckoff, or instructor approved by GISci coordinator). The independent project must also demonstrate a proficiency in GIS in the student's area of interest (1 credit hour) **or** take CVEN 5386. GIS Laboratory (3 credit hours). See below for course numbers/descriptions.

- GEOG 4840 - Independent Study: GEOG **gtPATHWAYS:**
- GEOL 4840 - Independent Study: GEOL **gtPATHWAYS:**
- CVEN 5386 - GIS Laboratory **gtPATHWAYS:**

Total: 1-3 Hours

Elective (choose one from the following):

- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
  (May also take as GEOL 4070 or 5070)
- GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**
- -OR- GEOG 5081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**
- GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**

- -OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- -OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- -OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- -OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- CVEN 5382 - GIS Spatial Database Development **gtPATHWAYS:**
- CVEN 5385 - GIS Relational Database Systems **gtPATHWAYS:**
  OR an elective approved by the GISci Certificate Coordinator.

Total: 3 Hours

Certificate Total: 16-18 Hours

Non Degree

Environmental Sciences Minor

The environmental sciences minor offers students exposure to the breadth of environmental issues. Students may emphasize the natural/physical sciences, the social sciences and humanities or structure their own mixed emphasis.

Program Requirements

Lecture/Laboratory Courses

Choose two lecture/laboratory courses (see Note 2):

- BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
- *and* BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
- BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
- *and* BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
- CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
- *and* CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
- CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
- *and* CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
- ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1
- GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1

- GEOL 1082 - Physical Geology: Internal Processes **gtPATHWAYS:** GT-SC1
- PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
- *and* PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
- PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1
- *and* PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1

Total: 8-10 Hours

Upper-division Courses

Choose three upper-division courses outside of the student's major discipline from the following list (see Notes 5 and 6):

- ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
- BIOL 3411 - Principles of Ecology **gtPATHWAYS:**
- CHEM 4700 - Environmental Chemistry **gtPATHWAYS:** (see note 4)
- ECON 4540 - Environmental Economics **gtPATHWAYS:**
- ENVS 3082 - Energy and the Environment **gtPATHWAYS:**
- -OR- PHYS 3082 - Energy and the Environment **gtPATHWAYS:**
- GEOG 3232 - Weather and Climate **gtPATHWAYS:**
- GEOG 3240 - Colorado Climates **gtPATHWAYS:**
- GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
- -OR- ENVS 5020 - Earth Environments and Human Impacts **gtPATHWAYS:**
- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
- -OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- -OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 4220 - Environmental Impact Assessment **gtPATHWAYS:**
- -OR- GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- -OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- GEOG 4240 - Principles of Geomorphology **gtPATHWAYS:**
- GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
- -OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
- GEOG 4270 - Glacial Geomorphology **gtPATHWAYS:**

- GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
- -OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
- GEOG 4350 - Environment and Society in the American Past **gtPATHWAYS:**
- -OR- GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
- GEOL 4030 - Environmental Geology **gtPATHWAYS:**
- HIST 4232 - Historic Preservation **gtPATHWAYS:**
- HIST 4810 - Special Topics **gtPATHWAYS:**
- PSCI 4354 - Environmental Politics **gtPATHWAYS:**

Total: 9 Hours

Minor Total: 17-19 Hours

Notes:

1. All work submitted for an environmental sciences minor must have a grade of *C* (2.0) or above.
2. The lecture/laboratory sequence can be part of the requirements for the major, but not in the student's major department (i.e., a biology major cannot use the general biology sequence, but could use the general chemistry sequence, which is also required for the biology major).
3. Students must take a minimum of 9 hours of the upper-division courses at the Downtown Campus.
4. If the student plans to go on to the MS in environmental sciences program, he/she should choose courses other than CHEM 4700. This is a core course in the MS in environmental sciences program.
5. Many of the upper-division courses have prerequisites; the student must check the catalog for prerequisite requirements for these courses.
6. The four upper-division elective courses for the environmental sciences minor cannot be from the student's major discipline, even if the particular course is not counted toward the major.

Geography Minor

Students must complete 15 semester hours in geography, including at least 6 semester hours of upper-division courses. Students must achieve a grade of *C* (2.0) or above on required courses. At least 9 semester hours of upper-division geography courses must be completed at CU Denver.

Geology Minor

At least two of the upper-division requirements must be completed at CU Denver. Transfer students who have earned the equivalent of all these courses elsewhere must complete a minimum of two of the required upper-division courses at CU Denver. No grade below a *C* (2.0) will be counted toward the minor requirements.

Required Courses

- GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1
- GEOL 1082 - Physical Geology: Internal Processes **gtPATHWAYS:** GT-SC1

Choose at least two of the following courses:

- GEOL 3011 - Mineralogy **gtPATHWAYS:**
- GEOL 3421 - Sedimentation and Stratigraphy **gtPATHWAYS:**
- GEOL 4030 - Environmental Geology **gtPATHWAYS:**

Minor Total: 15-16 Hours

Urban and Regional Planning Minor

The undergraduate planning minor in the Department of Geography and Environmental Sciences provides non-geography undergraduate students the opportunity to pursue studies in the professional field of planning. Geography majors can pursue the urban studies option, so this minor would not be available to these majors.

Geography and urban and regional planning share a common concern for the spatial configuration of the places that we inhabit and enjoy. In recognition of this close association, there is currently an articulation agreement between the Department of Geography and Environmental Sciences and the College of Architecture and Planning that provides students with a mechanism for acceleration through the master of urban and regional planning (MURP) degree program, if accepted into that graduate program. Those students completing the requirements for an undergraduate planning minor may also be eligible to pursue an accelerated MURP degree.

To meet the requirements for this minor, students must complete three core requirements and two electives, totaling 15 semester hours. Although the three core courses may be taken in any order, it is advisable to begin with GEOG 1602, since this course familiarize students with many key concepts used in other classes. All core courses are offered on a yearly basis.

Program Requirements

Required Core

- GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2
- GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
- GEOG 4840 - Independent Study: GEOG **gtPATHWAYS:**
  (when Urban Sustainability is the topic)

Total: 9 Hours

Electives

Choose two of the following courses:

- GEOG 4000 - Planning Methods I **gtPATHWAYS:**
- -OR- URPL 5510 - Planning Methods I **gtPATHWAYS:**
- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- -OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
- GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
- -OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**
- GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- -OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- -OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- -OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- -OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- -OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- GEOG 4400 - Regional Economic Development **gtPATHWAYS:**
- GEOG 4630 - Transportation Planning I: Transport Network Analysis **gtPATHWAYS:**
- GEOG 4990 - Special Topics **gtPATHWAYS:**
- URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**

Total: 6 Hours

Minor Total: 15 Hours

Entrance Requirements

All undergraduate students, except geography majors, are eligible for this minor.

Performance Requirements

Students must complete 15 semester hours in geography and/or planning. Because of the professional nature of this minor and the potential for fast-tracking in the MURP program, 12 semester hours of upper-division courses are required. Students must achieve a grade of *C* (2.0) or higher in required courses. All upper-division courses must be completed at CU Denver and a minimum of 9 semester hours must be completed in CLAS (geography) to satisfy residency requirements.

Master of Science

Environmental Sciences MS

► Graduate School Rules apply to this program

Program Director: John Wyckoff
Associate Program Director: Jon Barbour
Office: North Classroom, 3622
Telephone: 303-556-4520
Fax: 303-556-6197
E-mail: Jon.Barbour@ucdenver.edu
Web site: clas.ucdenver.edu/ges/mses.html

Faculty Affiliates to the M.S. in Environmental Sciences Program

Professors:

Larry Anderson, chemistry
Lloyd Burton, School of Public Affairs

N. Y. Chang, civil engineering
James C. Y. Guo, civil engineering
Lynn Johnson, civil engineering
John A. Lanning, chemistry
Anu Ramaswami, civil engineering
Diana F. Tomback, integrative biology

Associate Professors:

Leo P. Bruederle, integrative biology
Frederick B. Chambers, geography and environmental science
Greg Cronin, integrative biology
Glenn T. Morris, political science
Timberly M. Roane, integrative biology
Deborah S. K. Thomas, geography and environmental science
John W. Wyckoff, geography and environmental science

Assistant Professors:

Casey Allen, geography and environmental science
Michael J. Green, integrative biology
Rafael Moreno-Sanchez, geography and environmental science
Bryan S. Wee, geography and environmental science

Instructors/Adjunct Faculty:

Jon Barbour, geography and environmental science
James Tindall, U. S. Geological Survey

Environmental sciences is a multidisciplinary study of the environment, housed in the Department of Geography and Environmental Sciences. Academic fields involved in environmental sciences include chemistry, biology and ecology, physics, geology, geography, anthropology, engineering, political science, law, economics and the health sciences. Students planning to pursue the MS in environmental sciences must either have earned a bachelor's degree or have taken significant course work in the natural/physical sciences or engineering and completed several other prerequisites (see the following graduate information). Graduate-level certificates in environmental sciences are also offered. The certificates may be earned stand-alone or as options in the MS in environmental sciences.

Environmental careers encompass a broad range of professions, from those with a strong foundation in the natural/physical sciences or engineering to those based in the social sciences and/or humanities. Students interested in environmental issues and careers should investigate the whole field before deciding which course to follow. At

CU Denver, the MS in environmental sciences emphasizes the natural/physical sciences and engineering with the addition of the social sciences and humanities.

The MS in environmental sciences degree is designed to provide training in engineering, natural/physical sciences and socioeconomic analysis. The goals of the program are to (1) enhance the interdisciplinary communication and analytical skills of the student, and (2) provide a multidisciplinary approach for more intensive study of a particular environmental issue. Students will receive instruction in the physical and biological dynamics of various ecosystems, environmental engineering and socioeconomic issues associated with environmental analysis.

Graduates of the environmental sciences program are involved in many different areas, such as reviewing environmental impact statements, monitoring groundwater quality and communicating with the public. Many students have found employment in various agencies (U.S. Environmental Protection Agency, U.S. Geological Survey, Colorado State Department of Public Health and Environment) and private-sector environmental and engineering firms.

Requirements for Admission

The program is for students who either have baccalaureate degrees or significant background in one of the natural/physical sciences or engineering. In addition, minimum undergraduate science and math requirements are:

- one semester of calculus and one semester of upper-division statistics *(if applicant is missing the statistics course, he/she can be admitted but must take ENVS 5600, Applied Statistics, or an approved statistics course as an elective before receiving the MS in environmental sciences degree)*
- two semesters general chemistry with lab
- one semester physics
- two semesters general biology with lab

If only two semesters of the six prerequisite courses are lacking, students may be admitted, but must take them in the first year in the program. Applicants who have fulfilled all prerequisites have a better chance of acceptance. Applicants may be required to take additional prerequisite courses (necessary for completing particular core or elective courses). The prerequisite courses will not count toward the MS in environmental sciences degree. As part of the admission review process, applicants are required to submit a graduate application, a minimum of three letters of recommendation and transcripts from all institutions previously attended. UC Denver has a minimum requirement of a 3.0 undergraduate GPA for applicants to the Graduate School. The program admits new students for the fall semester only, and the number of students admitted to the program depends, in part, on space availability. **Applicants must submit all materials by the March 1 deadline.**

Financial Aid

There are three types of financial aid available: tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office on the Denver campus. Incoming students will be automatically considered for program-distributed tuition assistance at the time of admission to the program. Continuing students will be regularly apprised of available aid and positions. Students interested in research assistantships should consult individual faculty with whom they wish to work regarding potential assistantship positions. All other aid should be requested through the CU Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

Internships

Students in the MS in environmental sciences program are strongly encouraged to contact the Experiential Learning Center for internships and paid positions related to environmental sciences. The Experiential Learning Center is located in the Tivoli Student Union, Suite 260. Telephone: 303-556-2250. Many students have had internships in federal agencies, such as the U.S. Environmental Protection Agency and the U.S. Geological Survey.

Program Requirements

The MS in environmental sciences is a 39-hour program that provides students with two alternate plans: Plan I requires a thesis, while Plan II is a nonthesis program. General requirements for the program include: a set of core courses (18 semester hours), the MS in environmental sciences seminar course (ENVS 6002, 3 semester hours), and elective courses (12 semester hours minimum). Students choosing Plan I must also complete 6 hours of thesis, while those choosing Plan II must complete 6 hours of additional elective course work. Students opting for Plan II are encouraged to enroll in 3 hours of independent study (ENVS 6840) as one of their electives.

The degree is offered through the College of Liberal Arts and Sciences with the cooperation of the College of Engineering and Applied Science. In addition, some courses offered by the College of Architecture and Planning, the School of Public Affairs and the Business School are relevant and applicable to the program.

Required Core Courses

Fall

- CVEN 5401 - Introduction to Environmental Engineering **gtPATHWAYS:**

- ENVS 5030 - Environmental Geology **gtPATHWAYS:**
- ENVS 6200 - Risk Assessment **gtPATHWAYS:**

Spring

- BIOL 5445 - Applied Environmental Biology **gtPATHWAYS:**
- CHEM 5700 - Environmental Chemistry **gtPATHWAYS:**
- GEOG 5440 - Science, Policy and the Environment **gtPATHWAYS:**

Total: 18 Hours

The core courses are to be taken first upon entry into the program. They are the foundation for other courses in environmental sciences.

Seminar Course

Students are required to register for ENVS 6002, Environmental Sciences Seminar, in the first fall semester they are enrolled in the MS in environmental sciences program. The seminar serves as an introduction to the program and helps students to develop research skills and further their professional development.

- ENVS 6002 - Environmental Sciences Seminar **gtPATHWAYS:**

Elective Courses

(See the MS in Environmental Sciences website for a complete list of elective courses for the MS in environmental sciences program.)

Students, with the coordinator and/or an advisor, will complete a program plan that will include 12-18 semester hours of elective requirements that will meet their interests. Students may choose to use four of the electives to fulfill one of the following options offered in environmental sciences: air quality, ecosystems, environmental health, environmental science education, geospatial analysis, hazardous waste and water quality. Students must have the prerequisites for each course and must meet the requirements listed in the notes below. Contact the option advisor for the particular option of interest before starting. Upon graduation, the option will be noted on the student's transcript.

Following are the requirements for each environmental sciences option:

AIR QUALITY OPTION

Option Advisor: Jon Barbour
Telephone: 303-556-4520
E-mail: Jon.Barbour@ucdenver.edu

Required Courses

- CHEM 5710 - Air Pollution Chemistry **gtPATHWAYS:**
- ENVS 5730 - Air Quality Modeling and Analysis **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two:

- CHEM 5720 - Atmospheric Sampling and Analysis **gtPATHWAYS:**
- CVEN 5800 - Special Topics **gtPATHWAYS:**
  (when Air Pollution Control is the topic)
- URPL 6686 - Special Topics: Urban and Regional Planning **gtPATHWAYS:**
  (when Air Quality Planning and Policy is the topic)

Total: 6 Hours

Option Total: 12 Hours

ECOSYSTEMS OPTION*

Option Advisor: Casey Allen
Telephone: 303-556-6007
E-mail: Casey.Allen@ucdenver.edu

Required Courses

- BIOL 5415 - Microbial Ecology **gtPATHWAYS:**
- ENVS 5010 - Landscape Geochemistry **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two:

- BIOL 5050 - Advanced Biology Topics **gtPATHWAYS:**
  (when Seminar in Aquatic Ecology is the topic)
- BIOL 5154 - Conservation Biology **gtPATHWAYS:**

- ENVS 5500 - Topics in Environmental Sciences **gtPATHWAYS:**
  (when Ecological Risk Assessment is the topic) (See Note 2)
- ENVS 6220 - Toxicology **gtPATHWAYS:**
  (see Note 2)
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

* BIOL 5445, Applied Environmental Biology, is required as a prerequisite for the ecosystems option.

ENVIRONMENTAL HEALTH OPTION*

Option Advisor: Deborah Thomas
Telephone: 303-556-5292
E-mail: Deborah.Thomas@ucdenver.edu

Required Courses

- ENVS 6220 - Toxicology **gtPATHWAYS:**
  (see Note 2) (fall, even years)
- ENVS 6230 - Environmental Epidemiology **gtPATHWAYS:**
  (spring, even years)

Total: 6 Hours

Electives

Choose two:

- ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
- ENVS 5500 - Topics in Environmental Sciences **gtPATHWAYS:**
  (when Ecological Risk Assessment is the topic) (See Note 2)
- ENVS 6210 - Human Health and Environmental Pollution **gtPATHWAYS:**
  (spring, odd years)
- PUAD 5633 - Seminar in Natural Resource and Environmental Health Law **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

* ENVS 6200, Risk Assessment, is required as a prerequisite for the environmental health option.

ENVIRONMENTAL SCIENCE EDUCATION OPTION

Option Advisor: Bryan Wee
Telephone: 303-315-4992
E-mail: bryan.wee@ucdenver.edu

Required Courses

- ENVS 5500 - Topics in Environmental Sciences **gtPATHWAYS:**
  (when Survey of Field Methods is the topic)
  Choose one from the following:
- ELED 5340 - Multicultural Science Education **gtPATHWAYS:**
- ENVS 5340 - Multicultural Science Education **gtPATHWAYS:**
- SECE 5340 - Multicultural Science Education **gtPATHWAYS:**

Total: 6 Hours

Electives:

Choose two:

- ANTH 5170 - Culture and the Environment **gtPATHWAYS:**
- BIOL 5154 - Conservation Biology **gtPATHWAYS:**
- COMM 5282 - Environmental Communication **gtPATHWAYS:**
- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
- GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
  Or another elective approved by the option advisor

Total: 6 Hours

Option Total: 12 Hours

GEOSPATIAL ANALYSIS OPTION*

Option Advisor: Rafael Moreno
Telephone: 303-556-3762
E-mail: Rafael.Moreno@ucdenver.edu

Required Courses

- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**
- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two:

- CVEN 5382 - GIS Spatial Database Development **gtPATHWAYS:**
- CVEN 5385 - GIS Relational Database Systems **gtPATHWAYS:**
- CVEN 5386 - GIS Laboratory **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

* GEOG 3080, Introduction to Mapping and Map Analysis, is required as a prerequisite of the geospatial analysis option.

For more information, contact the option advisor or Jon Barbour at 303-556-4520, Jon.Barbour@ucdenver.edu.

HAZARDOUS WASTE OPTION*

Option Advisor: Anu Ramaswami
Telephone: 303-556-4734
E-mail: Anu.Ramaswami@ucdenver.edu

Required Courses

- CVEN 5480 - Hazardous Wastes and Site Remediation **gtPATHWAYS:**
- CVEN 5800 - Special Topics **gtPATHWAYS:**
  (when Hazardous Waste Regulations is the topic)

Total: 6 Hours

Electives

Choose two:

- BIOL 5051 - Advanced Topics In Microbiology **gtPATHWAYS:**
- CVEN 5402 - Integrated Environmental Modeling **gtPATHWAYS:**

- ENVS 5403 - Unsaturated Zone Hydrology **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

*CVEN 5401, Introduction to Environmental Engineering, is required as a prerequisite for the hazardous waste option.

WATER QUALITY OPTION*

Option Advisor: John Wyckoff
Telephone: 303-556-2590
E-mail: John.Wyckoff@ucdenver.edu

Required Courses

Choose two:

- BIOL 5416 - Aquatic Ecology **gtPATHWAYS:**
- ENVS 5280 - Environmental Hydrology **gtPATHWAYS:**
- ENVS 5410 - Aquatic Chemistry **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two:

- CVEN 5333 - Applied Hydrology **gtPATHWAYS:**
- CVEN 5334 - Groundwater Hydrology **gtPATHWAYS:**
- CVEN 5343 - Open Channel Hydraulics **gtPATHWAYS:**
- CVEN 5393 - Water Resources Development and Management **gtPATHWAYS:**
- ENVS 5280 - Environmental Hydrology **gtPATHWAYS:** (if not selected as one of the required courses)
- ENVS 5403 - Unsaturated Zone Hydrology **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

*CHEM 5700, Environmental Chemistry, or appropriate chemistry background is required as a prerequisite of the water quality option.

Notes:

1. Many of the courses have prerequisites; student must check the catalog for prerequisite requirements for these courses. Some options have a prerequisite course requirement.
2. One course may not be used for more than one option, even if it is listed in several options. Other courses may be offered that will be acceptable as electives with approval of the option advisor and the director of the program.
3. No more than three courses may be from any one discipline (excluding ENVS); i.e., chemistry, biology, civil engineering.
4. Courses used by the student to fulfill a core requirement may not be used to fulfill the options.
5. All work submitted for the environmental sciences options must have a grade of *B* (3.0) or better.
6. All courses for the environmental sciences options must be completed at the Denver campus.
7. Courses applied to either a certificate* or an MS degree may later be applied toward the other if all pertinent course work is completed within a five-year time period.

* The above options of the program may be taken to earn a corresponding environmental sciences certificate. However, certificates may be earned without entrance into the MS in environmental sciences program. (See the Environmental Sciences Graduate Certificate description).

Health and Behavioral Sciences

Director: Debbi Main
Program Assistant: Abby Fitch
Mailing Address: Program in Health and Behavioral Sciences, Campus Box 188, P.O. Box 173364, Denver, CO 80217-3364
Office Location: Administrative Building, 280
Telephone: 303-556-4300
Fax: 303-556-8501
E-mail: Abby.Fitch@ucdenver.edu
Website: clas.ucdenver.edu/hbsc/

Faculty

Professors:

Stephen Koester, PhD, University of Colorado

Debbi Main, PhD, University of Colorado

David Tracer, PhD, University of Michigan

Associate Professors:

Sheana Bull, PhD, Georgia State University

Richard Miech, PhD, University of North Carolina

Assistant Professors:

Patrick Krueger, PhD, University of Colorado

Ronica Rooks, PhD, University of Maryland College Park

Sara Yeatman, PhD, University of Texas Austin

Research Faculty:

Sharon Devine, PhD, University of Colorado

Susan Dreisbach, PhD, University of Colorado

Sharry Erzinger, DrPH, University of California Berkeley

Jean Scandlyn, PhD, Columbia University

Adjunct Faculty:

John Brett, Anthropology

Mary Coussons-Read, Psychology

Deborah S. K. Thomas, Geography and Environmental Sciences

The mission of the health and behavioral sciences (HBSC) program is to apply social science theory and innovative research methods to critically address emerging issues in health. The program trains students to confront issues affecting the health of communities and populations by focusing on social determinants of health and diseases. These determinants can be more influential on population health than the health care system.

The program's overarching framework integrates social, cultural and biomedical perspectives to understand the underpinnings of health and the conditions essential for

its creation and maintenance. Students and faculty conduct interdisciplinary research on topics including emerging diseases, maternal/child health, substance abuse, health disparities and global health. Graduates are innovative researchers, effective educators and leaders directly engaged in the practice of public health.

Undergraduate Programs

Public health is working to protect the environment, identifying sources of illness in population groups, controlling disease outbreaks, evaluating the economic impacts of changing demographics, developing interventions to promote healthy behavior, and producing health policy legislation. Public health draws from a broad array of disciplines, such as the social and behavioral sciences, medicine, nursing, pharmacy, physical therapy, business, economics, statistics, epidemiology, law and biology, and each provides unique insights for the diverse set of activities involved in public health practice.

In response to the tremendous career and research opportunities in public health, the Department of Health and Behavioral Sciences in the College of Liberal Arts and Sciences (CLAS), in collaboration with the Colorado School of Public Health (CSPH), have created an undergraduate major in public health. Most core classes for the public health major are team taught with one faculty member from the downtown campus (CLAS) and the other from the Anschutz campus (CSPH).

The new degree is designed to accommodate as many student interests as possible. At CU Denver, we are committed to helping students develop their own individualized educational path; we strive to serve the needs of both the student who wishes to specialize in communication strategies for effective public health education campaigns, as well as the student who wants to hasten the translation of the latest bench science technologies into public health practice. To this end, the major consists of both BA and BS tracks.

Two options are available for the undergraduate major in public health: Bachelor of Arts (BA) or Bachelor of Science (BS). After completion of the program, students will have a broad background to serve as the foundation for a variety of career paths, such as immediate entry into public health positions, background training for a professional school (including but not limited to medical, dental, nursing, pharmacy or law school), or the pursuit of an advanced degree such as a master’s or Ph.D. in a range of social, behavioral or natural sciences.

BACHELOR OF ARTS (BA)

Students in the BA program develop a specialty in the social sciences and public health.

REQUIREMENTS FOR THE BA IN PUBLIC HEALTH

BACHELOR OF SCIENCE (BS)

The Bachelor of Science in Public Health is designed to fulfill all medical school prerequisites in a four-year course of study.

Students in the BS program develop a specialty in the natural sciences and public health.

REQUIREMENTS FOR THE BS IN PUBLIC HEALTH

DEMOGRAPHY MINOR

The minor in demography gives students focused training in theories and methods of demography. It will help students develop important skills in critical thinking and quantitative reasoning, and will prepare them for graduate level training in demography or related fields and for jobs requiring an understanding of population dynamics. Demographers are frequently employed in occupations including academia, risk assessment, marketing, consulting, non-profits, and various local, state, and federal government agencies.

REQUIREMENTS FOR THE MINOR IN DEMOGRAPHY

PUBLIC HEALTH MINOR

The undergraduate minor in public health is designed to provide students with a basic understanding of the social, cultural and biological dimensions of health. The minor curriculum provides students with the intellectual and methodological tools needed to understand the joint bio-cultural determinants and contexts of health, health care and public health.

Graduates with a minor in public health will be prepared for pursuit of graduate degrees in a broad range of fields, including the natural, social and behavioral sciences; public health; law; medicine; dentistry; pharmacy; nursing; business administration; and health services research. The program is especially appropriate for students intending to pursue careers in public health, as well as primary care specialties in medicine, nursing or health policy and administration.

REQUIREMENTS FOR THE MINOR IN PUBLIC HEALTH

PhD Program in Health and Behavioral Sciences

The doctor of philosophy degree in health and behavioral sciences is rooted in the realization that our ability as a global society to overcome some of the most significant and intractable public health problems today rests on the willingness of biomedical and social science researchers to innovate across traditional disciplinary boundaries. Students are trained in theory from multiple disciplines and in both quantitative and qualitative research methods.

Although a master's degree is not provided by the health and behavioral sciences department, two relevant master's programs currently exist at CU Denver, as described in the PhD program requirements for admission.

A student's particular research focus constitutes a key part of his or her doctoral program. A range of possible foci exists, given the particular student's interest and faculty expertise. Examples of HBSC research foci include:

- *Social determinants of health.* Such research interests include studies on the health-related influences of socioeconomic position, social and economic inequality, discrimination, social networks and support, social capital, work conditions and psychological states including stress.
- *Community health.* This area of research involves community health assessment; program design and evaluation; translation of evidence-based interventions to diverse populations and communities; participatory research and community mobilization; policy analysis and advocacy for health-related problems.
- *Biosocial ecology.* Within this area are studies of the interplay of biological (including physiological, genetic or others of the biomedical health sciences), social, cultural and environmental characteristics influencing maternal/infant health, exercise performance or susceptibility to disease.
- *Global health* topics include social, cultural and biomedical factors influencing transmission of disease and health disparities on an international (as well as national) scale.

Recent student research exemplifying such foci includes:

- social factors affecting newly emerging diseases in the American Southwest
- factors that contribute to positive perceived health in the older-aged population
- ethnic group differences in weight gain and cardiovascular disease
- the impact of natural hazards and risk management strategies on health among pastoral herders in Mongolia
- adolescent sexual risk behaviors in the context of social networks and cultural norms
- disease incidence patterns and environmental contamination in north Casper, Wyoming

Graduates of the HBSC program acquire skills that situate them for leadership roles in public health. Depending upon a student's concentration, the successful graduate will gain expertise in research design and methods; social, cultural and biobehavioral determinants of health and disease; the structure and organization of health care systems; the contribution of individual, social and cultural factors for deciding health behaviors; and how guided change in health care systems may enhance quality, efficacy and access. The significance of these skills in addressing current complex health issues ensures that graduates will be in demand in a number of employment sectors ranging from community and public health organizations, to academic institutions, to nonprofit research organizations and to private health care settings.

PhD PROGRAM REQUIREMENTS

Bachelor of Arts

Public Health BA

Director: David P. Tracer, Professor of Health and Behavioral Sciences and Anthropology
Office: Administration Building, 280
Telephone: 303-556-6792
Fax: 303-556-8501
E-mail: David.Tracer@ucdenver.edu

Website:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/hbsc/Programs/Bachelors/Pages/Bachelors.aspx

The Bachelor of Arts in Public Health consists of 43 credit hours in required classes. Each class must be completed with a grade of *C* (2.0) or higher to count for the major. The major classes for the BA degree are organized into four categories: (1) public health core, (2) quantitative methods, (3) biological sciences and (4) electives.

FOR BS IN PUBLIC HEALTH, CLICK HERE

Program Requirements

Public Health Required Courses

Seven courses (two still in development):

PBHL 2000 - Introduction to Public Health

- PBHL 2020 - Introduction to Environmental Health **gtPATHWAYS:**
- PBHL 3001 - Introduction to Epidemiology **gtPATHWAYS:**
  PBHL 3070 - Global Public Health
- PBHL 4040 - Social Determinants of Health **gtPATHWAYS:**
  One health policy course and a capstone experience are still being developed. Check the Health and Behavioral Sciences bachelors programs website for current information.

Total: 23 Hours

Quantitative Methods

This one-course requirement may be fulfilled with a wide array of statistics courses offered in a number of disciplines. Examples include:

ANTH 4050, MATH 2830, MATH 4830, PSYC 3090, SOCY 3121

The particular class chosen to fulfill the quantitative methods requirement should be cleared with the undergraduate program director/advisor in advance.

Total: 3 Hours

Electives

The three-course electives requirement may be fulfilled from a wide array of over 100 courses offered in the College of Liberal Arts and Sciences. A listing of pre-approved classes is available online. Other classes may be chosen to fulfill the electives requirement, but must be cleared with the undergraduate program director/advisor in advance.

Total: 9 Hours

Public Health Core Total: 35 Hours

Biological Sciences Ancillary Courses

Choose two of the following (also fulfill the campuswide core requirement in biological and physical sciences):

- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1
- -OR- BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
- **with** BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1

- BIOL 1560 - Basic Biology: From Cells to Organisms **gtPATHWAYS:** GT-SC1
- -OR- ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1

Total: 8 Hours

Major Total: 43 Hours

Bachelor of Science

Public Health BS

Director: David P. Tracer, Professor of Health and Behavioral Sciences and Anthropology
Office: Administration Building, 280
Telephone: 303-556-6792
Fax: 303-556-8501
E-mail: David.Tracer@ucdenver.edu

Website:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/hbsc/Programs/Bachelors/Pages/Bachelors.aspx

The Bachelor of Science in Public Health consists of 71 credit hours in required classes. Each class must be completed with a grade of *C* (2.0) or higher to count for the major. The major classes for the BS degree are organized into five categories: (1) public health core, (2) quantitative methods, (3) biological sciences, (4) additional math and science and (5) electives.

FOR BA IN PUBLIC HEALTH, CLICK HERE

Program Requirements

Public Health Required Courses

Seven courses (two still in development):

PBHL 2000 - Introduction to Public Health
- PBHL 2020 - Introduction to Environmental Health **gtPATHWAYS:**
- PBHL 3001 - Introduction to Epidemiology **gtPATHWAYS:**
  PBHL 3070 - Global Public Health
- PBHL 4040 - Social Determinants of Health **gtPATHWAYS:**
  One health policy course and a capstone experience are still being developed. Check the Health and Behavioral Sciences bachelors programs website for current information.

Total: 23 Hours

Quantitative Methods

This one-course requirement may be fulfilled with a wide array of statistics courses offered in a number of disciplines. Examples include:

ANTH 4050, MATH 2830, MATH 4830, PSYC 3090, SOCY 3121

The particular class chosen to fulfill the quantitative methods requirement should be cleared with the undergraduate program director/advisor in advance.

Total: 3 Hours

Electives

The two-course electives requirement may be fulfilled from a wide array of over 100 courses offered in the College of Liberal Arts and Sciences. A listing of pre-approved classes is available online. Other classes may be chosen to fulfill the electives requirement, but must be cleared with the undergraduate program director/advisor in advance.

Total: 6 Hours

Public Health Core Total: 32 Hours

Biological Sciences Ancillary Courses

Take all of the following lecture/lab courses (also fulfill the campuswide core requirement in biological and physical sciences):

- BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
- BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
- BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
- BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1

Total: 8 Hours

Additional Math and Science Ancillary Courses

Take all of the following:

- CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
- CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
- CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
- CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
- CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**

- CHEM 3421 - Organic Chemistry II **gtPATHWAYS:**
- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
  (fulfills the math requirement for the campuswide core)
- PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
- PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
- PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1
- PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1

Total: 31 Hours

Major Total: 71 Hours

Non Degree

Demography Minor

Demography is the scientific study of human populations. It is an interdisciplinary field that examines the causes and consequences of health and mortality, population aging, migration, fertility, maternal and child health, interactions between human populations and the environment and population growth and decline.

Students working toward a minor in demography within the Department of Health and Behavioral Sciences (HBS) will acquire focused training in theories and methods of demography. The minor will help students develop important skills in critical thinking and quantitative reasoning, and will prepare them for graduate-level training in demography or related fields and for jobs requiring an understanding of population dynamics. Demographers are frequently employed in occupations including academia, risk assessment, marketing, consulting, non-profits and various local, state and federal government agencies.

For more information, email demographyminor@ucdenver.edu.

Program Requirements for the Minor

All students must complete a **minimum of 18 credits drawn from the approved course list** (see below). Although students may count courses taken for other majors or minors toward the requirements for the demography minor, they must still take at least **18 credits that count exclusively toward the demography minor**.

All undergraduate CU Denver students are eligible to take this minor, and must achieve a *C* (2.0) or above in all the courses for them to be counted toward the minor. A minimum of 15 credit hours, at least 12 of which must be upper division courses, must be taken in residence at CU Denver.

Note: Students should check for prerequisites when enrolling in courses.

Survey Courses

Students must choose at least one **of the following; both** may **be counted toward the minor:**

- HBSC 2051 - Introduction to Population Studies **gtPATHWAYS:**
- SOCY 4220 - Population Change and Analysis **gtPATHWAYS:**

Quantitative Methods

Must choose at least one **of the following; additional courses** may not **count toward the minor:**

- MATH 2830 - Introductory Statistics **gtPATHWAYS:** GT-MA1
- HBSC 3001 - Introduction to Epidemiology **gtPATHWAYS:**
- PBHL 3001 - Introduction to Epidemiology **gtPATHWAYS:**

Strong Demographic Themes

Must choose at least one **of the following; more** may **count toward the minor:**

- ANTH 4260 - Human Reproductive Ecology **gtPATHWAYS:**
- HBSC 3071 - Global Topics in Sexual and Reproductive Health **gtPATHWAYS:**
- HBSC 4020 - Global Health: Comparative Public Health Systems **gtPATHWAYS:**
- HBSC 4040 - Social Determinants of Health **gtPATHWAYS:**
- SOCY 3520 - Topics in Sociology **gtPATHWAYS:** (when offered as Medical Sociology topic)
- SOCY 4440 - Social Inequality **gtPATHWAYS:**

Other Electives

These courses may be used to fulfill remaining credits:

- BIOL 3412 - Fundamentals of Applied Ecology **gtPATHWAYS:**
- ECON 3100 - Economics of Race and Gender **gtPATHWAYS:**
- ECON 3400 - Economics of Sex and Drugs **gtPATHWAYS:**
- GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2
- GEOG 3300 - Population and Resources in the World Environment **gtPATHWAYS:**
- GEOG 3501 - Geography of Health **gtPATHWAYS:**
- HBSC 3002 - Ethnicity, Health and Social Justice **gtPATHWAYS:**

- HBSC 3031 - Health, Human Biology and Behavior **gtPATHWAYS:**
- HBSC 3200 - Human Migration: Nomads, Sojourners, and Settlers **gtPATHWAYS:**
- -OR- ANTH 3200 - Human Migration: Nomads, Sojourners, and Settlers **gtPATHWAYS:**
- HBSC 4200 - The Global HIV/AIDS Epidemic **gtPATHWAYS:**
- -OR- HBSC 5200 - The Global HIV/AIDS Epidemic **gtPATHWAYS:**
- PSCI 4545 - Immigration Politics **gtPATHWAYS:**
- SOCY 3700 - Sociology of the Family **gtPATHWAYS:**
- SOCY 4772 - Advanced Topics in Sociology **gtPATHWAYS:** (when offered as Crime and Inequality Over the Life Course topic)

Public Health Minor

To earn a minor in public health, a minimum of 24 semester hours are required, of which 12 must be upper-division and taken from CU Denver faculty. Students must achieve no less than a *C* (2.0) in each course applied toward minor requirements. Up to 6 credit hours completed toward a major or minor in another department may be counted toward the minor in public health.

Program Requirements

Tier 1: General Public Health

All students pursuing the public health minor are **required** to take the following two courses:

PBHL 2000 - Introduction to Public Health
- PBHL 3010 - Human Sexuality and Public Health **gtPATHWAYS:**

Total: 8 Hours

Tier 2: Public Health Foci

Choose at least two of the following four courses:

- PBHL 2020 - Introduction to Environmental Health **gtPATHWAYS:**
  PBHL 3030 - Health Policy
  PBHL 3070 - Global Public Health
- PBHL 4040 - Social Determinants of Health **gtPATHWAYS:**

Note: Students may elect to take all four of these courses in lieu of taking two of the elective courses listed in Tier 4 below.

Total: 6 Hours

Tier 3: Biological Background

Choose one of the following three courses:

- ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1
- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1
- BIOL 1560 - Basic Biology: From Cells to Organisms **gtPATHWAYS:** GT-SC1

Total: 4 Hours

Tier 4: Electives

Choose two of the following courses:

- PBHL 2051 - Introduction To Population Studies **gtPATHWAYS:**
- PBHL 3010 - Human Sexuality and Public Health **gtPATHWAYS:**
- PBHL 3021 - Fundamentals of Health Promotion **gtPATHWAYS:**
- PBHL 3031 - Health, Human Biology and Behavior **gtPATHWAYS:**
- PBHL 3041 - Health, Culture and Society **gtPATHWAYS:**
- PBHL 3071 - Global Topics In Sexual and Reproductive Health **gtPATHWAYS:**
  PBHL 4021 - Community Health Assessment
- PBHL 4080 - Global Health Practice **gtPATHWAYS:**
- PBHL 4200 - The Global HIV/AIDS Epidemic **gtPATHWAYS:**
- ANTH 4090 - Political Economy of Drugs **gtPATHWAYS:**
- ANTH 4260 - Human Reproductive Ecology **gtPATHWAYS:**
- COMM 4500 - Health Communication **gtPATHWAYS:**
- COMM 4620 - Health Risk Communication **gtPATHWAYS:**
- GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
- PSYC 3235 - Human Sexuality **gtPATHWAYS:**
- PSYC 3262 - Health Psychology **gtPATHWAYS:**
- SOCY 3520 - Topics in Sociology **gtPATHWAYS:**
  (when Medical Sociology is the topic)

Total: 6 Hours

Total: 24 Hours

Check the department website for additional course offerings.

Doctor of Philosophy

Health and Behavioral Sciences PhD

► Graduate School Rules apply to this program

Requirements for Admission

A master's or equivalent graduate degree is required for admission to the PhD program. In addition, we encourage prior graduate training in the areas noted below. Students applying without prerequisites may be admitted, but will be required to complete appropriate courses before being permitted to complete the core curriculum.

In addition to the general admission requirements of the Graduate School, the specific admission requirements for the PhD in health and behavioral sciences are as follows:

1. Knowledge from prior course work or vocational experience at the equivalent of college senior or graduate level in each of the following areas.

Social or behavioral sciences (15 semester hours minimum): knowledge of essential facts and concepts concerning the relationship among individuals and society, social organization, individual psychology and the relationship among culture, belief and behavior. This could be satisfied by course work in psychology, sociology and anthropology.

Human biology or physiology (6 semester hours minimum): familiarity with the functioning of the human body in health and disease states, including an understanding of cellular and organ system processes; an appreciation of evolutionary theory and the mechanisms by which evolution operates on both cellular and population levels; and an understanding of the interplay between the evolution of disease and host response. This could be satisfied by course work in human biology, physiology, pathophysiology or biological anthropology.

Statistics (3 semester hours minimum): prior course work and current familiarity with statistics including probability theory, parametric and nonparametric methods and acquaintance with basic multivariate techniques.

Epidemiology (3 semester hours minimum): prior course work at the advanced undergraduate or graduate level with the basic concepts and methods of epidemiology, including measures of risk, mortality, distribution of disease, role of bias and confounders and study design.

2. Demonstrated academic excellence as evidenced by an undergraduate GPA of 3.25 (out of a possible 4.0 points) or better, a graduate GPA of 3.5 or better, and scores in the top 30th percentile (averaged) of the GRE. Admission to the program is highly competitive; minimum GPAs and GRE scores for acceptance in any given year may be higher than the minimum levels indicated here.

The applicability of a student's prior course work will be decided by the program executive committee after reviewing the student's transcript and additional materials. If the student does not have the requisite educational background or GPA, the student may be admitted on a conditional or provisional basis and additional course work required in accordance with Graduate School Rules.

Prospective students should not be dissuaded from applying to the program if they do not meet all of the requirements for admission. In some cases, employment experience may be counted toward meeting a requirement. In other cases, students may be admitted conditionally upon their completion of a list of prerequisite courses that will be established at the time of admission. Students should be sure to address this issue in completing the graduate application by specifying the academic and vocational experience they possess that meets, in part or full, the admission requirements described above.

MASTER'S LEVEL PREPARATION FOR THE DOCTORAL PROGRAM IN HEALTH AND BEHAVIORAL SCIENCES

The program does not currently offer master's-level training in HBSC. Instead, we urge interested applicants to pursue relevant master's degree training in one of the social, behavioral or health sciences disciplines. In addition, we work closely with two master's programs at UC Denver. These are the concentrations in medical anthropology within the anthropology MA program offered by the anthropology department and the master of public health offered by the Colorado School of Public Health. Contact the respective programs for more information on these degree options and our program for how their requirements articulate with those for the health and behavioral sciences PhD.

TO APPLY FOR ADMISSION

At the Denver campus, all graduate applications are now submitted electronically. To begin the application process, go to the online admissions website. If you have any difficulties, call the program assistant at 303-556-4300. The program admits students only for the fall semester, which typically begins in mid- to late August. The deadline for the receipt of all application materials is **February 15** for admission the following August.

Applicants should invest considerable thought and effort in preparing their application. For instance, in the essay (Part II, question six) applicants should provide information on: (a) their academic training and any employment related to public health or health

care; (b) their experiences with inter- and multidisciplinary perspectives, and (c) how they envision using their doctoral degree to improve the health status of human populations and individuals. Students should also indicate the kinds of research *foci* that interest them the most.

In addition to the required recommendation form, letters of recommendation are required from at least three individuals in a position to judge the applicant's ability to complete the program. Recommenders may be employers, colleagues or professors; however, the applicant should be sure that the letters address the quality of and aptitude for academic work as well as personal characteristics and qualities.

Financial Aid

There are four kinds of financial aid available: graduate student stipends/fellowships; tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office.

Newly admitted, out-of-state and students demonstrating outstanding scholastic achievement receive priority when assigning departmental sources of funding. Students interested in research assistantships should contact the individual faculty member with whom they wish to work regarding potential assistantship positions.

All other aid should be requested through the CU Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

Program Requirements

There are three dimensions to the required curriculum:

a. A core curriculum that focuses on problem-oriented, interdisciplinary approaches to theory and method
b. Elective course work intended to provide the student with a solid base from which to launch the dissertation research
c. Dissertation research and writing

The curriculum is subject to change. What appears below is intended to give students a general idea of the extent, shape and content of the curriculum. Students should check with the program office for up-to-date information on specific course requirements and scheduling.

The Core Curriculum

The core curriculum should be completed by students by the end of their second year of full-time study. It consists of the following series of courses which, together, constitute 29 semester hours:

I. Health and Behavioral Sciences Colloquium

Each fall, the HBSC program will organize a series of presentations by scholars working in the health and behavioral sciences. The presentations provide students with the most current science and theory in the field. Required of all first- and second-year students, who must take at least two times.

- HBSC 7001 - Colloquium Series in the Health and Behavioral Sciences **gtPATHWAYS:**

Total: 2 Hours

II. Theoretical Perspectives in the Health and Behavioral Sciences

This series is designed to give students a thorough background in how the principles of the social and behavioral sciences have been applied to health issues. Topics include: the interplay between structure and agency in creating and maintaining health; social epidemiology; critical theory and social determinants of health; issues affecting Western biomedicine and public health systems; diffusion of healthy behavioral change among populations; social construction of health and illness; health policy and bioethics; social networks; and stress.

- HBSC 7011 - Theoretical Perspectives in Health and Behavioral Science I **gtPATHWAYS:**
- HBSC 7021 - Theoretical Perspectives in Health and Behavioral Science II **gtPATHWAYS:**
- HBSC 7071 - Social and Behavioral Determinants of Health and Disease **gtPATHWAYS:**

Total: 9 Hours

III. Human Ecology and Environmental Adaptation

This course will emphasize the biological/physiological dimensions of human health and disease.

- HBSC 7031 - Human Ecology and Environmental Adaptation **gtPATHWAYS:**

Total: 3 Hours

IV. Research Design and Methods in the Health and Behavioral Sciences

Three HBSC core research design and methods courses, plus one additional advanced methods course of student's choosing. This series covers the philosophy of science and the structure of scientific inquiry, procedures for hypothesis-testing, quantitative and qualitative methodological strategies commonly employed in the field, epidemiology and program evaluation. Students must further develop specialized methodological skills by completing an independent study (HBSC 6840) or taking one additional course in advanced epidemiology, advanced biostatistics, health economics, survey research design or qualitative methods and data analysis. This requirement will be tailored specifically to the student's particular interests by his/her advisor.

- HBSC 7041 - Research Design and Methods in the Health and Behavioral Sciences I **gtPATHWAYS:**
- HBSC 7051 - Qualitative Research Design and Methods **gtPATHWAYS:**
- HBSC 7061 - Quantitative Methods in the Health and Behavioral Sciences **gtPATHWAYS:**
  One elective course in advanced methods: **3 semester hours**

Total: 12 Hours

V. Applications of the Health and Behavioral Sciences

This course offers students the opportunity to focus on individual research interests with guidance from faculty and input from peers.

- HBSC 7111 - Applications of the Health and Behavioral Sciences **gtPATHWAYS:**

Total: 3 Hours

TOTAL CORE: 29 Hours

Elective Courses

Elective course work together constitutes 6 semester hours, which can be drawn from the large number of offerings in the health and behavioral sciences at CU Denver. Students will be expected to fulfill the necessary prerequisites for taking these courses, and final authority as to whether a student may enroll in the course will rest with the department in which the course is offered.

TOTAL ELECTIVES: 6 Hours

Doctoral Dissertation Research

The doctoral dissertation research topic is chosen by the student. The student is expected to define a research question in health and behavioral science, identify the research strategy to be used for answering the question, conduct the research required and document the project in the form of a doctoral dissertation. The student will be guided in this process by a doctoral dissertation advisor and the additional members who comprise the student's doctoral dissertation committee (see below). A minimum of 30 semester hours of dissertation work is required. Students must register for a minimum of 5 dissertation credits each semester of their dissertation work. Students may not take more than a year's leave of absence or fail to enroll for semester hours more than three semesters before they are dropped from the program.

Advisors

Upon admission to the program, each student will be assigned a first-year advisor. The student or the faculty will then choose the faculty advisor who will guide the student through the core and elective course work. The faculty advisor may or may not be the chair of the student's dissertation committee. The student selects his or her chair and a minimum of three additional committee members who oversee the student's comprehensive examination and dissertation research.

Formal Review

A formal review of each student's progress will be undertaken at the end of each year of study. Students who are deemed not to be making satisfactory progress will be informed in writing as to the nature and final result of the review before the end of June.

The Dissertation Prospectus and the Comprehensive Examination

Before a student advances to candidacy, she/he must complete a dissertation prospectus and defend it successfully in the context of an oral comprehensive examination. The dissertation prospectus is a complete description of the question or hypothesis that the student wishes to research for the dissertation project, the research design and study techniques and an assessment of the proposed project's contribution to the field. It will include a comprehensive review of the relevant literature. If the student chooses to undertake research in a particular ethnic or cultural community, she/he must also demonstrate sufficient understanding of that setting including adequate knowledge of the language. This prospectus must be approved by the student's advisor prior to scheduling the comprehensive examination.

The comprehensive examination will be an oral format based in part on, but not restricted to, the material presented in the dissertation prospectus. This exam *must* take place before the student's advancement to candidacy and will typically occur by the end

of the third year of study. A committee comprising the chair and a minimum of three faculty members will supervise the completion of the dissertation prospectus. This committee will conduct the oral examination and will recommend to the executive committee by a majority vote whether or not the student should be advanced to candidacy.

The Doctoral Dissertation and Final Exam

After advancement to candidacy, the student in consultation with his or her advisor will appoint a dissertation committee comprising the chair and a minimum of three faculty members. The chair and composition of the committee will be subject to approval by the program executive committee. The chair and two other members must have been present at the student's comprehensive examination and will be responsible for overseeing the research and writing of the doctoral dissertation. The committee will review drafts of the dissertation and, when the dissertation is completed to its satisfaction, will conduct the final exam, which will be based on the doctoral dissertation and related materials. The final examination will be open to the public.

Dissertation Total: 30 Hours minimum

History

Chair: Marjorie Levine-Clark
Program Assistant: Tabitha Fitzpatrick
Undergraduate Advisor: Myra L. Rich
Graduate Advisor: Pamela Laird
Office: King Center, 562
Telephone: 303-556-4830
Fax: 303-556-6037
Website: clas.ucdenver.edu/history/

Faculty

Professors:

Pamela W. Laird, PhD, Boston University

Thomas J. Noel, PhD, University of Colorado

Associate Professors:

Thomas G. Andrews, PhD, University of Wisconsin

Gabriel Finkelstein, PhD, Princeton University

Marjorie Levine-Clark, PhD, University of Iowa

Carl E. Pletsch, PhD, University of Chicago

Assistant Professors:

Christopher Agee, PhD, University of California, Berkeley

Xiaojia Hou, PhD, Cornell University

Alison M. Shah, PhD, University of Pennsylvania

Senior Instructors:

James E. Fell Jr.

Rebecca Hunt

Richard D. Smith

John G. Whitesides

Instructor:

James P. Walsh

Emeritus Professors:

Frederick S. Allen, PhD, Harvard University

Mary S. Conroy, PhD, Indiana University

Mark S. Foster, PhD, University of Southern California

Myra L. Rich, PhD, Yale University

James B. Whiteside, PhD, University of Colorado

James B. Wolf, PhD, University of California, Los Angeles

The special responsibility of historical studies is understanding the past. History courses integrate many branches of knowledge, cutting across the lines of the social sciences and the humanities, and even the natural sciences. Identifying forces of stability and processes of change, history students develop their research, writing and analytical skills, which serve them well beyond their university years.

Undergraduate

REQUIREMENTS FOR THE MAJOR

REQUIREMENTS FOR THE MINOR

Internships

Students may qualify for internships with the Center for Colorado and the West, Colorado State Historical Society, Historic Denver, Denver Museum of Nature and Science, the Colorado Railroad Museum, the National Park Service and other agencies to earn credit and experience. Students must have a minimum 2.75 cumulative GPA in at least 15 semester hours of University of Colorado course work to take an internship. Three hours of internship can be taken in one semester.

Honors Program

Students with a cumulative GPA of 3.5 or higher in their history classes are encouraged to complete an honors thesis to achieve a degree awarded with Latin honors: *cum laude, magna cum laude* or *summa cum laude*. A cumulative GPA of 3.5-3.69 is required for *cum laude*, 3.7-3.89 for *magna cum laude*, and 3.9-4.0 for *summa cum laude*. Students must enroll for HIST 4849, in which they will prepare and submit a research paper for honors review by a faculty committee.

Historical Studies Journal

Since 1983, CU Denver students in history have published this illustrated journal showcasing the most outstanding original research done each year by history students.

Independent Study

Students may take up to 9 semester hours of courses in independent study or internships (no more than 6 hours per semester), with permission of the concerned instructors and an undergraduate advisor.

Graduate

REQUIREMENTS FOR MA IN HISTORY

PUBLIC HISTORY MA MAJOR PROGRAM

Certificate in Historic Preservation

The history department also offers a certificate in historic preservation in conjunction with the College of Architecture and Planning. History students pursuing the certificate should consult the historic preservation website for this program as well as their history advisor to determine appropriate course work.

Bachelor of Arts

History BA

The bachelor's degree in history provides students with firm grounding for advanced studies in education, librarianship, law, business and public service, as well as graduate work in the humanities and social sciences broadly. History is an all-inclusive discipline, making it an excellent choice for students with a wide variety of career goals.

For the BA in history, students must complete a minimum of 36 semester hours of history course work. Majors must complete at least 18 upper-division (3000- and 4000-level) hours at the University of Colorado Denver. Majors must take a minimum of 15 credit hours in history at the 4000 level, including HIST 4839, the History Seminar. Not more than 48 hours of history will be counted toward graduation requirements. No grade below a *C* (2.0) will count toward major requirements to graduate.

Course Requirements

Required History Courses

- HIST 3031 - Theory and Practice of History: An Introduction to the Major **gtPATHWAYS:**
- HIST 4839 - History Seminar **gtPATHWAYS:**
  Students must complete HIST 3031 before enrolling in HIST 4839.

Total: 6 Hours

Distribution Requirement

A minimum of 6 semester hours in each of the following areas: United States, Europe and world (Africa, Asia, Latin America). At least 3 semester hours in each area must be upper-division (3000- and 4000-level).

Total: 18 Hours

Electives

The degree requires a minimum of 12 additional semester hours of electives, which can be satisfied by a combination of additional history courses, history internships, or history honors independent study for eligible students.

Total: 12 Hours

Major Total: 36 Hours

BA in History with Secondary Licensure

Students seeking secondary social studies teacher licensure may pursue a BA in history. This option enables them to complete their history major as well as fulfill requirements for licensure at the undergraduate level.

If you are interested in this option, you should meet with a CLAS advisor as soon as possible. You can complete your degree, including licensure, within a 4-year graduation plan, but only if you declare it early in your college career and meet regularly with your advisors.

To earn the professional teacher licensure, you will complete a major in history and then complete licensure courses in the School of Education & Human Development (SEHD). See Undergraduate Teacher Licensure on the SEHD Urban Community Teacher Education program page for more information. The licensure process requires that you be admitted into the SEHD to complete licensure classes. You will be working with your CLAS advisor through the application process.

Get to know your advisor! He/she is your guide through what can be a complex process dictated by the State of Colorado. Call 303-556-8316 for more information.

Non Degree

History Minor

Students interested in a minor in history are required to complete 18 hours of course work. At least 12 semester hours must be completed at CU Denver. No grade below a *C* (2.0) will count toward the minor.

Students minoring in history must take at least 9 credit hours of upper division (3000- and 4000-level) courses.

Course Requirements

Required Course

- HIST 3031 - Theory and Practice of History: An Introduction to the Major **gtPATHWAYS:**

Total: 3 Hours

Distribution Requirement

A minimum of 3 semester hours must be taken in each of the following areas: United States, Europe and World.

Total: 9 Hours

Electives

Choose at least 6 hours of elective upper-division history credit.

Total: 6 Hours

Minor Total: 18 Hours

Master of Arts

History MA

► Graduate School Rules apply to this program

The master of arts in history requires 36 semester hours (12 courses). Students applying for admission to the program should have some background in history, though not

necessarily a BA in the subject. The department encourages applications from individuals of any age interested in resuming their education. Graduate students in history develop skills in critical thinking, writing and independent research. Our program prepares students for a wide variety of professions, including teaching, government service, museum and archive management and historic preservation, as well as further degree work in history, law, librarianship and business. The department expects that students graduating with an MA in history will master the following general skills for their degrees:

- The ability to pursue independent historical research projects
- The ability to analyze historiographical arguments
- The ability to analyze primary documents and develop arguments from them
- The ability to create bibliographies using archival, library and Internet resources
- The ability to write in a variety of formats, including historiographical essays, book reviews and research papers

Students will also master knowledge of the basic historical content of both their major and minor fields, and an understanding of the historiographies and historical methods in their major and minor fields.

Admission Requirements

- In addition to the general admission requirements of the Graduate School, the Department of History requires an undergraduate GPA of at least 3.25.
- All applicants to the history program must take the GRE. GRE scores form a part of the department's consideration of students' qualifications.
- Applicants are required to submit a sample of written work, usually a term paper or project of similar length.
- All applications must include three letters of recommendation, preferably from college or university faculty.
- Applicants should address any gaps, weaknesses or special circumstances in their academic records in the statement of purpose portion of the application. In special circumstances, the department may modify its admission standards.

APPLICATION DEADLINES

April 1 Fall admission
October 1 Spring admission

Admission decisions are made by a graduate committee composed of the graduate advisor and faculty representing fields in U.S., European, global and public history.

Graduate School Policies

All history MA students are subject to Graduate School policies related to graduate study, as well as to all relevant university policies. These policies cover such topics as time limits on degree completion, changing degree programs, incomplete grades, and more. Further information on these policies can be found in the Graduate School section of this online catalog.

Transfer Credits

With approval from the graduate advisor and the appropriate faculty, students may transfer nine graduate-level credits accrued before enrollment in the UC Denver MA history degree program, provided that they earned a grade of *B*+ or better in these courses. Students must submit a syllabus for each course they wish to transfer, and faculty may require students to complete additional assignments to meet the expectations of the department. The department will not accept transfer of courses comparable to HIST 6013, Introduction to the Professional Study of History.

Grade Requirements

A minimum grade of *B*- (2.7) is required in all CU Denver history courses applied toward the degree. Students who earn less than a *B*- in HIST 6013 must retake the class.

Residency Requirements

The history department requires a residency of at least one academic year for the degree.

Graduate Advising

Upon admission, students will sign a check list indicating their understanding and acceptance of the department's expectations. Early in their first semester, students should contact the history department graduate advisor to discuss their path through the program and to receive advice regarding the selection of major and minor fields.

Degree Tracking Responsibility

Although faculty will provide reasonable guidance, it is up to students to monitor their own progress through the program in consultation with the graduate advisor and their major advisor; this includes knowledge and understanding of application and graduate deadlines, degree requirements, thesis guidelines, etc.

Choosing Advisors and Fields of Study

All history MA candidates choose a major and minor field. Students will take courses in these fields (see Degree Requirements below) and will be tested in these fields (see Comprehensive Examinations). As soon as possible after consulting with the graduate advisor, students are responsible for securing two field advisors, one to oversee their progress in the major field, the other to oversee their minor field. All students should have chosen a major field and major advisor by the time they have completed 12 credit hours.

Major Fields, Minor Fields and Concentrations

The MA in history seeks to provide students with a balance of breadth and depth in the study of history. Major fields are broad areas of study within which students gain a general picture of historical processes. Concentrations provide focus for developing expertise within the major, either regionally or thematically. Minor fields provide a complementary or comparative area and must be from outside the major field.

Advisors and students together will work out Plans of Study, which indicate the courses students intend to take to meet their requirements, based on their selection of major and minor fields. *Students should make every effort to enroll in courses which best fit their major field, major concentration and minor field.*

Students can choose to major in one of the following four fields:

- European History
- Global History
- Public History
- U.S. History

Students will draw on core lists for their comprehensive exams. Core lists contain a number of themes with bibliographies for each theme. In consultation with their major advisor, students choose at least two books from each theme; for some themes, students will read more than two books.

Major Field Concentrations

Students work with advisors to select one of the major field concentrations listed above. Concentrations provide thematic or regional focus to a broad geographical major (e.g. for the global history major, students could concentrate on trade, borders, imperialism, etc. or any of the areas of regional expertise of our faculty). Readings for the major field concentration are in addition to the core reading list.

Minor Fields

Students choose minor fields from the list of major fields or the list of major field concentrations. They choose their minor field list in consultation with the minor field advisor.

Degree Requirements

All history MA students must have a major field and a minor field, and they must complete half of their course work at the 6000 level.

Required Introductory Course

- HIST 6013 - Introduction to the Professional Study of History **gtPATHWAYS:**

Total: 3 Hours

Major Field

Core course in Major Field (3 semester hours)

European, public, and U.S. history major fields each have a required core course covering major approaches and themes. The core courses familiarize students with the field in a broad sense.

Research Seminars (3-6 semester hours)

Research seminars focus on students' development of an original, primary research paper. One 3-semester-hour research seminar is required of all students. A second research seminar is required for students not pursuing an extended research option; the second 3 semester hours can be taken within the major or minor field.

Major Electives (9-12 semester **hours**)

Electives are made up of courses in the major and concentration, including readings courses, which address specific field historiographies, and optional extended research credits. Students who choose to do a thesis may apply 6 thesis semester hours (HIST 6950) toward the major electives requirement.

Total: 18 Hours

Minor Field

Minor Electives

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

Total: 12 Semester Hours

Open Elective

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

Total: 3 Hours

Degree Total: 36 Hours

PUBLIC HISTORY MA MAJOR PROGRAM

INDEPENDENT STUDY AND/OR INTERNSHIP

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Students will not be allowed to fulfill the research requirement with an independent study or internship. Any independent study or internship at the 6000-level needs the permission of the graduate advisor. Students interested in pursuing an independent study or internship must find a faculty member willing to oversee their work, and they should expect the workload to equal or exceed that required for other courses at the same level.

- HIST 5840 - Independent Study: History **gtPATHWAYS:**
- HIST 6840 - Independent Study: HIST **gtPATHWAYS:**
- HIST 6939 - Internship **gtPATHWAYS:**

COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. The exam consists of a take-home written section, with broad essay questions in both the major and minor fields; this is followed by an oral exam with the student's faculty committee. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)
Students majoring in public history must complete either a thesis (6 semester hours) or a project (usually 3 semester hours).

OPTIONAL THESIS FOR STUDENTS IN U.S., GLOBAL AND EUROPEAN HISTORY (HIST 6950)
Students majoring in U.S., global or European history can choose to write a thesis (6 semester hours in their major field).
OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)
Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

- HIST 6950 - Master's Thesis **gtPATHWAYS:**
- HIST 6951 - Masters Project: Advanced History Curriculum Development **gtPATHWAYS:**
- HIST 6952 - Master's Project: Public History **gtPATHWAYS:**

Thesis Requirements

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students will enroll for six credit hours in HIST 6950 to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

Project Requirements

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey or similar activities.

Students are required to prepare a paper describing the process and results of their project.

Opportunities for Teachers and Teachers-in-Training

Curriculum Projects

Licensed teachers and teachers-in-training enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the hours from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document Advanced History Curriculum Development Projects.

- HIST 6951 - Masters Project: Advanced History Curriculum Development
  gtPATHWAYS:
  (3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure.

We strongly encourage students to complete the School of Education & Human Development's teacher licensure program before enrolling in the history MA program; the history graduate program and the teacher licensure program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the teacher licensure program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the teacher licensure program and the MA in history:

- HIST 5464 - Problems and Methods in Teaching History and Social Studies I
  gtPATHWAYS:
  -and-
- HIST 5465 - Problems and Methods in Teaching History and Social Studies II
  gtPATHWAYS:

Public History, MA in History

The MA program in history offers graduate-level major and minor fields in public history. Public history is a field of study that applies historical methods to the public sphere. This graduate major does not require a concentration, but students can choose to concentrate in museum studies or historic preservation. Public history majors can minor in any subspecialty the department currently offers. Students majoring in U.S., European or global history can also minor in public history.

Admission Requirements—See History MA

Degree Requirements

Required Introductory Course

- HIST 6013 - Introduction to the Professional Study of History **gtPATHWAYS:**

Total: 3 Hours

Major Courses

- HIST 5234 - Introduction to Public History **gtPATHWAYS:**

  Concentration Requirement (optional)
  Students who choose to concentrate in museum studies or historic preservation must take either
- HIST 5231 - History in Museums **gtPATHWAYS:**
- -OR- HIST 5232 - Historic Preservation **gtPATHWAYS:**

  Research Seminar (3 hours)
  Research seminars focus on students' development of an original, primary research paper.
  Major Electives (9-12 hours)
  Electives are made up of courses in public history, which focus on methodology and practice and thesis or project credits. These courses include:

- HIST 5133 - Management of Material Culture and Museum Collections **gtPATHWAYS:**
- HIST 5228 - Western Art and Architecture **gtPATHWAYS:**
- HIST 5229 - Colorado Historic Places **gtPATHWAYS:**

- HIST 5240 - National Parks History **gtPATHWAYS:**
- HIST 5242 - Oral History **gtPATHWAYS:**
- HIST 5243 - Public History Administration **gtPATHWAYS:**
- HIST 5244 - Interpretation of History in Museums: Exhibits and Education **gtPATHWAYS:**
- HIST 5245 - Heritage Tourism **gtPATHWAYS:**
- HIST 6992 - Seminar: Colorado Studies **gtPATHWAYS:**

  Additionally, special topics courses may be offered in such areas as historic reenactments, monuments and memory and recreating historic house interiors. Students who didn't take HIST 5231 or HIST 5232 as their concentration requirement may use these courses toward their elective requirements.

Total: 18 Hours

Minor Electives

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

Total: 12 Hours

Open Elective

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

Total: 3 Hours

Total: 36 Hours

INDEPENDENT STUDIES AND/OR INTERNSHIPS

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Students will not be allowed to satisfy the research seminar requirement via independent study. *Any independent study or internship at the 6000-level needs the permission of the graduate advisor.* Students interested in pursuing an independent study or internship must find a faculty member willing to oversee their work, and they should expect the workload to equal or exceed that required for other courses at the same level.

- HIST 5840 - Independent Study: History **gtPATHWAYS:**
- HIST 6840 - Independent Study: HIST **gtPATHWAYS:**

- HIST 6939 - Internship **gtPATHWAYS:**

COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)
Students majoring in public history must complete either a thesis (6 semester hours) or a project (3 semester hours).
OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)
Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

- HIST 6950 - Master's Thesis **gtPATHWAYS:**
- HIST 6951 - Masters Project: Advanced History Curriculum Development **gtPATHWAYS:**
- HIST 6952 - Master's Project: Public History **gtPATHWAYS:**

Thesis Requirements

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students enroll for six credit hours in HIST 6950 to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon

completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

Project Requirements

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey or similar activities. Students are required to prepare a paper describing the process and results of their project.

- HIST 6952 - Master's Project: Public History **gtPATHWAYS:**

Opportunities for Teachers and Teachers-in-Training

Curriculum Projects

Licensed teachers and teachers-in-training enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the credits from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document Advanced History Curriculum Development Projects.

- HIST 6951 - Masters Project: Advanced History Curriculum Development
  gtPATHWAYS:
  (3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure.

We strongly encourage students to complete the School of Education & Human Development's teacher licensure program before enrolling in the history MA program; the history graduate program and the teacher licensure program require separate

admission. Students complete 36 semester hours in history and 37 semester hours in the teacher licensure program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the teacher licensure program and the MA in history:

- HIST 5464 - Problems and Methods in Teaching History and Social Studies I **gtPATHWAYS:**
  -and-
- HIST 5465 - Problems and Methods in Teaching History and Social Studies II **gtPATHWAYS:**

Certificate in Historic Preservation

The history department also offers a certificate in historic preservation in conjunction with the College of Architecture and Planning. History students pursuing the certificate should consult the historic preservation website for this program as well as their history advisor to determine appropriate course work.

History MA

Humanities, Master of

Director: Margaret Woodhull
Associate Director: Myra Bookman
Office: Modular #1, MC01 (east of Tivoli Student Union)
Telephone: 303-556-2305
Fax: 303-352-3872
E-mail: masterhs@ucdenver.edu
Website: clas.ucdenver.edu/ict/index.html

Faculty

Senior Instructors:
Myra Bookman, PhD, University of Colorado
Margaret Woodhull, PhD, University of Texas, Austin

The Master of Humanities degree program offers graduate interdisciplinary studies designed for recent university graduates or those who have graduated earlier and are now seeking intellectual enrichment, career change or preparation for a PhD or professional school. Some students are teachers or other professionals seeking

additional training to expand their expertise. Many enroll in the program for the sheer satisfaction of intellectual enrichment. It is ideal for students whose professional and personal obligations require flexibility and accessibility, whether they are part-time or full-time students. Students are able to pursue their interests across disciplinary boundaries and enroll in courses from a number of departments. Students who pursue the master of humanities will take courses from disciplines traditionally included in the category of liberal arts, such as literature, philosophy, history, communication, fine arts, art history, theatre and music. But they may also include appropriate course work from the social sciences or other areas. Each student's program is supervised by a faculty advisor.

MH REQUIREMENTS

Master of Humanities

Humanities MH

► Graduate School Rules apply to this program

Requirements for Admission

In addition to the general requirements of the Graduate School governing acceptance to a master's degree program, applicants must submit the following:

- evidence of a bachelor's degree
- two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0
- a writing sample
- three letters of recommendation (at least two from academic sources)
- appropriate undergraduate training or professional background, or indicators that supply evidence of ability to pursue the MH degree
- a typed statement specifying the goal of advanced study in the humanities expressed in clear, correct and effective English
- standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

Provisional admission:

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

Nondegree students:

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

1. Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program
   -or-
2. Wish to start courses in the program prior to completing their application.

Up to 12 semester hours of graduate-level work taken as a nondegree student may be accepted by the program once a student has been admitted to the program (the 12-hour limit also includes graduate work from another university). For further information on nondegree graduate student status, see the Information for Graduate Students section of this catalog.

International Students:

International students must also meet CU Denver requirements for international admission. See the Information for International Students section of this catalog or call 303-315-2230 for further information.

Degree Requirements

The master of humanities offers two general plans of study: Track I (individualized program) and Track II (cultural studies in interdisciplinary cluster areas).

Thirty-six semester hours are required for Track I and 39 semester hours are required for Track II. All courses credited toward the MH degree must be taken at CU Denver over a period not exceeding five years (a maximum of 12 graduate semester hours may be transferred from other institutions subject to the MH director's approval). At least a *B* average (3.0) must be maintained in all graduate-level course work for the degree. A grade of *C*+ or below will not be counted toward the degree. Each student's program is supervised by a faculty advisor. All independent study, project and thesis contracts must be approved in advance by one of the program directors. A total of two independent study courses and two 4000-level undergraduate courses may count toward the degree. Only one graduate-level online course (up to 3 hours) may be taken toward the degree. The rest must be 5000-level or above courses offered through various departments. All students must pass an oral comprehensive exam in order to graduate.

TRACK I (Individualized Program) Requirements—Thesis or Project Option

Students in Track I have the opportunity to fashion a course of study based on their individual interests and goals. In consultation with a faculty advisor, students choose two or three academic disciplines as areas of concentration. Students who select a thesis (6 semester hours) will submit a thesis proposal after completing 30 hours of course work.

In the case of a project (3 semester hours), students will submit a project proposal after 33 hours.

TRACK I REQUIREMENTS:

Three interdisciplinary seminars

- HUMN 5025 - Methods and Texts of the Humanities **gtPATHWAYS:**
  (Must be taken during the first year of entrance into the program. **Offered fall only.**)

  Mid-Program Seminar, an interdisciplinary seminar which is approved for the student's program by the program director (note that the Mid-Program Seminar **must** have a HUMN prefix).

- HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities **gtPATHWAYS:**
  (A final seminar that provides background reading, theory and research approaches for students to develop a thesis or project; student must have completed at least 24 hours of course work and must register for the course via a schedule adjustment form with instructor approval. **Offered spring only.**)
  Total: 9 Hours

Electives

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-structured portion of the program must be selected with the approval of the MH program director.

A total of two independent study courses and two 4000-level undergraduate courses taken when enrolled in the program may count toward the degree. All independent study contracts must be approved by the program director. The remaining course work must be 5000-level or above courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

Total: 21-24 Hours

Thesis or Project

A thesis (6 semester hours) or a final project (3 semester hours), which must include a substantial scholarly paper and may include a creative exercise involving at least two disciplines. In order to proceed with a thesis or project, all students must submit to the

program a proposal to be approved by three faculty members of the committee and the program director.

- HUMN 5950 - Master's Thesis **gtPATHWAYS:**
- HUMN 5960 - Master's Project **gtPATHWAYS:**

  Total: 3-6 Hours

Oral Exam

An oral exam before a committee of three faculty members in order to graduate.

Track I Total: 36 Hours

TRACK II (Cultural Studies)—Non-thesis or Project Option

This track is somewhat more structured than Track I, but does not require a thesis or a project. In consultation with a faculty advisor, students choose from courses organized into one of eight interdisciplinary clusters:

- classics
- identity and gender
- meaning and values
- philosophy and theory
- self, society and community
- social and political thought
- technology and culture
- understanding America/understanding the world

TRACK II REQUIREMENTS:

Three required interdisciplinary seminars

- HUMN 5025 - Methods and Texts of the Humanities **gtPATHWAYS:**
  (Must be taken during the first year of entrance into the program. **Offered fall only.**)

  Mid-Program Seminar, an interdisciplinary seminar which is approved for the student's program by the program director (note that the Mid-Program Seminar **must** have a HUMN prefix).

- HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities **gtPATHWAYS:**

(A final seminar that provides background reading, theory and research approaches for students to develop a thesis or project; student must have completed at least 24 hours of course work and must register for the course via a schedule adjustment form with instructor approval. **Offered spring only.**)
Total: 9 Hours

Core cluster courses

Complete 15 semester hours in one of the eight interdisciplinary clusters listed above.

Total: 15 Hours

Electives

15 additional elective semester hours (students retain considerable flexibility in selecting these hours).

Total: 15 Hours

Comprehensive Exam

A comprehensive oral exam and a brief paper (15-20 pages) presented before a committee of three faculty members in order to graduate.

Track II Total: 39 Hours

Individually Structured Major

Contact: CLAS Advising Office, North Classroom, 4002
Telephone: 303-556-2555
Website:
http://www.ucdenver.edu/academics/colleges/CLAS/BachelorsPrograms/ProgramsDegrees/Pages/IndividualyStructuredMajor.aspx

The individually structured major (ISM) is an interdisciplinary major based on an individual contract rather than a preset list of courses. The flexibility of designing your own major affords liberal arts students an opportunity to pursue academic interests that cross traditional department or college boundaries. The ISM is attractive to students who have specific educational and career goals which cannot be satisfied with a traditional major or to students interested in a K–12 teaching career where breadth more than depth is valued to meet licensure requirements.

Students interested in the individually structured major work with faculty advisors in each discipline to create a program plan, or contract, to define the individually structured major. The ISM program plan must have an academic or career theme that ties course work together. Students are encouraged to complete the program plan before the end of their sophomore year.

Upon completion of graduation requirements, students in the individually structured major program will receive a diploma that will read “Bachelor of Arts, Individually Structured.” The University of Colorado transcript will read “Bachelor of Arts, Major: Individually Structured, Area:” (ISM title selected by student and approved as part of the ISM program plan).

REQUIREMENTS FOR THE MAJOR

Honors

Liberal arts students interested in graduating with Latin honors in the individually structured major program should meet with the assistant/associate dean in the CLAS Advising Office to verify they meet eligibility requirements and to modify the program plan for the honors project. Students who successfully complete the ISM honors program will have the appropriate Latin honor designation placed on the University of Colorado diploma and transcript.

To participate in the ISM honors program, CLAS students must meet each of the following eligibility requirements:

- have a declared ISM major with an approved ISM contract
- possess a minimum 3.2 cumulative University of Colorado GPA
- possess a minimum 3.5 GPA on all completed University of Colorado course work in the ISM contract

Eligible ISM students must complete an undergraduate research project and present the results to a faculty honors committee. The level of Latin honors awarded is determined by the faculty honors committee. ISM students are to complete 3 to 6 semester hours of undergraduate independent study over a period of two semesters in one of the disciplines that constitute the ISM contract. The faculty sponsor from the project discipline will serve as the honors committee chair. The independent study research project is to produce a thesis-quality report to be presented orally to a three-member interdisciplinary faculty honors committee representing the disciplines in the ISM contract. Upon completion of the research report and oral presentation to the honors committee, the level of Latin honors will be determined by the following criteria:

cum laude—awarded upon completion of written report and oral presentation

magna cum laude—awarded by honors committee based on successful written report and oral presentation

summa cum laude—awarded by honors committee based on excellence in written report and oral presentation

Bachelor of Arts

Individually Structured Major BA

Requirements for the Major

The ISM program plan requires course work over two or three disciplines. A discipline is defined as a single department or program such as biology, ethnic studies or math. The ISM program plan must comply with the following policies:

- Between 48 and 54 semester hours are allowed for the program plan.
- A minimum of 16 semester hours must be upper-division credit.
- A minimum of 30 semester hours must be completed in liberal arts and sciences course work.
- Each discipline requires a minimum of 15 semester hours, of which at least 3 must be upper-division hours.
- A minimum of 6 semester hours in each discipline must be taken from CU Denver faculty.
- A maximum of one discipline may be outside CLAS.
- A third optional discipline may be a mixture of course work, excluding courses from the first and second disciplines.
- An ISM title must be consistent with the academic theme and disciplines in the program plan.

The ISM program plan contract is approved by faculty for each discipline and submitted along with a cover letter identifying the ISM focus or academic theme to the CLAS Advising Office, North Classroom, 4002, for college approval by the assistant/associate dean. The ISM program plan must be approved before one-third of the ISM course work is completed. Typically, a maximum of 18-21 hours of previously completed courses is allowed.

Graduation requirements for ISM students include a minimum 2.0 GPA for all ISM course work, a minimum 2.0 GPA in each discipline in the program plan and a minimum of 24 hours of course work taken from CU Denver faculty.

Integrated Sciences, Master of

Director: Mary Coussons-Read
Office: North Classroom, 5002M
Telephone: 303-556-2687

Fax: 303-556-3520
E-mail: mary.coussons-read@ucdenver.edu
Website: clas.ucdenver.edu/mis/

Students in this program have the opportunity to take courses from a variety of areas in mathematics, the natural and physical sciences (biology, chemistry, geology, physics) and computer science in a program designed for professional growth in their area of interest. These areas are further explored through a required project or thesis that includes independent research into some particular area of interest.

The length of time it takes to complete the degree is determined by the student's own schedule flexibility; many finish within two years of full-time work. The program requires completion within five years or within six successive summers. Courses are offered during a wide range of times, and many MIS students complete their curriculum while working full time.

Requirements for Admission

To be considered for admission to the program, students:

- must submit an application for graduate admission, an essay specifying why they wish to be admitted to the program and their career goals, and three letters of recommendation
- must have completed at least 40 semester hours in mathematics, computer science, physics, biology, chemistry and/or geology
- may be required to take the GRE if their undergraduate GPA is less than 3.0

Students are admitted for the fall and spring semesters. The deadline for a complete application for fall admission is April 15; for spring admission it is October 15.

DEGREE REQUIREMENTS

Master of Science

Integrated Sciences MIS

► Graduate School Rules apply to this program

Degree Requirements

Minimum Hours

Students must complete a minimum of 30 semester hours at the 4000+ level, of which 1-4 must be project hours or 4-6 must be thesis hours. In accordance with Graduate School rules , a minimum of 18 hours must be at the 5000+ level.

Breadth Requirement

Students are required to take classes in a minimum of two (2) areas and maximum of three (3) areas within the disciplines of computer science, math, chemistry, biology, physics or geology. With approval, students may take a maximum of three (3) hours at the 4000+ level in one other school or college. All classes counted toward the degree must be related to the student's stated program goal and be approved as part of a program of study by the program director. The student is responsible for insuring that all prerequisite requirements for the classes they take have been met.

Depth Requirement

The student must designate a primary area (either within a department or as an interdisciplinary concentration including, but not limited to, biophysics, biochemistry and computational biology). The student must take a minimum of nine (9) semester hours in the chosen area of concentration.

Project or Thesis

All students must conduct independent research that results in either a thesis or project, which is presented to their committee in written form and is subject to an oral defense.

Graduate Advisor and Project Committee

All candidates for the master of integrated sciences degree must select a faculty advisor and two other faculty members to serve with the advisor as the candidate's graduate committee. The committee members must be part of the graduate faculty and approved by the program director. The name of the faculty advisor must be submitted to the MIS director no later than two semesters following full admission to the program.

DEGREE TOTAL: 30 HOURS

Integrative Biology

Acting Chair: Diana F. Tomback
Associate Chair: Timberley M. Roane
Program Assistant: Barbara Schmidt

Administrative Assistant: Jacki Craig
Undergraduate Major Advisor: Kimberly F. Regier
Health Careers Advisors: Charles A. Ferguson, Kent Nofsinger, Denise Leberer
Graduate Coordinator: Timberley M. Roane
Lab Coordinator: James Salmen
Office: Science, 2071
Telephone: 303-556-8440
Fax: 303-556-4352
Website: clas.ucdenver.edu/biology/

Undergraduate Program

Graduate Program

Faculty

Professors:

Daniel J. Howard, PhD, Yale University

Roderick Nairn, PhD, University of London

Bradley J. Stith, PhD, Washington State University

Diana F. Tomback, PhD, University of California, Santa Barbara

Associate Professors:

Leo P. Bruederle, PhD, Rutgers, the State University of New Jersey

Greg Cronin, PhD, University of North Carolina at Chapel Hill

Charles A. Ferguson, PhD, University of Colorado

Michael J. Greene, PhD, Oregon State University

Timberley M. Roane, PhD, University of Arizona

Assistant Professors:

Amanda Charlesworth, PhD, University College, London

Laurel Hartley, PhD, Colorado State University

Lisa Johansen, PhD, University of Alabama at Birmingham

Alan Vajda, PhD, University of Colorado

Michael Wunder, PhD, Colorado State University

Senior Instructors:

Hannah Anchordoquy, PhD, University of Colorado

Aimee Bernard, PhD, University of Rochester

Tod Duncan, PhD, University College, London (U.K.)

Cheri A. Jones, PhD, University of Florida

Kent Nofsinger, MD, University of Kansas School of Medicine

Instructor:

Kimberly F. Regier, MA, University of Colorado

Affiliated **Faculty:**

Mary Coussons-Read, PhD, University of North Carolina

David Albeck, PhD, University of Denver

Richard Allen, PhD, University of North Carolina

Emeritus Faculty:

Gerald Audesirk, PhD, California Institute of Technology

Teresa E. Audesirk, PhD, University of Southern California

Linda K. Dixon, PhD, University of Illinois

Georgia E. Lesh-Laurie, PhD, Case Western Reserve University

Undergraduate

Biology is the study of life, and integrative biology emphasizes the study and understanding of living organisms at different levels of organization—from cell and molecular to the biosphere. We teach biology students core information that serves as a foundation for advanced study and professional training. This basic knowledge includes concepts central to our understanding of molecular biology, as well as the relationship between structure and function, and the genetic mechanisms of inheritance. In addition, biology students are educated in cell biology and genetics, as well as the technological breakthroughs that have led to discoveries in these fields. They learn how organisms adapt to diverse environments and about energy flow and nutrient cycles through ecosystems, worldwide biodiversity and how ecological function can be altered by human impacts.

In the process of learning core information, biology students become well-versed in the critical skill sets of science: understanding and applying the scientific method and learning to understand and critically evaluate the current scientific literature. The biology major builds a solid foundation for professional careers in health and medicine; for academic, government, non-profit or private sector careers in a wide range of disciplines from ecology and the environment to cell and molecular biology; and for fulfilling careers in secondary school science education. Students planning a teaching career should consult the Teacher Education Program description in the School of Education & Human Development for information on teaching licensure.

REQUIREMENTS FOR MAJOR

Additional Information

Students with transfer credits in biology from other institutions should consult an undergraduate major advisor in the department for transfer credit and/or proper placement. Transfer credit from community college courses will not fulfill the requirements for upper-division semester hours or electives. However, students who have taken both semesters of anatomy and physiology at a community college *may* be given credit for having satisfied the structure/function requirement for the major. Biology

students seeking credit through AP (Advanced Placement), CLEP (College Level Examination Program) and/or IB (International Baccalaureate, Diploma Programme) should refer to the transfer tables (AP , CLEP , IB) in the Information for Undergraduate Students chapter of this catalog, as well as consult an undergraduate major advisor in the department for proper placement.

Departmental Honors. Departmental honors will be awarded to students based on their GPA in classes taken from Downtown Campus faculty. The following minimum GPA must be met both for all courses taken at UC Denver (overall GPA) and for biology courses alone (biology GPA): *cum laude*, 3.5; *magna cum laude*, 3.7; *summa cum laude*, 3.9.

Biology Research Scholars. The biology faculty encourages students to pursue research as part of their undergraduate education. Students who excel in both course work and research will be recognized as UC Denver biology research scholars. To qualify as biology research scholars, students must fulfill all of the following requirements: (1) achieve a minimum GPA of 3.5 in courses taken from Downtown Campus faculty; (2) participate in a research project consisting of a minimum of 6 semester hours of independent study, taken over at least two semesters; (3) write a paper describing the rationale, methodology and results of their research; and (4) present a seminar or poster based on their research. Students who wish to become involved in research should contact the chair of the department no later than their junior year.

REQUIREMENTS FOR MINOR

Biotechnology Certificate

To serve the needs of students who wish to obtain recognition for the acquisition of specialized skills in biology and to prepare students for graduate school, health careers and jobs in industry, the Department of Integrative Biology offers a certificate program in biotechnology. Upon completion of the required courses (21 to 22 semester hours), including independent study or internship, the student will be awarded a certificate and receive the biotechnology certificate on their transcript. The certificate may be completed in addition to an undergraduate or graduate degree or as a stand-alone certificate. For complete information, see the Biotechnology Certificate description.

Graduate

The MS in Biology program offers students the opportunity to receive advanced training and research experience in an area of specialization of one of our nationally and internationally recognized faculty members. The master's program is designed to prepare graduate students for careers in research and teaching; for employment in

business, industry and government; for existing career advancement; and for continuing post-baccalaureate work in PhD and professional programs. Students in the program specialize in fields ranging from cell and molecular biology to ecology and evolution.

The master's program has two tracks: research (thesis) and course work (non-thesis). The course work track is reserved primarily for teachers and career professionals requiring additional background for career advancement. For both tracks, applicants to the master's in biology program must have a declared area of specialization that aligns with the research focus of a biology graduate faculty member. Faculty expertise can be found under graduate faculty profiles on the Department of Integrative Biology website. Students must contact prospective faculty advisors to determine if openings are available within the faculty member's program.

BIOLOGY MS REQUIREMENTS

Bachelor of Science

Biology BS

Biology students must declare their major by the time they have taken 60 semester hours. A minimum of 36 hours of biology must be completed, of which 18 hours are at the upper-division level and taken in residence with UC Denver Downtown Campus biology faculty. Included in the 36 hours are 22 semester hours of biology core courses, required of all majors. At least 14 hours of upper-division biology elective courses beyond the core are required to fulfill the remaining hours, including one 4000-level lecture course. A maximum of 6 semester hours of independent study (BIOL 3840/4840) **or** a combined maximum total of 6 hours of independent study (3 hours) and internship/cooperative education (BIOL 3939) (3 hours) can be counted toward the 14 hours of upper-division electives in biology. The minimum grade in each CU Denver biology course is *C*- (1.7). However, a GPA of 2.5 in biology courses taken at CU Denver is required to graduate.

To ensure a proper background for the study of biology, majors are required to pass 31-33 hours of course work in ancillary disciplines, including two semesters of general chemistry laboratory, for which the minimum grade is *C*- (1.7). MATH 1110 (with one of BIOL 3763, BIOL 4764 or MATH 4830) may substitute for Calculus I (MATH 1401). All biology courses applied to the undergraduate biology major must be completed within 10 years of graduation. The following biology and ancillary courses are required and must be completed with a letter grade of *C*- (1.7) or higher:

Requirements for the Major

Biology Core Courses

- BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
- BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
- BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
- BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
- BIOL 3411 - Principles of Ecology **gtPATHWAYS:**
- -OR- BIOL 3412 - Fundamentals of Applied Ecology **gtPATHWAYS:**
- BIOL 3611 - General Cell Biology **gtPATHWAYS:**
- BIOL 3832 - General Genetics **gtPATHWAYS:**

One of the following structure/function courses:

- BIOL 3225 - Human Physiology **gtPATHWAYS:**
- BIOL 3244 - Human Anatomy **gtPATHWAYS:**
- BIOL 3654 - General Microbiology **gtPATHWAYS:**
- BIOL 4335 - Plant Science **gtPATHWAYS:**

Total Biology Core: 22 Hours

Biology Electives

*Biology elective courses (3000 or 4000 level) **

Total Electives: 14 Hours

Biology (core and electives) Total: 36 Hours

* Biochemistry as a Biology Elective

Students who have taken both semesters of organic chemistry (CHEM 3411 and CHEM 3421) may use either biochemistry (CHEM 3810) or 4 hours of the general biochemistry series (CHEM 4810 and 4820 combined) as one of their required upper-division biology electives.

Ancillary Core Courses

- CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
- CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
- CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
- CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
- CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**

- CHEM 3421 - Organic Chemistry II **gtPATHWAYS:**
- -OR- CHEM 3810 - Biochemistry **gtPATHWAYS:**
- PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
- PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
- PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1
- PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1
- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
- -OR- MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1

Plus one of the following:

- BIOL 4764 - Biostatistics **gtPATHWAYS:**
- MATH 4830 - Applied Statistics **gtPATHWAYS:**

Total Ancillary Core: 31-33 Hours

The following courses will **not** count toward the BS in biology:

- BIOL 1136 - Human Biology **gtPATHWAYS:**
- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1
- BIOL 1560 - Basic Biology: From Cells to Organisms **gtPATHWAYS:** GT-SC1

Degree Total: 36 Hours Biology + 31-33 Hours Ancillary

Certificate

Biotechnology Certificate

To serve the needs of students who wish to obtain recognition for the acquisition of specialized skills in biology and to prepare students for graduate school, health careers and jobs in industry, the Department of Integrative Biology offers a certificate program in biotechnology. Upon completion of the required courses (21 to 22 semester hours), including independent study or internship, the student will be awarded a certificate and have the biotechnology certificate noted on their transcript. The certificate may be completed in addition to an undergraduate or graduate degree or as a stand-alone certificate. Click on Biotechnology Certificate for a complete description.

Non Degree

Biology Minor

For a biology minor, students must complete all biology core requirements (22 hours), of which a minimum of 9 hours must be completed in residence at CU Denver. The minimum grade in each CU Denver course is *C*- (1.7); however, a GPA of 2.5 is required in biology courses taken at CU Denver to complete the minor. In addition, students must complete one year of general chemistry including laboratory with a grade of *C*- (1.7) or higher.

Course Requirements

- BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
- BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
- BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
- BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
- BIOL 3411 - Principles of Ecology **gtPATHWAYS:**
- -OR- BIOL 3412 - Fundamentals of Applied Ecology **gtPATHWAYS:**
- BIOL 3611 - General Cell Biology **gtPATHWAYS:**
- BIOL 3832 - General Genetics **gtPATHWAYS:**

One of the following structure/function courses:

- BIOL 3225 - Human Physiology **gtPATHWAYS:**
- BIOL 3244 - Human Anatomy **gtPATHWAYS:**
- BIOL 3654 - General Microbiology **gtPATHWAYS:**
- BIOL 4335 - Plant Science **gtPATHWAYS:**

Ancillary chemistry courses:

- CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
- CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
- CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
- CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1

Minor Total: 31 Hours

Master of Science

Biology MS

► Graduate School Rules apply to this program.

Associate Chair for Graduate Studies: Timberley Roane
Office: Science, 4096
Telephone: 303-556-6592
E-mail: timberley.roane@ucdenver.edu
Website: clas.ucdenver.edu/biology/grad.html

Requirements for Admission

Applicants must hold a baccalaureate degree from an accredited college or university, awarded within the preceding ten years. Students whose biology degree was awarded more than 10 years prior to entrance to the CU Denver program will be expected to retake or show competence in the biology core courses. Successful applicants generally have earned an overall GPA of 3.0 or better. Most applicants have an undergraduate major in biology or a related field. Students entering the master's program in biology must have completed the equivalent of a minor in biology. Although a deficit of one course is allowed, this must be completed within the first semester of entering the master's program and will not apply toward the degree. The general GRE is required of all applicants, with scores above the 50th percentile required on each of the three sections (verbal, quantitative and analytical writing).

The master's program has two tracks: research (thesis) and course work (non-thesis). For both tracks, applicants to the master's in biology program must have a declared area of specialization that aligns with the research focus of a biology graduate faculty member. Faculty expertise can be found under Graduate Faculty Profiles on the Department of Integrative Biology website. Students must contact prospective faculty advisors to determine if openings are available within the faculty member's program.

Application deadlines are February 1 for domestic U.S. students and January 15 for international students. Applications submitted after the deadline date WILL NOT be considered. Before submitting an application, it is highly recommended that students meet with the associate chair for graduate studies to ensure this program meets individual needs and that students meet the program requirements. Application to the master's in biology program is through CU Denver Admissions. Application includes the University graduate application and the biology supplemental application.

Degree Requirements

All course work taken within the Department of Integrative Biology and applied toward the degree must be at the 5000 level or above. There is no core of required courses. A course plan is developed jointly by the student and faculty advisor and is approved by the student's graduate committee. In addition to regular meetings throughout the semester, all students must meet with their faculty advisor at the beginning of each

semester to determine course schedules and upcoming deadlines. A pre-registration agreement form is signed by the student and advisor, and then filed with the associate chair for graduate studies in biology to ensure that degree requirements are met, and that selected courses will be applicable toward the MS degree.

With the advisor's and/or graduate committee's approval, a maximum of 6 semester hours of course work at the 4000 level taken outside the department may be applied toward the degree. At least 18 semester hours must be taken from faculty in the Department of Integrative Biology at CU Denver. Upon approval of the department, as many as 12 semester hours may be transferred into the program. Two types of degree tracks are offered:

Research (thesis) track

Students must form a three-person committee consisting of members of the graduate faculty, with at least two from the rostered CU Denver graduate faculty. Committee membership must be approved by the faculty advisor. The research track requires 30 semester hours, including a minimum of 4 and no more than 6 thesis hours. Students may also count a maximum of 7 hours (total) of graduate-level independent study and/or internship. Graduate internship or independent study projects must be research-based. In addition, two semesters of graduate seminar (BIOL 6655) are required.

- BIOL 6655 - Seminar **gtPATHWAYS:**

Course work (non-thesis) track

This track is reserved primarily for teachers and career professionals requiring additional background for career advancement. The course work track requires 32 semester hours, including two semesters of graduate seminar (BIOL 6655).

- BIOL 6655 - Seminar **gtPATHWAYS:**

Comprehensive Examination

All students in the master's in biology program are required to complete a series of biology comprehensive exams. The purpose of the exams is to demonstrate mastery of chosen biological concepts. The comprehensive exams include three written exams and an oral exam.

Financial Assistance

Financial aid for graduate students may be available from university and/or state fellowships, research assistantships sponsored by individual faculty members and teaching assistantships. Teaching assistantships are available on a competitive basis

through application. Students should refer to the department web site for information on how to apply for a teaching assistantship.

Contact the Office of Financial Aid for information about fellowships, or the associate chair for graduate studies for information about research and teaching assistantships.

Interdisciplinary Programs

Most of the individual departments represented in the College of Liberal Arts and Sciences have numerous links with other disciplines; consequently, many faculty members encourage students to take courses in related disciplines. Students will often find opportunities to explore relationships among different disciplines while studying *within* traditional disciplines.

The college also has several established interdisciplinary programs leading to full undergraduate degrees, minors, certificates and graduate degrees. A brief description of each program follows, with a link to its respective program section.

Undergraduate

- The **MINOR IN CHINESE STUDIES** combines studies in language, literature and social sciences for students wishing to explore the interwoven perpectives of Chinese culture.
- The **EDUCATIONAL STUDIES MINOR AND K-12 TEACHER LICENSURE PROGRAMS**, in collaboration with the School of Education & Human Development, enable students to add educational training to their liberal arts and sciences discipline studies.
- The **ENVIRONMENTAL SCIENCES MINOR** allows students to choose courses from the social sciences, physical sciences, engineering, humanities and statistics to create a unique program of study.
- The **ETHNIC STUDIES MINOR** provides students the opportunity, through academic investigation, to develop a greater understanding of the cultural pluralism of the present day United States and to acquire skills needed in professional and social service fields.
- The **INDIVIDUALLY STRUCTURED MAJOR (ISM)** provides liberal arts and sciences students the freedom to create their own interdisciplinary major centered around an academic or career theme.
- The **INTERNATIONAL STUDIES MAJOR** affords students the opportunity to learn about diverse cultures as they acquire the methodological tools to analyze the world from different academic disciplines. Study abroad experiences are strongly encouraged in this major.

- The **LAW STUDIES MINOR** introduces the study of law in relation to social and political discourse, and provides preparation for students contemplating application to law school.
- The **PUBLIC HEALTH MAJOR** enables students to get either a BA or BS degree in public health, depending on their focus. They may choose from over 100 electives in 14 academic departments, in addition to specific public health core courses.
- The **MINOR IN RELIGIOUS STUDIES** gives students a grounding in religious traditions through such interrelated disciplines as anthropology, literature, philosophy and psychology.
- The **MINOR IN SOCIAL JUSTICE** invites students to consider social justice as a goal of every healthy society and the best guarantee for sustaining peace. Two components of social justice are *civic engagement* and *critical consumption*, around which students create an interdisciplinary course of study.
- Students in the **MINOR IN SUSTAINABILITY** are encouraged to integrate approaches from different disciplines to problems related to sustainability, including sustainable ecology, environmental ethics, sustainable food production, critical consumerism and environmental policymaking.
- The **WOMEN'S AND GENDER STUDIES MINOR** focuses on the ways in which gender and sexuality help us to understand our past and present worlds, combining course work from humanities and social sciences disciplines.

Graduate

- The **MS IN ENVIRONMENTAL SCIENCE** combines environmental courses from the social sciences, physical sciences, engineering, humanities and statistics. A graduate certificate is also available.
- **PhD IN HEALTH AND BEHAVIORAL SCIENCES** students integrate social, cultural and biomedical perspectives to understand the underpinnings of health and the conditions essential for its creation and maintenance.
- Students interested in synthesizing curricula in the arts, communication, history, literature, philosophy and theatre at the graduate level may be interested in the **MASTER OF HUMANITIES (MH)** degree.
- The **MASTER OF INTEGRATED SCIENCES (MIS)** degree enables students to combine course work and independent research within the disciplines of computer science, math, chemistry, biology, physics or geology.
- Students in the **MASTER OF SOCIAL SCIENCE (MSS)** degree program develop their own interdisciplinary curriculum in the social sciences (anthropology, economics, geography, history, political science, psychology and sociology), as well as related disciplines (such as English, philosophy, education, public affairs and architecture).

International Studies

Interim Director: J. G. Whitesides (history)
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Faculty

The international studies program is an interdisciplinary major with faculty drawn from several independent academic departments.

Undergraduate Major

In a world where global commerce and politics have emerged as driving forces, the international studies major provides students with global perspectives. This interdisciplinary liberal arts degree is designed to offer a thorough education in international issues in preparation for international careers. This major offers students the opportunity to develop a deeper understanding of complex international issues and the forces shaping our world. Increasingly, government and the private sector seek graduates familiar with differing perspectives and cultures and willing to adapt to the rapidly changing workplace.

The international studies major not only introduces students to diverse cultures, but also gives them the methodological tools to analyze the world from different academic disciplines. The program requires students to take courses from a wide array of departments: anthropology, economics, geography, history, modern languages, political science, religious studies and the Business School. The program is designed to give students both a broad understanding of different methods and approaches to international problems and ensure that students come out of the program with a deeper understanding of one world region.

While the major does not require study abroad or an international internship, we encourage students to pursue such opportunities. The major is committed to supporting students who wish to take advantage of the numerous international education opportunities available through the CU Denver Office of International Affairs.

REQUIREMENTS FOR THE MAJOR

Regional Specialization

Within the courses taken to fulfill the three different thematic concentrations and introductory courses, students must specialize in a single region. Students should consult with the major advisor to confirm which courses fulfill the regional requirement. At least 15 hours of courses must focus on one of the following world regions:

Asia
Europe
Latin America
Middle East or Islamic World
Sub-Saharan Africa

Majors may use any of the courses taken to fulfill the introductory or concentration requirements for the regional specialization. Language courses may be used to fulfill the regional requirement. Wherever possible, students must fulfill their language requirement with a language applicable to the region they study. (No semester hours are required beyond those needed to fulfill the introductory courses and thematic concentrations).

Honors

Students with a cumulative GPA of 3.5 or above in all CU Denver courses may compete for a degree in international studies awarded with Latin praise of *cum laude, magna cum laude* or *summa cum laude*. Students with a GPA of 3.5 in their international courses are eligible for the award of *cum laude,* those with 3.7 are eligible for *magna cum laude*, and those with 3.9 or above may be awarded *summa cum laude*. In addition to a high GPA, candidates for honors must submit a research paper prepared under the supervision of a CU Denver faculty member for review by an honors examination committee. The committee will consist of three faculty members drawn from departments participating in the program.

Study Abroad

Students are encouraged to participate in a study abroad program in the region they choose as their specialization. Please note that the major advisor must approve the study program in advance, and no more than 18 semester hours from a study abroad program can apply to the major. The courses applied to the major must also be approved by their respective disciplines. Travel-study courses that are University of Colorado resident courses will not count toward the residency requirement for the major. Students should contact the Office of International Affairs for more information concerning study abroad opportunities (located at the Lawrence Street Center, 932, 303-315-2230).

Internships

Students may use up to 6 internship semester hours toward international studies graduation requirements. The internship must have a CLAS faculty sponsor who teaches courses applicable to the international studies degree. The internship must have an international element to count toward the degree. Students should seek the approval of

the international studies program director for all internships. Students must fulfill the CLAS requirements to participate in an internship: junior standing and a minimum 2.75 GPA. Students must maintain communication with their faculty advisors on the progress they make during the internship if they expect to receive credit toward the major. For further information regarding internships, students should contact the Experiential Learning Center in Tivoli 260, 303-556-2250.

Independent Study

Students may apply up to 6 semester hours of independent study toward international studies graduation requirements. All independent studies require students to work closely with a faculty member to carry out a research project. Under the supervision of a faculty member, students must prepare a serious research proposal to guide their project during the semester. Students participating in these courses must have completed at least 18 hours of the international studies major to participate in independent study. Students who participate in independent study must have an overall CU Denver GPA of 2.5. All independent studies are subject to approval of the dean's office.

Bachelor of Arts

International Studies BA

Program Requirements

The major consists of 48 to 51 semester hours, structured as follows:

- complete 9 semester hours from a list of introductory courses listed below
- choose three thematic concentrations from the following five:
  language and culture, international relations and comparative politics, economics and development, international commerce, and regional societies and history. Majors complete 12 hours in each theme (except international commerce, which requires 15). Below is a list of preapproved courses in each concentration. Students wishing to apply courses not on the list may do so with the approval of the program director.
- a capstone seminar (3 semester hours) for students in their last year
- the major is interdisciplinary, and students must take classes in at least three different disciplines (anthropology, economics, geography, history, international commerce/business, modern languages, political science or religious studies). No more than 18 hours in any one discipline will be accepted toward the major.

- students are expected to develop a regional specialization. They must choose courses from the introductory and thematic concentration lists that contribute to an understanding of a world region.
- all international studies majors must demonstrate a proficiency in a language other than English. This may be fulfilled with the fourth semester of a foreign language course sequence. Students must receive a grade of *C* or better in all language courses; they also have the option of testing out of this requirement.
- majors must complete at least half (24 hours) of the semester hours at CU Denver. A cumulative GPA of 2.5 or better is required, with a minimum grade of *C*- earned in all major courses to graduate.

Required Courses

Introductory Courses

Choose one course from each of the following three groups:

Choose one:

- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
- GEOG 1102 - World Regional Geography **gtPATHWAYS:** GT-SS2

Choose one:

- INTB 3000 - Global Perspectives **gtPATHWAYS:**
- PSCI 3022 - Introduction to Comparative Politics **gtPATHWAYS:**
- PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**

Choose one:

- ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
- HIST 3451 - Introduction to African History **gtPATHWAYS:**
- HIST 3460 - Introduction to Latin American History **gtPATHWAYS:**
- HIST 3470 - Introduction to Asian History **gtPATHWAYS:**
- HIST 3480 - Introduction to European History **gtPATHWAYS:**
- HIST 3483 - Introduction to Modern South Asia **gtPATHWAYS:**
- RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3

Total: 9 Hours

Thematic Concentrations

Students must take a minimum of four upper-division courses in each of three of the following five concentrations, for a total of 36 semester hours (12 hours in each concentration). Please note that the concentration in international commerce requires five courses rather than four, for a total of 39 semester hours. The list below does not include all the international courses applicable to the major, only the ones frequently taught. It is expected to change as departments develop new courses and hire new faculty in different areas.

Note: Concentrations are interdisciplinary and are not the same as academic departments. Students must take courses in at least three different academic departments and no more than 18 semester hours in any one department.

Language, Culture and Literature

This concentration aims at deepening the student's understanding of the cultural underpinnings and worldviews of different societies.

Modern languages: any upper-division courses in the Department of Modern Languages except Methods of Teaching French/German/Spanish. We have not listed the courses individually because there are so many upper-division courses on world literature and culture available in modern languages.

- ANTH 3121 - Language, Culture, and Communication **gtPATHWAYS:**
- ANTH 4130 - Comparative Religious Systems **gtPATHWAYS:**
- -OR- RLST 4010 - Comparative Religious Systems **gtPATHWAYS:**
- PHIL 4650 - Differing Concepts of God **gtPATHWAYS:**
- -OR- RLST 4400 - Differing Concepts of God **gtPATHWAYS:**

International Relations and Comparative Politics

Courses in this concentration stress comparative approaches, diplomacy and conflict resolution. Students will have an understanding of how different societies make decisions and manage international relations. How do other cultures conceive of and practice power?

- ANTH 4180 - The Nature of Power **gtPATHWAYS:**
- HIST 3121 - The World at War, 1914-1945 **gtPATHWAYS:**
- HIST 4032 - Globalization in World History Since 1945 **gtPATHWAYS:**
- HIST 4220 - U.S. Foreign Policy Since 1912 **gtPATHWAYS:**
- HIST 4412 - Mexico and the United States: People and Politics on the Border **gtPATHWAYS:**
- HIST 4471 - The Second World War **gtPATHWAYS:**
- HIST 4475 - The Vietnam War **gtPATHWAYS:**
- * PSCI 3022 - Introduction to Comparative Politics **gtPATHWAYS:**
- * PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**

- PSCI 4057 - Religion and Politics **gtPATHWAYS:**
- -OR- RLST 4500 - Religion and Politics **gtPATHWAYS:**
- PSCI 4105 - Comparative Politics: Europe **gtPATHWAYS:**
- PSCI 4146 - Indigenous Politics **gtPATHWAYS:**
- PSCI 4156 - The Arab-Israeli Peace Process **gtPATHWAYS:**
- PSCI 4185 - Corruption in the U.S. and Abroad **gtPATHWAYS:**
- PSCI 4216 - International Politics: Human Rights **gtPATHWAYS:**
- PSCI 4225 - Democracy and Democratization **gtPATHWAYS:**
- PSCI 4226 - The United Nations in World Affairs **gtPATHWAYS:**
- PSCI 4236 - American Foreign Policy **gtPATHWAYS:**
- PSCI 4266 - International Law **gtPATHWAYS:**
- PSCI 4286 - International Relations: War or Peace? **gtPATHWAYS:**
- PSCI 4726 - Russian and Chinese Foreign Policy **gtPATHWAYS:**
- PSCI 4736 - The Middle East in World Affairs **gtPATHWAYS:**
- PSCI 4807 - Revolution and Political Violence **gtPATHWAYS:**
- PSCI 4995 - Travel Study **gtPATHWAYS:**

  * If not taken to fulfill the introductory major requirements.

Economics, Development and Environment

Students taking this concentration will develop an understanding of economic processes in an international context. The courses offer comparative approaches and cultural perspectives on development and environment.

Note: Students in this concentration must take ECON 2012 - Principles of Economics: Macroeconomics as one of their three introductory courses.

Required economics course

- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1

Choose three upper division courses from the following:

- ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
- ANTH 4070 - Culture of Development and Globalization **gtPATHWAYS:**
- ANTH 4140 - Principles of Economic Anthropology **gtPATHWAYS:**
- ANTH 4170 - Culture and the Environment **gtPATHWAYS:**
- ANTH 4390 - Laboratory Methods in Archaeology **gtPATHWAYS:**
- ECON 4081 - Intermediate Macroeconomic Theory **gtPATHWAYS:**
- ECON 4230 - Law and Economics **gtPATHWAYS:**
- ECON 4410 - International Trade **gtPATHWAYS:**
- ECON 4420 - International Finance **gtPATHWAYS:**

- ECON 4540 - Environmental Economics **gtPATHWAYS:**
- ECON 4770 - Economic Development--Theory and Problems **gtPATHWAYS:**
- GEOG 3300 - Population and Resources in the World Environment **gtPATHWAYS:**
- GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
- GEOG 3430 - Geography of Tourism **gtPATHWAYS:**
- GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
- INTB 3000 - Global Perspectives **gtPATHWAYS:**
- PSCI 4085 - Comparative Public Policy **gtPATHWAYS:**
- PSCI 4126 - Introduction to International Political Economy **gtPATHWAYS:**
- PSCI 4235 - Politics and Markets in Latin America **gtPATHWAYS:**
- PSCI 4248 - Gender, Globalization and Development **gtPATHWAYS:**
- PSCI 4326 - Advanced International Political Economy: Globalization **gtPATHWAYS:**
- PSCI 4365 - Global Ecological Crises **gtPATHWAYS:**
- PSCI 4555 - International Women's Resistance **gtPATHWAYS:**

International Commerce

The objective of this concentration is to give students an introduction to international business practices.

ECON 2012 and ECON 2022 are prerequisites for most of these courses. Note that the first three courses are prerequisites for MGMT 4400 and MKTG 4200. Students opting for this concentration must take both MGMT 4400 and MKTG 4200. Students must meet Business School entrance requirements for the international commerce concentration, with a 3.0 GPA overall or in the last 24 hours.

Note: This concentration requires 15 hours, not 12.

- ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
  (MATH 1070 or MATH 1110 prerequisite and sophomore standing).
- * MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**
- * MKTG 3000 - Principles of Marketing **gtPATHWAYS:**
- * MGMT 4400 - Environments of International Business **gtPATHWAYS:**
- * MKTG 4200 - International Marketing **gtPATHWAYS:**

  * Students must have junior standing to take the 3000-level courses and must be formally admitted to the international studies program to take the 4000-level courses.

Regional Societies and History

Students in this concentration are expected to develop a historical understanding of how nations and political systems develop. To understand why international actors behave in a given way, one needs to understand the historical background of those actors; this concentration will familiarize students with that background.

- ANTH 4220 - Community in Global Context **gtPATHWAYS:**
- ANTH 4250 - Culture Change in the Modern World **gtPATHWAYS:**
- ANTH 4740 - Ethnography of Mexico and Central America **gtPATHWAYS:**
- ANTH 4995 - Travel Study **gtPATHWAYS:**
- GEOG 3120 - Geography of Europe **gtPATHWAYS:**
- GEOG 3130 - Central America and the Caribbean **gtPATHWAYS:**
- GEOG 3140 - Geography of South America **gtPATHWAYS:**
- GEOG 3150 - Middle East **gtPATHWAYS:**
- HIST 3350 - Colonial Latin America **gtPATHWAYS:**
- HIST 3500 - African History in Novels and Films **gtPATHWAYS:**
- HIST 3995 - Travel Study **gtPATHWAYS:**
- HIST 4027 - Enlightenment and Revolution **gtPATHWAYS:**
- HIST 4028 - After the Revolutions: Nineteenth Century Intellectual History **gtPATHWAYS:**
- HIST 4029 - Age of Anxiety in Europe **gtPATHWAYS:**
- HIST 4046 - Victorians and Victorianism **gtPATHWAYS:**
- HIST 4051 - Britain and The Empire **gtPATHWAYS:**
- HIST 4062 - Modern France, 1789 to the Present **gtPATHWAYS:**
- HIST 4071 - Modern Germany **gtPATHWAYS:**
- HIST 4074 - Post-War Germany **gtPATHWAYS:**
- HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917 **gtPATHWAYS:**
- HIST 4083 - Russia Since 1917 **gtPATHWAYS:**
- HIST 4086 - Eastern Europe **gtPATHWAYS:**
- HIST 4303 - Sex and Gender in Modern Britain **gtPATHWAYS:**
- HIST 4411 - Modern Mexico **gtPATHWAYS:**
- HIST 4414 - Nationalism and State Building in Latin America, 1750-1850 **gtPATHWAYS:**
- HIST 4415 - Social Revolutions in Latin America **gtPATHWAYS:**
- HIST 4421 - Modern China **gtPATHWAYS:**
- HIST 4451 - Southern Africa **gtPATHWAYS:**
- HIST 4455 - African Struggle for Independence **gtPATHWAYS:**
- HIST 4460 - The Islamic World's Golden Age **gtPATHWAYS:**
- HIST 4461 - The Modern Middle East **gtPATHWAYS:**
- HIST 4621 - Explorers and Exploration **gtPATHWAYS:**
- PSCI 4155 - Political Systems of the Middle East and North Africa **gtPATHWAYS:**
- PSCI 4165 - Islamic Politics and Culture **gtPATHWAYS:**
- -OR- RLST 3100 - Islamic Politics and Culture **gtPATHWAYS:**

- PSCI 4505 - The Post-Soviet World: Origins and Present Condition **gtPATHWAYS:**
- PSCI 4554 - Chicano and Latino Politics **gtPATHWAYS:**
- PSCI 4615 - Politics and Government of China **gtPATHWAYS:**
- RLST 3400 - Asian Philosophies and Religions **gtPATHWAYS:**
- -OR- PHIL 3666 - Asian Philosophies and Religions **gtPATHWAYS:**
- RLST 3500 - Religions of India **gtPATHWAYS:**
- RLST 3660 - Chinese Philosophy and Culture **gtPATHWAYS:**
- -OR- PHIL 3981 - Chinese Philosophy and Culture **gtPATHWAYS:**

International Studies Capstone Course

All majors must take a 3-semester-hour seminar focusing on a global issue. Currently the designated capstone courses are:

- HIST 4417 - Commodities and Globalization: Dessert in World History **gtPATHWAYS:**
- PSCI 4126 - Introduction to International Political Economy **gtPATHWAYS:**

Law Studies

Coordinator: Omar Swartz (communication), JD, Duke University; PhD, Purdue University
Telephone: 303-556-5660
E-mail: Omar.Swartz@ucdenver.edu
Additional Advisor: Glenn Morris (political science), JD, Harvard University School of Law
Telephone: 303-556-6243
E-mail: Glenn.Morris@ucdenver.edu
Website:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/PoliticalScience/Programs/Pages/Minors.aspx

The law studies minor at CU Denver is an interdisciplinary course of studies intended to help students become intelligent and critical scholars of legal and political discourse. While the minor may be useful for students contemplating law school, it is also intended to appeal to a wider group of students interested in issues relating to law and society and careers in public policy-related fields. The minor is designed to achieve the following three interrelated goals:

- to introduce students to the major areas of law that affect life in the United States and important legal issues that influence current events

- to enable students to become familiar and fluent with a legal vocabulary and legal reasoning
- to better prepare students with the analytical and conceptual tools to be critical citizens in our constitutional democracy

In addition to these goals, students who complete the minor with the intention of attending law school may find themselves more prepared than they otherwise would be for the often mystifying and rigorous first year of law school. To help these students, the program contains an advising component which assists students who are contemplating law school to provide them with a realistic appraisal of law school and of the legal profession. The counselors will aid students with the law school application process.

REQUIREMENTS FOR THE MINOR

Non Degree

Law Studies Minor

Program Requirements

A total of 18 semester hours must be completed for the law studies minor. The courses must be taken in residence at CU Denver. A minimum grade of *C* is required in each course and students must maintain a GPA of 3.0 in courses taken toward the minor. Every course taken for the minor must be upper division. Courses taken for the minor cannot serve to fulfill requirements of the undergraduate core, and students should check with their major department to determine whether courses counted toward the law studies minor can fulfill major requirements. To apply for this minor, students must complete and submit a major/minor change declaration form to the CLAS Advising Office in North Classroom, 4002.

Required Courses

- HUMN 3250 - Introduction to Law Studies **gtPATHWAYS:**
  (offered every fall)
- PHIL 4260 - Philosophy of Law **gtPATHWAYS:**
  (offered every spring)
- COMM 4680 - Mass Communication Law and Policy **gtPATHWAYS:**
  (offered fall and spring)
- COMM 4750 - Legal Reasoning and Writing **gtPATHWAYS:**
  (offered once a year)

Total: 12 Hours

Electives

Choose two:

- BLAW 3000 - Legal and Ethical Environments of Business I **gtPATHWAYS:**
- COMM 4681 - Communication Issues in Trial Court Practices and Processes **gtPATHWAYS:**
- COMM 4683 - Media in the Courtroom **gtPATHWAYS:**
- COMM 4710 - Topics in Communication **gtPATHWAYS:**
  (when offered as the topic, "Communication in Jury Decision Making")
- CRJU 4430 - Law and Society **gtPATHWAYS:**
- PSCI 4494 - Judicial Politics **gtPATHWAYS:**
- PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
- PSYC 3505 - Psychology and the Law **gtPATHWAYS:**

Total: 6 Hours

Minor Total: 18 Hours

The law studies program also recommends a course in informal logic to aid in preparation for the LSAT (e.g., PHIL 2441).

Mathematical and Statistical Sciences

Chair: Michael S. Jacobson
Associate Chair: Stephen Billups
Program Assistant: Lindsay Hiatt
Administrative Assistant: Angela Beale
Office: CU-Denver Building, 600
Telephone: 303-556-8442
Fax: 303-556-8550
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Centers and Clinics
Undergraduate Program
Graduate Program

Faculty

Professors:

William E. Cherowitzo, PhD, Columbia University

Leopoldo Franca, PhD, Stanford University

Michael S. Jacobson, PhD, Emory University

Andrew Knyazev, PhD, Institute of Numerical Mathematics, Russian Academy of Sciences

Weldon A. Lodwick, PhD, Oregon State University

J. Richard Lundgren, PhD, Ohio State University

Jan Mandel, PhD (equivalent), Charles University (Czechoslovakia)

Stanley E. Payne, PhD, Florida State University

Associate Professors:

Lynn Bennethum, PhD, Purdue University

Stephen Billups, PhD, University of Wisconsin-Madison

Roxanne M. Byrne, PhD, University of Colorado

Anatolii Puhalskii, PhD, Moscow Institute of Physics and Technology

Stephanie A. Santorico, PhD, North Carolina State University

Burton Simon, PhD, University of Michigan, Ann Arbor

Assistant Professors:

Steven Culpepper, PhD, University of Minnesota

Alexander Engau, PhD, Clemson University

Michael Ferrara, PhD, Emory University

Joshua French, PhD, Colorado State University

Julien Langou, PhD, INSA, Toulouse, France

Diana White, PhD, University of Nebraska

Instructors:

RaKissa Cribari, EdD, University of Northern Colorado

Michael Kawai, MS, University of Colorado

Lance Lana, MS, University of Colorado

Gary Olson, MS, University of Colorado

Research Faculty:

Loren Cobb, PhD, Cornell University

Post-Docs:

Jonathan Beezley, PhD, University of Colorado

Jinhai Chen, PhD, Hong Kong Polytechnic University

Ashok Krishnamurthy, PhD, University of Louisville

Bedrich Sousedik, PhD, University of Colorado

Paul Wenger, PhD, University of Illinois at Urbana-Champaign

Adjuncts:

Rico Argentati

Russell Bowler

Karen Braman

David Brown

Peter Bryant

Pavel Burda

Arthur Busch

Changhui Choi

Janice Coen

Dan Cooley

George Corliss

Jack Dongarra

Markus Emsermann

Mark Fitzgerald

Laurie Gaspar

Ellen Gethner

Fred Glover

Gary Grunwald

William Hart

Sylvia Hobart

Masahiro Inuiguchi

Ilse Ipsen

Craig Johns

Abram Jujunashvi

Karen Kafadar

Gary Kochenberger

Mark Labovitz

Long Lee

Jiangguo Liu

Ning Lu

Fernando Mancilla-David

David Mays

Richard Naff

Christopher Nelson

Francis Newman

Tim Penttila

Steve R. Sain

Kristian Sandberg

Frederic Valentin

Sam Welch

Jason Williford

Emeritus Faculty:

William Briggs, PhD, Harvard University

Kathryn L. Fraughnaugh, PhD, University of Houston

Harvey J. Greenberg, PhD, Johns Hopkins University

Zenas R. Hartvigson, PhD, Oregon State University

Sylvia Lu, PhD, Pennsylvania State University

Roland Sweet, PhD, Purdue University

The Department of Mathematical and Statistical Sciences offers courses and research opportunities with an emphasis on applied and computational mathematics. Traditional courses such as calculus, linear algebra, probability, statistics and discrete mathematics are offered regularly by the department. In addition, contemporary subjects such as continuous, probabilistic, optimization and discrete modeling; supercomputing; numerical analysis; optimization; and operations research are also well represented by course offerings and faculty interests. In all of its activities, the department embodies the outlook that mathematics is a powerful tool that can be used to solve problems of immediate and practical importance.

The study of mathematics with an emphasis on computers and applications can prepare students for careers in engineering, the sciences, business and management, actuarial science, public health and all computer-dependent disciplines.

Center for Computational & Mathematical Biology

Director: Weldon Lodwick
Telephone: 303-556-8462
Website: http://ccmb.ucdenver.edu/

The Center for Computational Biology (CCB) is a multidisciplinary center focused on computational and mathematical biology research and education.

Center for Computational Mathematics

Director: Jan Mandel
Telephone: 303-556-4475
Website: http://math.ucdenver.edu/ccm/

The Center for Computational Mathematics is composed of faculty members who have an interest in computational mathematics, the study of solving mathematical problems with computers. The center resides in the Department of Mathematical and Statistical Sciences and includes faculty members from various other departments. The primary goal of the center is to foster research in computational mathematics and to maintain a strong educational program at all levels. It has extensive ties with industry along the Front Range and with government laboratories throughout the nation. It offers students an excellent opportunity to receive training and experience in this exciting new field. The center operates a supercomputing cluster, Beowulf.

Math Clinic

Website:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/math/Research/mathclinic/Pages/ClinicConcept.aspx

Each semester, the mathematical and statistical sciences department conducts math clinics that are open to both undergraduate and graduate students. Each clinic is sponsored by a business, government agency or research organization. The clinic sponsor provides a specific project on which students work with the supervision of a faculty member and a sponsor representative. Every clinic results in a final report to the sponsor and provides participating students with an opportunity to apply mathematics to relevant problems. Recent math clinic sponsors include Raytheon, Lockheed Martin, Xenometrix, Budget Truck Rental and United Launch Alliance.

Statistics Consulting Workshop

The Department of Mathematical and Statistical Sciences regularly offers a graduate course in statistical consulting in which students work on problems provided by researchers and clients at CU Denver and in the Denver metropolitan area. Potential clients should contact Loren Cobb at stats@math.ucdenver.edu or 303-556-8571.

Undergraduate Program

Director: Julien Langou
Telephone: 303-556-3919

The Department of Mathematical and Statistical Sciences offers a BS program that provides broad training in mathematics with the option of specializing in one of seven areas of special emphasis, or simply satisfying the requirements without specifying an area. The seven areas of emphasis are: pure mathematics, applied mathematics, computer science, discrete mathematics, probability and statistics, actuarial science and mathematics education. (Required courses for each option are given on the Requirements for Math Majors.) Graduates typically teach, work in actuarial firms, develop software, work for engineering companies, perform statistical analysis for private and public organizations or pursue graduate work in mathematics.

Selecting a First Mathematics Course (Mathematics Majors)

The following table is a guide for mathematics majors selecting a first mathematics course:

Previous Mathematics Courses	**Recommended First Course**
A. one year high school algebra and one year high school geometry	Beginning or intermediate algebra at a community college
B. two years high school algebra and one year high school geometry (i) *C* average (ii) at least *B* average	MATH 1110 - College Algebra MATH 1120 - College Trigonometry
C. two years high school algebra and one year high school geometry with trigonometry	MATH 1130 - Precalculus Mathematics MATH 1401 - Calculus I

(i) *C* average (ii) at least *B* average	

Students planning to take MATH 1070, MATH 1110 or MATH 1401 must take a prerequisite exam. For more information, see How, When, and Where to Take a Placement or Prerequisite Exam. Students with transfer or advanced placement credit should see an academic advisor in the Department of Mathematical and Statistical Sciences.

The BS in mathematics requires a minimum of 48 semester hours in mathematics with an average of *C* (2.0) and with a grade of at least *C* in each course. At least 30 semester hours must be in upper-division courses (3000 level or above), excluding MATH 3040. To graduate, a mathematics major must have a minimum of 30 hours of resident credit (letter grades received at CU Denver). Furthermore, 21 out of the last 30 hours must be taken at CU Denver. Finally, at least 15 upper-division mathematics credits must be taken at CU Denver.

Students must declare a major in the CLAS Advising Office by the time they have completed 60 semester hours. At this time, they will also be assigned a mathematics advisor in the Department of Mathematical and Statistical Sciences, whom they should consult at least once a semester. All mathematics majors should visit the CLAS Advising Office to have graduation requirements checked.

REQUIREMENTS FOR MATHEMATICS MAJOR

REQUIREMENTS FOR THE MATHEMATICS MINOR

Graduation With Honors

The mathematical and statistical sciences department recognizes students who complete the undergraduate program with distinction. To be eligible for graduation with honors (*cum laude, magna cum laude, summa cum laude*), a student must graduate with an overall GPA of 3.2 or better; must have a GPA of 3.5 or better in upper-division math courses; and must complete an honors project. Specific details may be obtained from the Department of Mathematical and Statistical Sciences. Students who wish to be considered for graduation with honors should notify a mathematics advisor as early in the program as possible.

Applied Statistics Certificate

Director: Stephanie Santorico
Telephone: 303-556-2547
Website: http://math.ucdenver.edu/statistics/certificates.shtml

Applied Statistics Certificate - Undergraduate

Applied Statistics Certificate - Graduate

Graduate Program

Director: Stephanie Santorico
Telephone: 303-556-2547

The Department of Mathematical and Statistical Sciences offers the MS degree in applied mathematics and the PhD degree in applied mathematics. Each of these degree programs conforms to the rules and policies of the Graduate School.

Detailed descriptions of the requirements for the MS and PhD degrees are maintained in the Mathematical & Statistical Sciences Graduate Handbook (July 2010). The following is an abbreviated summary of these requirements.

Requirements for Admission

To begin graduate work toward the MS or PhD degrees, a student should have at least the following preparation: 30 semester hours of mathematics [*B* (3.0) or better], at least 24 of which are at or above the level of MATH 3000. These courses should include a full year of advanced calculus or introduction to analysis, one semester of linear algebra and one semester of either differential equations, abstract algebra, discrete mathematics or probability. Additionally, students should take the GRE exam.

Students who do not have all the prerequisites may be admitted with prerequisite deficiencies with the understanding that those deficiencies must be removed after admission. Students who have a cumulative undergraduate GPA that is less than 3.0 may be eligible for provisional admission to the master's program (see also the Graduate School admission requirements).

Application Deadlines

Applications to the MS or PhD program should be submitted by the following target dates to be guaranteed full consideration. International students should submit their applications one month prior to these target dates.

Target Dates for PhD Program	Target Dates for MS Program
Feb 1: fall or summer semester	**Apr 1**: fall or summer semester
Oct 1: spring semester	**Nov 1**: spring semester

Applications received after the target dates may still be considered for admission, depending on space availability.

Financial Support

PhD students and exceptionally strong MS students are encouraged to apply for teaching assistantships. A variety of other opportunities for financial support are also available. See the Mathematical & Statistical Sciences Graduate Handbook (July 2010) for details.

REQUIREMENTS FOR THE MS IN APPLIED MATHEMATICS

REQUIREMENTS FOR THE PhD IN APPLIED MATHEMATICS

Bachelor of Science

Mathematics BS

Degree Requirements

Required Core Courses for All Mathematics Majors

- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
- MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
- MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
- MATH 3000 - Introduction to Abstract Mathematics **gtPATHWAYS:**
- MATH 3191 - Applied Linear Algebra **gtPATHWAYS:**
- MATH 4310 - Introduction to Real Analysis I **gtPATHWAYS:**

TOTAL REQUIRED CORE: 21 HOURS

IN ADDITION, ALL STUDENTS MUST SATISFY THE FOLLOWING REQUIREMENTS:

- Programming experience: MATH 3250 (Problem-Solving Tools) or MATH 4650 (Numerical Analysis I)
- Capstone Experience: MATH 4779 (Math Clinic) or MATH 4015 (Capstone Course for Secondary Teachers)
- Statistics Requirement: MATH 3800 (Probability and Statistics for Engineers) or MATH 4820 (Statistics)
- Depth in Proofcraft Requirement: at least one additional class requiring significant proof-writing. Choose from MATH 3140, 4110, 4201, 4220, 4320 and 4408
- Applied/Modeling Requirement: at least one class containing significant applied/modeling content. Choose from MATH 3301, 3302, 4387, 4409, 4733, 4791, 4792, 4793 and 4794

- A total of at least 36 upper-division credits (typically 12 courses)
- All mathematics options require at least 48 credits total for the bachelor's degree

Required Courses for Each Option

GENERAL MATHEMATICS OPTION

All core courses (21 semester hours), plus the following:

- MATH 4779 - Math Clinic **gtPATHWAYS:**

One course chosen from:
- MATH 3250 - Problem Solving Tools **gtPATHWAYS:**
- MATH 4650 - Numerical Analysis I **gtPATHWAYS:**

One course chosen from:
- MATH 3800 - Probability and Statistics for Engineers **gtPATHWAYS:**
- MATH 4820 - Statistics **gtPATHWAYS:**

One course chosen from:
- MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
- MATH 4110 - Theory of Numbers **gtPATHWAYS:**
- MATH 4201 - Topology **gtPATHWAYS:**
- MATH 4220 - Higher Geometry II **gtPATHWAYS:**
- MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**
- MATH 4408 - Applied Graph Theory **gtPATHWAYS:**

One course chosen from:
- MATH 3301 - Introduction to Operations Research I - Deterministic Systems **gtPATHWAYS:**
- MATH 3302 - Operations Research II **gtPATHWAYS:**
- MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
- MATH 4409 - Applied Combinatorics **gtPATHWAYS:**
- MATH 4733 - Partial Differential Equations **gtPATHWAYS:**
- MATH 4791 - Continuous Modeling **gtPATHWAYS:**
- MATH 4792 - Probabilistic Modeling **gtPATHWAYS:**
- MATH 4793 - Discrete Math Modeling **gtPATHWAYS:**
- MATH 4794 - Optimization Modeling **gtPATHWAYS:**

Electives:
Four approved math electives (at least 12 semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. (Note: Students cannot use MATH 3195 to satisfy this requirement if both MATH 3191 and MATH 3200 are being applied toward this degree.)

General B.S. in Mathematics Total: 48-49 Hours

APPLIED MATHEMATICS OPTION

All core courses (21 semester hours), plus the following:

- MATH 3200 - Elementary Differential Equations **gtPATHWAYS:**
- MATH 4650 - Numerical Analysis I **gtPATHWAYS:**
- MATH 4779 - Math Clinic **gtPATHWAYS:**

One course chosen from:

- MATH 3800 - Probability and Statistics for Engineers **gtPATHWAYS:**
- MATH 4820 - Statistics **gtPATHWAYS:**

One course chosen from:

- MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
- MATH 4110 - Theory of Numbers **gtPATHWAYS:**
- MATH 4201 - Topology **gtPATHWAYS:**
- MATH 4220 - Higher Geometry II **gtPATHWAYS:**
- MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**
- MATH 4408 - Applied Graph Theory **gtPATHWAYS:**

Two courses chosen from:

- MATH 3301 - Introduction to Operations Research I - Deterministic Systems **gtPATHWAYS:**
- MATH 3302 - Operations Research II **gtPATHWAYS:**
- MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
- MATH 4733 - Partial Differential Equations **gtPATHWAYS:**
- MATH 4791 - Continuous Modeling **gtPATHWAYS:**
- MATH 4792 - Probabilistic Modeling **gtPATHWAYS:**
- MATH 4793 - Discrete Math Modeling **gtPATHWAYS:**
- MATH 4794 - Optimization Modeling **gtPATHWAYS:**

Electives:
Two approved math electives (at least 6 semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. (Note: Students cannot use MATH 3195 to satisfy this requirement if both MATH 3191 and MATH 3200 are being applied toward this degree.)
Applied Mathematics Option Total: 48-49 Hours

PROBABILITY AND STATISTICS OPTION

All core courses (21 semester hours), plus the following:

- MATH 3200 - Elementary Differential Equations **gtPATHWAYS:**
- MATH 4650 - Numerical Analysis I **gtPATHWAYS:**
- MATH 4779 - Math Clinic **gtPATHWAYS:**
- MATH 4810 - Probability **gtPATHWAYS:**
- MATH 4820 - Statistics **gtPATHWAYS:**

One course chosen from:

- MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
- MATH 4792 - Probabilistic Modeling **gtPATHWAYS:**

One course chosen from:

- MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
- MATH 4110 - Theory of Numbers **gtPATHWAYS:**
- MATH 4201 - Topology **gtPATHWAYS:**
- MATH 4220 - Higher Geometry II **gtPATHWAYS:**
- MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**
- MATH 4408 - Applied Graph Theory **gtPATHWAYS:**

Electives:
Two approved math electives (at least 6 semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. (Note: Students cannot use MATH 3195 to satisfy this requirement if both MATH 3191 and MATH 3200 are being applied toward this degree.)
Probability and Statistics Option Total: 48-49 Hours

ACTUARIAL SCIENCE OPTION

All core courses (21 semester hours), plus the following:

- MATH 3200 - Elementary Differential Equations **gtPATHWAYS:**
- MATH 4650 - Numerical Analysis I **gtPATHWAYS:**
- MATH 4779 - Math Clinic **gtPATHWAYS:**
- MATH 4810 - Probability **gtPATHWAYS:**
- MATH 4820 - Statistics **gtPATHWAYS:**

One course chosen from:

- MATH 3301 - Introduction to Operations Research I - Deterministic Systems **gtPATHWAYS:**
- MATH 3302 - Operations Research II **gtPATHWAYS:**
- MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
- MATH 4409 - Applied Combinatorics **gtPATHWAYS:**
- MATH 4733 - Partial Differential Equations **gtPATHWAYS:**
- MATH 4791 - Continuous Modeling **gtPATHWAYS:**

- MATH 4793 - Discrete Math Modeling **gtPATHWAYS:**
- MATH 4794 - Optimization Modeling **gtPATHWAYS:**

One course chosen from:

- MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
- MATH 4110 - Theory of Numbers **gtPATHWAYS:**
- MATH 4201 - Topology **gtPATHWAYS:**
- MATH 4220 - Higher Geometry II **gtPATHWAYS:**
- MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**
- MATH 4408 - Applied Graph Theory **gtPATHWAYS:**

One course chosen from:

- MATH 4792 - Probabilistic Modeling **gtPATHWAYS:**
- MATH 5350 - Mathematical Theory of Interest **gtPATHWAYS:**
  (MATH 5350 strongly recommended)

Elective:
One approved math elective (at least 3 semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. (Note: Students cannot use MATH 3195 to satisfy this requirement if both MATH 3191 and MATH 3200 are being applied toward this degree.)
Actuarial Science Option Total: 48-49 Hours

Suggested minor for acturial science major option:

Actuaries need a background in business, particularly accounting, economics and finance. You are strongly advised to do a minor in one of these areas. Recommended classes are:

- ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
- FNCE 3000 - Principles of Finance **gtPATHWAYS:**

MATHEMATICS EDUCATION OPTION

All core courses (21 semester hours), plus the following:

- MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
- MATH 3210 - Higher Geometry I **gtPATHWAYS:**
- MATH 4010 - History of Mathematics **gtPATHWAYS:**
- MATH 4012 - An Advanced Perspective on Number and Operation **gtPATHWAYS:**

- MATH 4013 - An Inquiry-based Approach to Geometry **gtPATHWAYS:**
- MATH 4014 - Statistical Knowledge for Teaching **gtPATHWAYS:**
- MATH 4015 - Capstone Course for Secondary Teachers **gtPATHWAYS:**
- MATH 4110 - Theory of Numbers **gtPATHWAYS:**
- MATH 4409 - Applied Combinatorics **gtPATHWAYS:**

One course chosen from:

- MATH 3250 - Problem Solving Tools **gtPATHWAYS:**
- MATH 4650 - Numerical Analysis I **gtPATHWAYS:**

One course chosen from:

- MATH 3800 - Probability and Statistics for Engineers **gtPATHWAYS:**
- MATH 4820 - Statistics **gtPATHWAYS:**

Mathematics Education Option Total: 49 Hours

NOTE:

Certification by the School of Education & Human Development (SEHD) is required for public school teaching. See the description of Undergraduate Teacher Licensure on the School of Education & Human Development (SEHD) Urban Community Teacher Education program page for more information.

Portfolio, Interview, Survey

In the semester of graduation, students must:

- submit a portfolio consisting of two papers, typically written for previous courses, that demonstrate mathematical and writing proficiency
- participate in an exit interview, which may be scheduled by the department administrative assistant
- complete a senior survey, available from the department administrative assistant

Math Majors Considering Graduate Study

Mathematics majors who are considering graduate study in mathematics should plan to take the following courses as part of their major:

- MATH 4310 - Introduction to Real Analysis I **gtPATHWAYS:**
- MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**

Certificate

Applied Statistics Graduate Certificate

Coordinator: Stephanie Santorico:
Telephone: 303-556-2547
E-mail: Stephanie.Santorico@ucdenver.edu
Web site:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/math/program_info/statisticscertificate/Pages/GraduateStatisticsCertificate.aspx

Entrance Requirements

Students are expected to have a bachelor's degree and be admitted to the graduate school as either a degree-seeking or non-degree seeking student. Students are expected to have completed an introductory statistics course (such as MATH 2830 or the equivalent) or an introductory course in probability. At least one semester of calculus and a course containing linear algebra are also recommended.

To apply, see Graduate Applied Statistics Certificate Application

Curriculum

There are three parts to the requirements:

Required Courses

Basic methods (choose one):

- MATH 4820 - Statistics **gtPATHWAYS:**
- -OR- MATH 4830 - Applied Statistics **gtPATHWAYS:**
- -OR- MATH 5320 - Statistics **gtPATHWAYS:**

Advanced methods (choose two):

- MATH 5387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
- -AND/OR- MATH 5394 - Experimental Designs **gtPATHWAYS:**
- -AND/OR- MATH 6360 - Exploratory Data Analysis **gtPATHWAYS:**

Total: 9 Hours

Elective (choose one):

Any statistics course in the math department at the 5000 level or higher

- ECON 5150 - Economic Forecasting **gtPATHWAYS:**
- ECON 5813 - Econometrics I **gtPATHWAYS:**
- ECON 5823 - Econometrics II **gtPATHWAYS:**
- ENVS 5600 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
- GEOL 5770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
- PSYC 7713 - Advanced Statistics **gtPATHWAYS:**
- SOCY 5183 - Seminar: Quantitative Data Analysis **gtPATHWAYS:**

Equivalent course pre-approved by the certificate coordinator

Total: 3 Hours

Project (1 Hour)

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 5840 (Independent Study) or in an equivalent course preapproved by the certificate coordinator.

Certificate Total: 13 Hours

Grade Requirements

Students must maintain a 3.0 GPA or above in these courses with no credit given for courses with grades below *B*-.

Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

Applied Statistics Undergraduate Certificate

Coordinator: Stephanie Santorico:
Telephone: 303-556-2547
E-mail: Stephanie.Santorico@ucdenver.edu
Web site:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/math/program_info/statisticscertificate/Pages/UndergraduteStatsCertificate.aspx

Entrance Requirements

All undergraduate students in good standing (including non-degree seeking students) will be admitted to the program. For students in the College of Liberal Arts and Sciences, this requires a cumulative grade point average of 2.0 or above. Some mathematical background (including calculus and linear algebra) is recommended.

To apply, see Undergraduate Applied Statistics Certificate Application

Curriculum

There are three parts to the requirements:

Required Courses

- MATH 2830 - Introductory Statistics **gtPATHWAYS:** GT-MA1

Basic Methods (choose one):
- MATH 4820 - Statistics **gtPATHWAYS:**
- MATH 4830 - Applied Statistics **gtPATHWAYS:**

Advanced Methods (choose one):
- MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
- MATH 4394 - Experimental Designs **gtPATHWAYS:**

Total: 9 Hours

Elective (choose one):

- MATH 4101 - Applied Statistics Using SAS and SPSS I **gtPATHWAYS:**

or any statistics course in the math department at the 4000 level or higher

- ECON 4150 - Economic Forecasting **gtPATHWAYS:**
- ECON 4811 - Introduction to Econometrics **gtPATHWAYS:**
- GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
- GEOL 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
- SOCY 5183 - Seminar: Quantitative Data Analysis **gtPATHWAYS:**
  Equivalent course pre-approved by the certificate coordinator

Total: 3 Hours

Project (1 Hour)

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 4840 (Independent Study) or in an equivalent course pre-approved by the certificate coordinator.

Certificate Total: 13 Hours

Grade Requirements

Students must maintain a 3.0 GPA or above in these courses with no credit given for courses with grades below *B*-.

Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

Non Degree

Mathematics Minor

Program Requirements

- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
- MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
- MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1

Three additional upper-division math courses (3 or more semester hours each, excluding MATH 3040) — **9 semester hours**

Minor Total: 21 Hours

Minimum of 21 semester hours with a *C* average.

Note: At least 6 of the upper-division semester hours must be taken at CU Denver. Students must receive a grade of *C* or better in order for the course to be counted toward the minor requirements.

Master of Science

Applied Mathematics, MS

► Graduate School Rules apply to this program.

Program Requirements

Students must present 30 hours of course work and maintain a 3.0 GPA or above for the MS degree. At least 24 of these hours must consist of graduate-level (numbered 5000 or higher) mathematics courses. The remaining 6 hours must be either mathematics courses numbered 5000 or above or approved courses outside the department numbered 4000 or above. Up to 9 semester hours may be transferred from other institutions.

A student may devote from 4 to 6 hours (of the 30 required hours) to the writing of a thesis. Following completion of course work, all candidates must make a one-hour oral presentation before a committee consisting of three graduate faculty members.

Students must take either applied analysis or real analysis and applied linear algebra. Additionally, students must fulfill specific course work requirements for one of the following areas of specialization:

- Applied Probability
- Applied Statistics
- Computational Biology
- Discrete Mathematics
- Mathematics of Science and Engineering
- Numerical Analysis
- Operations Research

All master's degree students are encouraged to participate in the Math Clinic, a unique program in which students have an opportunity to work on real-world problems supplied by local businesses, research firms and government agencies.

For more detailed information about the applied mathematics MS, see the Mathematical & Statistical Sciences Graduate Handbook (July 2010).

Doctor of Philosophy

Applied Mathematics, PhD

► Graduate School Rules apply to this program.

Program Requirements

The Department of Mathematical and Statistical Sciences also offers a PhD in applied mathematics. The degree is designed to give candidates a contemporary, comprehensive education in applied mathematics and to provide research opportunities in the special fields of discrete mathematics, optimization, operations research, applied probability, computer science, computational mathematics, applied statistics and the mathematics of science and engineering.

There are six phases of the PhD program. A candidate must fulfill course requirements, pass the preliminary examinations, establish a PhD committee, meet the academic residency requirement, pass the comprehensive examination and write and defend a dissertation.

- Students must complete 42 semester hours of non-thesis course work at the graduate level (up to 30 hours of this course work may be transferred in, including courses taken as part of a master's degree). In addition, 30 hours of dissertation credit must be taken. The following courses are required as part of the formal course work: the math clinic and three readings courses (1 semester hour each). Students must also satisfy a **breadth requirement** by completing a total of six graduate math courses from among several areas of mathematics, with no more than three of these courses from any one area. A 3.25 GPA must be maintained throughout all course work.
- The preliminary examinations are designed to determine that students who intend to pursue the PhD program are qualified to do so. These four-hour written examinations are in the areas of applied analysis and applied linear algebra. Students must pass these exams within two years of entering the program. Exception: students admitted with prerequisite deficiencies must pass these exams within three years.

- Six semesters of full-time scholarly work are required, as specified in the rules of the Graduate School. All students are strongly advised to spend at least one year doing full-time course work or research with no outside employment.
- Application for candidacy is made after completion of the preliminary examinations and after at least three semesters of residency. The application must be submitted at least two weeks before taking the comprehensive examination. The comprehensive examination is designed to determine mastery of graduate-level mathematics and the ability to embark on dissertation research. It consists of a six-hour written examination and potentially an oral follow-up examination. Students must pass the comprehensive exam within 4 years of admission. Within six months after passing the comprehensive examination, the candidate must present a dissertation proposal to their dissertation committee.
- Each student must write and defend a dissertation containing original contributions and evidence of significant scholarship. The dissertation defense is public and must be given before an examining committee approved by the Graduate School.

For more detailed information about the applied mathematics PhD, see the Mathematical & Statistical Sciences Graduate Handbook (July 2010).

Modern Languages

Chair: Devin Jenkins
Coordinator: Tim Phillips
Program Assistant: Sally Thee
Office: Plaza Building, 118
Mailing Address:
Campus Box 178
P.O. Box 173364
Denver, CO 80217-3364
Telephone: 303-556-4893
Fax: 303-556-6038
Website: clas.ucdenver.edu/modLang/

General Information
French Programs
German Programs
Latin online courses
Spanish Programs

Chinese Faculty

Senior Instructor:

Kuan-Yi Rose Chang, PhD, Purdue University

French Faculty

Associate Professor:

Diane Dansereau, PhD, University of Michigan

Senior Instructors:

Linda Alcott, PhD, University of Colorado

Lori Willard, PhD, University of Colorado

Instructor:

Jocelyne Hunsinger, BA, University of Ottawa (Ontario, Canada)

French Advisor:

Diane Dansereau

German Faculty

Associate Professor:

Carsten E. Seecamp, PhD, Johns Hopkins University

Senior Instructor:

Tim Phillips, MA, University of Colorado

German Advisor:

Carsten E. Seecamp

Latin Faculty

Instructor:

Mary De Forest, PhD, University of Colorado

Spanish Faculty

Associate Professors:

Michael Abeyta, PhD, University of California-Davis

Kathleen Bollard, PhD, University of California-Berkeley

Devin Jenkins, PhD, University of New Mexico

Assistant Professors:

Andrés Lema-Hincapié, PhD, Cornell University and PhD, University of Ottawa

María Luisa Fernández Martínez, PhD, University of California, Irvine

Senior Instructor:

Conxita Domenech, PhD, University of Colorado

Instructors:

Ileana Gross, MA, University of Georgia

Ted Wendelin, MA, University of Southern Mississippi in Morelia, Michoacán, Mexico

Instructor, Attendant Rank:

Danny Martinez, MA, University of Colorado

Undergraduate Advisors (by student's last name):

A—F: Andrés Lema-Hincapié

G—O: Devin Jenkins

P—Z: María Luisa Fernández Martínez

Graduate Advisor:

Michael Abeyta

Study Abroad Advisor:

María Luisa Fernández Martínez

Internship Director:

Andrés Lema-Hincapié

General Information

The Department of Modern Languages includes Chinese, French, German, Latin and Spanish. Majors are available in French and Spanish, and minors are available in French, German and Spanish. Certification is available in German. Students must declare a major by the time they have completed 60 semester hours of course work. The department recommends that majors and minors include some study abroad while they are fulfilling their degree requirements at CU Denver. Please see a departmental advisor about study abroad opportunities. Credit earned abroad will normally count toward satisfaction of the major and minor requirements at UC Denver, but to assure full

transfer of credit, students must see an advisor in the department before enrolling in programs abroad. Courses taken abroad and designated as upper division in French, German or Spanish are subject to the 48-hour maximum of semester hours from a single discipline in the College of Liberal Arts and Sciences.

Departmental Honors

Students who meet certain criteria and have been invited by the faculty of the appropriate language are encouraged to participate in the Department of Modern Languages honors program. Successful completion of this program by students majoring in French or Spanish leads to graduation with the distinction of *cum laude, magna cum laude* or *summa cum laude*. See French and Spanish sections for details.

Relevance to Other Programs

In addition to fulfilling major and minor requirements, courses in the Department of Modern Languages prepare students in the language, literature and civilization of the countries and peoples they are studying. Certain courses may apply to the fulfillment of core curriculum requirements in the College of Liberal Arts and Sciences. Other courses lead to a secondary-school teaching certificate, the master of humanities degree and the master of arts degrees in Spanish and education at CU Denver, and to the master of arts degree in French or Spanish at CU Boulder. Only courses numbered 5000 and above apply to the master's degree; students enrolled in a master's program in Boulder should consult with their advisor before enrolling in courses at CU Denver.

Foreign Language Requirement

All students with majors in the College of Liberal Arts and Sciences must demonstrate proficiency in a foreign language at the second semester level. This is accomplished through course work, by examination or by completion of second-year high school credit. Students must receive a grade of *C*- (1.7) or higher in the final semester of the second-year course in high school or the second-semester college-level course in order to fulfill the foreign language requirement. The prerequisite for the second-semester college course is a grade of *C* (2.0) or better in the first-semester course. There is no pass/fail option for any course taken for the foreign language requirement.

Students may show their level of proficiency by taking the placement/proficiency exam. The languages tested are French, German and Spanish. For other languages, consult the CLAS Advising Office (North Classroom, 4002). For information on the placement/proficiency exam, check the Modern Languages website or call the Department of Modern Languages, 303-556-4893. The number of times a student may take the exam is limited to once per semester.

For information on fulfilling part of the foreign language requirement through study abroad, see the Study Abroad website or call 303-315-2232, or consult a Modern Languages advisor.

Department of Modern Languages Policy on Student Placement in Lower-Division Courses

A student may not enroll in a lower-division (1000/2000) language course that is below his/her level of language proficiency. Students wishing to enroll in a lower-division language course that does not directly follow their last completed course in the regular sequence must consult with an appropriate faculty member of the Department of Modern Languages prior to enrollment. Students who have achieved some proficiency in a foreign language through other means than academic courses must also consult with an appropriate faculty member of the Department of Modern Languages prior to enrollment. Call 303-556-4893 for further information.

Departmental Advising

Upon declaring a major or minor in modern languages, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that modern language majors have their transcripts reviewed by a departmental advisor before enrolling in their final 30 semester hours at CU Denver. Failure to do so may result in delay of graduation. Students presenting four years of high school foreign language (Level IV) for admission must see a departmental advisor before enrolling in courses for the major or minor. Students with advanced placement credits from high school should see a departmental advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.

Before enrolling in their final semester, seniors demonstrate advanced oral and written proficiency in the language that they are studying through an oral proficiency interview and a written outcomes assessment exam. Students must see a departmental advisor to schedule proficiency tests in their language.

Residency Requirement

A minimum of 18 semester hours of course work leading to a major in French or Spanish must be taken from modern languages faculty at CU Denver. For a minor in French, German or Spanish, 9 semester hours must be taken from modern languages faculty at CU Denver. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major or minor only with departmental approval before enrollment in those courses.

French

Undergraduate

REQUIREMENTS FOR THE FRENCH MAJOR

REQUIREMENTS FOR THE FRENCH MINOR

Graduate

At present, CU Denver offers no French courses above 5999. The courses at the 5000 level are applicable to an MA degree through CU Boulder and to the master of humanities program at CU Denver, depending upon degree plan approval by the appropriate graduate advisor.

German

Undergraduate

REQUIREMENTS FOR THE GERMAN MINOR

UNDERGRADUATE CERTIFICATE IN APPLIED GERMAN LANGUAGE SKILLS

Graduate

CU Denver offers no German courses above 5999. Courses at the 5000 level are applicable to an MA degree in German through CU Boulder and to the master of humanities program at CU Denver, depending upon degree plan approval by the appropriate graduate advisor.

Latin (online)

The study of Latin can help build a bridge between the rote learning of verbs and nouns, and the deeper meaning and history of many Western languages. Latin also continues to be widely employed as a source of vocabulary in such fields as medicine and science, academia and law. The department offers a series of online-only Latin language courses:

LATN 1010-OL1 - Elementary Latin I

LATN 1020-OL1 - Beginning Latin II

LATN 2010-OL1 - Intermediate Latin I

LATN 2020-OL1 - Intermediate Latin II

Spanish

Undergraduate

REQUIREMENTS FOR THE SPANISH MAJOR

REQUIREMENTS FOR THE SPANISH MINOR

Graduate

REQUIREMENTS FOR THE MA IN SPANISH

Bachelor of Arts

French BA

The French program offers courses in advanced language, linguistics, literature, civilization, culture and business, all taught exclusively in French. A minor is also offered. All French majors are strongly encouraged to participate in a study abroad program. Please see your French department advisor for information about opportunities to include study abroad as part of your major.

Admission and Grade Requirements

To be admitted to major status in French, students must have an overall GPA of *C+* (2.3). The minimum grade acceptable in any French course applied to a French major is *C* (2.0). The grade point average in all courses applied to a French major at CU Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a French major. Upon declaring a major in French, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that students have their transcripts reviewed by their advisor before enrolling in their final 30 credit hours at CU Denver. Failure to do so may result in delay of graduation. Students presenting four years of high school French (Level IV) for admission to CU Denver must see a French advisor before enrolling in courses for the major. Students with advanced placement credits from high school must see a French advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.

Honors in French

Qualified majors will automatically graduate with regular honors in French. Faculty occasionally nominate students for extra course work leading to higher levels of honors

in French. For information, consult the French advisor in the Department of Modern Languages.

Outcomes Assessment

During their final semester in the language, French major students participate in an oral proficiency interview and take a written outcomes assessment exam to measure their level of proficiency and mastery of key concepts.

Residency Requirement

All students majoring in French must complete 30 semester hours of upper-division French courses (courses numbered 3000 and above). A minimum of 18 of those semester hours must be taken from the faculty in French at CU Denver. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses. Students studying French for the professions must also take courses in other areas. Requirements for both tracks are outlined below.

Course Requirements for the Major

Track A: Language, Literature and Culture

Students wishing to improve their linguistic skills as well as their knowledge of Francophone literature and culture may choose this track.

Required Courses

- FREN 3010 - French Phonetics and Pronunciation **gtPATHWAYS:**
- FREN 3020 - Oral Practice **gtPATHWAYS:**
- FREN 3050 - Advanced Grammar and Composition **gtPATHWAYS:**
- FREN 3060 - Advanced French Language Skills **gtPATHWAYS:**

Total: 12 Hours

Electives

Three courses at the 4000 level: **9 semester hours**

Three electives at 3000 or 4000 level: **9 semester hours**

Note: students must take at least one literature course and at least one culture or civilization course.

Total: 18 Hours

Track A Major Total: 30 Hours

Track B: International Language and Culture for the Professions

This option in the French major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. Students interested in this track should contact the French advisor in the Department of Modern Languages as early as possible in their academic career, but not later than the second semester of the sophomore year.

Prerequisites

(these courses do not count toward the major total of 48 hours)

- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
- MATH 1070 - Algebra for Social Sciences and Business **gtPATHWAYS:** GT-MA1
- -OR- MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1
  (or higher level math course)

Required French Courses

- FREN 1000 - Introduction to Cultures of the French- Speaking World **gtPATHWAYS:** GT-AH1
- FREN 3020 - Oral Practice **gtPATHWAYS:**
- FREN 3050 - Advanced Grammar and Composition **gtPATHWAYS:**
- FREN 3060 - Advanced French Language Skills **gtPATHWAYS:**
- FREN 3112 - Survey of French Literature I **gtPATHWAYS:**
- -OR- FREN 3122 - Survey of French Literature II **gtPATHWAYS:**
- FREN 3130 - Current Topics of the French-Speaking World **gtPATHWAYS:**
- -OR- FREN 3140 - Contemporary Francophone Cultures **gtPATHWAYS:**
- FREN 4050 - Advanced French for Business **gtPATHWAYS:**
- FREN 4082 - Introduction to Translation **gtPATHWAYS:**
- FREN 4210 - French Civilization - Twentieth and Twenty-First Centuries **gtPATHWAYS:**

Total: 27 Hours

French Electives

Choose two (at least one at 4000 level) from:

- FREN 3120 - French Cultural Identities: Myths and Realities **gtPATHWAYS:**
- FREN 3130 - Current Topics of the French-Speaking World **gtPATHWAYS:**
- FREN 3140 - Contemporary Francophone Cultures **gtPATHWAYS:**
- FREN 4200 - French Civilization Through the Nineteenth Century **gtPATHWAYS:**
  Any 3000- or 4000-level literature course (not already taken from required list)

Total: 6 Hours

Business Courses

(please be aware of prerequisites in business course descriptions)

- ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
- MGMT 1000 - Introduction to Business **gtPATHWAYS:**
- MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**
- MKTG 3000 - Principles of Marketing **gtPATHWAYS:**
  One 3000-level course in international business

Total: 15 Hours

Recommended

Official proficiency exam (Paris Chamber of Commerce)

Track B Major Total: 48 Hours

Secondary Foreign Language Teacher Licensure Program

With this option, students complete a major in French along with additional course work required for certification to teach French in the public schools. This program should be chosen early in the students' careers. See the description of Undergraduate Teacher Licensure on the School of Education & Human Development (SEHD) Urban Community Teacher Education program page for more information. You may also contact the CLAS

Advising Office (phone 303-556-2555 or visit North Classroom, 4002) and the French advisor for more information.

Spanish BA

The Spanish program studies the language, linguistics, literature, culture and civilization of Spain, Spanish America and the Spanish-speaking areas of the United States.

Admission and Grade Requirements

To be admitted to major status in Spanish, students must have an overall GPA of *C+* (2.3). The minimum grade acceptable in any course applied to a Spanish major or minor is a *C* (2.0). The GPA in all courses applied to a Spanish major or minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a Spanish major or minor.

Residency Requirement

The BA in Spanish requires 30 semester hours of upper-division course work in Spanish and 6 additional hours in related fields. A minimum of 18 semester hours of Spanish course work for the major, and 9 hours for the minor, must be taken from Spanish faculty at CU Denver. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses.

Proficiency Requirement

Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.

Course Requirements for the Major

Students majoring in Spanish for the BA degree must complete 30 semester hours of upper-division course work, at least 12 of which must be at the 4000 level. All course work applied to the 30-semester-hour minimum must be taught in Spanish. In addition, students must complete 6 semester hours in courses in related fields outside the curriculum in Spanish.

Program Requirements

Language, Literature and Culture Track

LITERATURE

- SPAN 3252 - Introduction to the Study of Literature **gtPATHWAYS:**
  At least one course on the literature of Spain: **3 semester hours**
  At least one course on the literature of Spanish America: **3 semester hours**

Total: 9 Hours

LANGUAGE SKILLS AND THEORY

- SPAN 3060 - Hispanic Phonetics: Theory and Practice **gtPATHWAYS:**
  6 additional hours in language skills and theory

Total: 9 Hours

CULTURE AND CIVILIZATION OF SPAIN OR SPANISH AMERICA

Choose two:

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact **gtPATHWAYS:**
- SPAN 3212 - Spanish American Culture and Civilization **gtPATHWAYS:**
- SPAN 3213 - Contemporary Latin American Culture and Institutions **gtPATHWAYS:**
- SPAN 3221 - Culture and Civilization of Spain I **gtPATHWAYS:**
- SPAN 3222 - Culture and Civilization of Spain II **gtPATHWAYS:**
- SPAN 3223 - Contemporary Spanish Culture and Institutions **gtPATHWAYS:**
- SPAN 3230 - Ibero-American Cultures through Film **gtPATHWAYS:**
- SPAN 4230 - Modern Culture of Spain through Film and Narrative **gtPATHWAYS:**

Total: 6 Hours

ELECTIVES

Two SPAN electives, to be taken at the 4000 level

Total: 6 Hours

RELATED FIELDS

Choose 2 courses from the following fields of study (see Modern Languages departmental web site for a list of pre-approved courses):

Latin American studies (from fields such as history, geography, political science, art history)
Hispanic American studies
Linguistics (in the fields of anthropology or English)
Comparative literature
Upper-division courses in another foreign language

Total: 6 Hours

MAJOR TOTAL: 36 Hours

International Language and Culture for the Professions Track

This option in the Spanish major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. (However, students who wish to be certified to teach Spanish in the public schools should consult the department for information concerning the undergraduate language licensure program.)

International Spanish for the professions is a controlled-enrollment major that takes two years to complete. Interested students should contact the Spanish advisor in the Department of Modern Languages to declare the major. This should be done as early as possible in the student's academic career, but not later than the second semester of the sophomore year.

PREREQUISITES

(These courses do not count toward the major total of 45 semester hours)

- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
- MATH 1070 - Algebra for Social Sciences and Business **gtPATHWAYS:** GT-MA1
- -OR- MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1
  (or higher level math course)
- SPAN 2110 - Second Year Spanish I **gtPATHWAYS:**

- -OR- SPAN 2120 - Second Year Spanish II **gtPATHWAYS:**

REQUIRED SPANISH COURSES

- SPAN 3082 - Introduction to Translation I **gtPATHWAYS:**
- SPAN 3252 - Introduction to the Study of Literature **gtPATHWAYS:**
- SPAN 3700 - Spanish for International Business I **gtPATHWAYS:**
- SPAN 3710 - Spanish for International Business II **gtPATHWAYS:**

Total: 12 Hours

Two of the following language skills and theory courses:

- SPAN 3010 - Advanced Conversation and Composition I **gtPATHWAYS:**
- SPAN 3020 - Advanced Conversation and Composition II **gtPATHWAYS:**
- SPAN 3060 - Hispanic Phonetics: Theory and Practice **gtPATHWAYS:**
- SPAN 3310 - Spanish Writing and Grammar I **gtPATHWAYS:**

Total: 6 Hours

One of these must be either SPAN 3213 or 3223, while the other may be any of the following:

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact **gtPATHWAYS:**
- SPAN 3212 - Spanish American Culture and Civilization **gtPATHWAYS:**
- SPAN 3213 - Contemporary Latin American Culture and Institutions **gtPATHWAYS:**
- SPAN 3222 - Culture and Civilization of Spain II **gtPATHWAYS:**
- SPAN 3223 - Contemporary Spanish Culture and Institutions **gtPATHWAYS:**
- SPAN 3230 - Ibero-American Cultures through Film **gtPATHWAYS:**

Total: 6 Hours

Electives

Two SPAN electives, to be taken at the 4000 level.

Total: 6 Hours

SPANISH TOTAL: 30 Hours

BUSINESS COURSES

(please be aware of prerequisites in business course descriptions)

- ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
- MGMT 1000 - Introduction to Business **gtPATHWAYS:**
- MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**
- MGMT 4400 - Environments of International Business **gtPATHWAYS:**
- MKTG 3000 - Principles of Marketing **gtPATHWAYS:**

Business Total: 15 Hours

SPANISH BUSINESS OPTION TOTAL: 45 Hours

RECOMMENDED:

- Language study abroad / international travel or field study
- Internship in target language
- Official proficiency exam

Undergraduate Licensure Program in Spanish

With this option, students complete a major in Spanish along with additional course work required for certification to teach Spanish in the public schools. This program should be chosen early in the students' careers. See the description of Undergraduate Teacher Licensure on the School of Education & Human Development (SEHD) Urban Community Teacher Education program page for more information. You may also contact the CLAS Advising Office (phone 303-556-2555 or visit North Classroom, 4002) and the Spanish advisor for more information.

Honors in Spanish

Students who complete all the requirements for the Spanish major (as outlined above) and meet the following criteria are encouraged to talk with the Spanish faculty about participation in the honors program. Successful completion of this program by students majoring in Spanish leads to graduation with the distinction of *cum laude*, *magna cum laude* or *summa cum laude*.

Cum laude

Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better

Magna cum laude or summa cum laude

1. Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better
   —and—

2. *6 semester hours of Spanish 4840, Independent Study*, spread over two semesters. The candidate must present the independent study topic for approval by the faculty honors committee by the end of the semester preceding the independent study. At the end of the independent study project, and at least one month before the end of the second semester, the candidate shall submit a **written thesis** to the faculty honors committee.
3. The designation of *magna* or *summa* will be the decision of the faculty honors committee.

Certificate

Applied German Language Skills Undergraduate Certificate

Certificate Description

The undergraduate certificate in applied German language skills is designed for students of any discipline who wish to acquire and demonstrate to potential employers that they possess a fluid working knowledge of the German language and understanding of the cultures in which German is spoken. The completion of the requirements for this certificate can also serve as a means for nondegree-seeking professionals to develop a working competency in the German language and culture for use in such areas as international business, education, genealogy, transatlantic travel, academic research, translation and many other fields.

Admission

All currently enrolled students at CU Denver (undergraduate or graduate) in good standing (including nondegree-seeking students) are eligible for admission into the program. Any student who already possesses an undergraduate degree is also qualified for admission into the program, but must apply to the university as a nondegree-seeking student. Students working toward a baccalaureate degree who are currently enrolled in a college-level institution other than UC Denver are also eligible for certification.

Course Requirements

Twenty-four (24) semester hours of course work with CU Denver faculty (15 of which must be upper division), distributed as follows:

German Language Skills (15 credit hours): Students must complete a minimum of 15 semester credit hours of upper-division German language skills courses. These courses are defined as those areas of study in which grammar, vocabulary, pronunciation and/or communicative abilities in German are the primary focus of instruction. Up to six credit hours of upper-division German skills courses may be applied as transfer credit from outside, college-level institutions. Alternately, students may apply up to nine credit hours of officially recognized study abroad credit toward this requirement.

German Culture (9 credit hours): Students must complete a minimum of nine semester credit hours of German culture courses where the primary focus of instruction addresses any facet of Austrian, German and/or Swiss culture. These courses may be completed at any level (lower or upper division as well as graduate) and in any combination of disciplines, provided that the student supplies evidence that a significant portion of each course is devoted to Austrian, German and/or Swiss culture. This includes but is not limited to history, philosophy, political science, literature (in German or in translation) and other German cultural topics. Up to three credit hours of culture courses may be applied as transfer credit from outside, college-level institutions. Alternately, students may apply up to six credit hours of officially recognized, documented university-level course work (or the equivalent) in a German-speaking country.

Proficiency Exam: Successful completion of an internationally recognized German language proficiency exam. At any point prior to the awarding of the certificate, students must submit documentation that they have passed an internationally recognized German language skills examination. Such proficiency exams (some of which are administered locally in Denver and Boulder) include but are not limited to the TestDaF (Test Deutsch als Fremdsprache), Zertifikat Deutsch (ZD), Zertifikat Deutsch für den Beruf (ZDfB) or Prüfung Wirtschaftsdeutsch (PWD). Students must receive approval from German faculty at CU Denver to ensure that their exam scores are valid and applicable toward certification.

Students must obtain approval from CU Denver German faculty for all of the above and maintain a minimum 3.0 GPA in all course work applied to the certificate.

Transfer Credit

A significant portion of the certificate program is based on language proficiency. Consequently, students who have developed language skills through course work at institutions outside of CU Denver, including study abroad, may apply a limited number of previously earned semester hours toward the program. Please make an appointment with an advisor in the department to discuss details. All transfer credits must be approved by CU Denver German faculty.

Application of Course Work

The course work applied toward certification is meant as a proficiency requirement and not as a total semester hour amount. As a result, students who are working toward a degree may apply course work in German certification as credit toward other programs such as a minor, general education requirements or their major. Students are encouraged to inform their major advisor that they are working toward certification in German for help in coordinating their overall academic curriculum.

Further Information

Students are encouraged to hold a personal conference with a departmental advisor before applying to the certificate program. Phone 303-556-4893 for contact information.

Non Degree

French Minor

Students minoring in French must complete 15 semester hours of upper-division French courses (courses numbered 3000 and above). The minor in French must include at least one language skills class, chosen from the following:

Required Courses

Choose one:

- FREN 3010 - French Phonetics and Pronunciation **gtPATHWAYS:**
- FREN 3020 - Oral Practice **gtPATHWAYS:**
- FREN 3050 - Advanced Grammar and Composition **gtPATHWAYS:**
- FREN 3060 - Advanced French Language Skills **gtPATHWAYS:**

Total: 3 Hours

Electives

In addition, students minoring in French must complete four additional upper-division French courses

Total: 12 Hours

Minor Total: 15 Hours

German Minor

The German program provides a variety of courses for students interested in German language, linguistics, literature, history, philosophy, music and art.

Admission and Grade Requirements

To be admitted to minor status in German, students must have an overall GPA of *C*+ (2.3). The minimum grade acceptable in any course applied to a German minor is a *C* (2.0). The GPA in all courses applied to a German minor at CU Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a German minor.

Residency Requirement

The German minor requires 15 semester hours of upper-division course work. A minimum of 6 semester hours must be taken from German faculty at CU Denver. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the minor only with departmental approval before enrollment in those courses.

Students who have completed course work through an approved exchange program must also complete a residency requirement of a minimum of 6 credits of upper-division German courses. This residency requirement must include at least 3 semester hours of language skills courses at CU Denver.

Course Requirements for the Minor

Students minoring in German must complete 15 hours of upper division German courses (courses numbered 3000 and above). The minor in German must include at least one language skills course:

Required Courses

Choose one:

- GRMN 3050 - Phonetics and Pronunciation of German **gtPATHWAYS:**
- GRMN 3060 - Advanced German Language Skills I **gtPATHWAYS:**
- GRMN 3070 - Advanced German Language Skills II **gtPATHWAYS:**
- GRMN 3080 - Advanced German Language Skills III **gtPATHWAYS:**
- GRMN 3090 - Advanced German Language Skills IV **gtPATHWAYS:**

Total: 3 Hours

Electives

In addition, students minoring in German must complete four additional German courses.

Total: 12 Hours

Minor Total: 15 Hours

Students taking a German course taught in English must complete a portion of the course work (e.g., papers and exams) in German for the course to count toward the minor.

Spanish Minor

Students minoring in Spanish for the BA degree must complete 15 semester hours of upper-division Spanish courses (courses numbered 3000 and higher). All course work must be taught in Spanish.

The minor in Spanish must include at least one culture and civilization class, chosen from the following:

Program Requirements

Required Courses

Choose one:

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact **gtPATHWAYS:**
- SPAN 3212 - Spanish American Culture and Civilization **gtPATHWAYS:**
- SPAN 3213 - Contemporary Latin American Culture and Institutions **gtPATHWAYS:**
- SPAN 3221 - Culture and Civilization of Spain I **gtPATHWAYS:**
- SPAN 3222 - Culture and Civilization of Spain II **gtPATHWAYS:**
- SPAN 3223 - Contemporary Spanish Culture and Institutions **gtPATHWAYS:**
- SPAN 3230 - Ibero-American Cultures through Film **gtPATHWAYS:**
- SPAN 4230 - Modern Culture of Spain through Film and Narrative **gtPATHWAYS:**

Total: 3 Hours

Electives

In addition, students minoring in Spanish must complete four additional upper-division Spanish courses.

Total: 12 Hours

Minor Total: 15 Hours

Master of Arts

Spanish MA

► Graduate School Rules apply to this program

The CU Denver modern languages faculty offers a Spanish master's degree program that is an alternative to the exclusively literary studies that traditionally lead to doctoral programs. By integrating language, literature and cultural studies with ancillary work in other disciplines, the degree provides a broader expertise that will lead to or enhance careers in teaching, government, social services, business and international trade. Students will tailor the program to their specific interests and needs by developing a topical focus and including courses from outside the Department of Modern Languages, through which they may develop a secondary emphasis that can be incorporated in a thesis project.

Requirements for Admission

In addition to the general admission requirements of the Graduate School, the Spanish MA program requires:

- an undergraduate GPA of at least 2.5, with a GPA of at least 3.0 in Spanish courses
- a bachelor's degree in Spanish is not required, although all candidates must demonstrate Spanish oral and written proficiency at the advanced level, as defined by the American Council on the Teaching of Foreign Languages
- two copies of all college transcripts

- three letters of recommendation
- a statement of the applicant's purpose in pursuing the degree, in Spanish; any gaps, weaknesses or special circumstances affecting an applicant's academic record should be addressed in the statement of purpose portion of the application
- a TOEFL score higher than 550 for students whose previous academic degree was completed in a non-English-speaking country

In special circumstances, the department may modify its admission standards.

Program Requirements

Candidates in Spanish must satisfy the general requirements of the Graduate School as outlined in this catalog and will be required to complete 33 hours of course work distributed with respect to one of the following two options:

Thesis option (course work + thesis):

- SPAN 5000 - Introduction to Graduate Studies in Spanish **gtPATHWAYS:**

  Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **15 semester hours**
  Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**
  Elective, as approved by advisor: **3 semester hours**
  Thesis preparation and writing: **6 semester hours**
- SPAN 5950 - Master's Thesis **gtPATHWAYS:**

Thesis Option Total: 33 Hours

Nonthesis option (course work):

- SPAN 5000 - Introduction to Graduate Studies in Spanish **gtPATHWAYS:**

  Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **18 semester hours**
  Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**
  Electives as approved by advisor (may include another course outside the Department of Modern Languages): **6 semester hours**

Nonthesis Option Total: 33 Hours

Notes:

1. No more than one undergraduate course (3 semester hours) may be applied toward the MA degree and then only in an ancillary field outside the Department of Modern Languages.
2. Students choosing the nonthesis option may elect to take three courses (9 semester hours) outside the department.

Financial Aid

The department offers a limited number of teaching assistantships for graduate students on a semester-by-semester basis. Appointment is competitive and is typically based on a student's academic credentials. Contact the department for details. For information on grants, federal work-study programs, scholarships and loans, contact the Office of Financial Aid (303-556-2886).

For further information concerning the master's degree in Spanish at CU Denver, direct inquiries to the graduate advisor.

Philosophy

Chair: Robert Metcalf
Program Assistant: Agnes Romero
Office: Plaza Building, M108
Telephone: 303-556-4868
Fax: 303-556-8100
Website: clas.ucdenver.edu/philosophy/

Undergraduate Program
Graduate Program

Faculty

Professor:

Mark Tanzer, PhD, Stony Brook University

Associate Professors:

David Hildebrand, PhD, University of Texas at Austin

Robert Metcalf, PhD, Pennsylvania State University

Candice Shelby, PhD, Rice University

Assistant Professors:

Chad M. Kautzer, PhD, Stony Brook University

Gabriel Zamosc-Regueros, PhD, University of Michigan

Senior Instructors:

Myra Bookman, PhD, University of Colorado

Sharon Coggan, PhD, Syracuse University

Daryl Mehring, PhD, University of Colorado

Samuel F. Walker, PhD, University of Colorado

Instructor:

Brian Lisle, PhD, Loyola University, Chicago

Honoraria:

Barbara Goodrich, William Simpson, Maria L. Talero

The philosophy program is recommended to students whose goal is a liberal arts education in the finest sense. Philosophy is concerned with the transmission and evaluation of basic beliefs and values. It is not an easy field of study, but for more than 25 centuries philosophy has been judged most rewarding by those who seek self-development, intellectual sophistication and the happiness of a reflective life.

Philosophy is an excellent undergraduate preparation for almost any professional field.

Undergraduate

REQUIREMENTS FOR THE MAJOR

REQUIREMENTS FOR THE MINOR

HONORS PROGRAM

Requirements for honors are the following:

A. Course Performance

1. Cum laude	3.4 GPA within the major	3.3 overall GPA
2. Magna cum laude	3.6 GPA within the major	3.5 overall GPA
3. Summa cum laude	3.8 GPA within the major	3.7 overall GPA

B. Thesis

Majors desiring to graduate with honors in philosophy must enroll in PHIL 4950 for a minimum of 3 hours and a maximum of 6 hours (note that these hours are in addition to the 36 hours required for the philosophy major) and complete research that culminates in a thesis and oral examination. Majors must work with two faculty members during the project. Written proposals must be submitted and approved by the faculty committee prior to the beginning of the project. If the completed thesis and oral exam are deemed worthy of honors, the student will be awarded the honors consistent with his or her GPA. However, to receive highest honors (*summa cum laude*), the faculty committee must designate the performance for both the written thesis and the oral defense as worthy of graduation with highest honors. If the faculty committee makes no such designation, students will graduate *magna cum laude*.

MINOR IN ETHICS

CERTIFICATE IN ETHICS

Graduate

Graduate-level courses offered at CU Denver may be applied to University of Colorado-Boulder graduate degrees in philosophy or toward the Master of Humanities and Master of Social Science degree programs at CU Denver. Contact these programs for degree requirements and applicability limitations of CU Denver course work.

Bachelor of Arts

Philosophy BA

Students must declare a major by the time they have completed 60 semester hours of course work. A total of 36 semester hours must be completed for the philosophy major,

at least 18 of which must be taken at CU Denver. A minimum grade of *C* (2.0) is required in each course. For those students who qualify for and fulfill the requirements for graduation with honors, a total of at least 39 hours is required.

A total of 18 upper-division semester hours are required for the major, and no more than 6 hours below the 3000 level may be counted toward the major. Courses taken at other institutions must be approved by an advisor in the Department of Philosophy to be applied toward the major.

Unless otherwise noted, registration for 4000-level courses in philosophy require a minimum grade of *C* (2.0) in every prior philosophy course and completion of at least PHIL 3002 or PHIL 3022 or permission of instructor.

Program Requirements

Required Courses

- PHIL 3002 - Ancient Greek Philosophy **gtPATHWAYS:**
- PHIL 3022 - Modern Philosophy **gtPATHWAYS:**
  (It is recommended, but not required, that PHIL 3002 be taken before PHIL 3022)
- PHIL 3440 - Introduction to Symbolic Logic **gtPATHWAYS:**
- PHIL 4760 - Kant **gtPATHWAYS:**

Total: 12 Hours

Additional distribution requirements

(All are upper-division courses)

One course in social/political philosophy
One course in ethics
One course in Continental philosophy
One course in EITHER American or analytic philosophy
One course with specific focus in the history of philosophy (may be fulfilled by a course in a single figure)

Total: 15 Hours

Electives

Choose three:

One upper-division elective (may include courses from previous lists that are not counted toward those requirements)
Two electives at any level

Total: 9 Hours

Major Total: 36 Hours

Course work required for graduation with honors:

3-6 semester hours taken over two semesters of:

- PHIL 4950 - Honors Thesis **gtPATHWAYS:**

Certificate

Ethics Undergraduate Certificate

The certificate in ethics is designed for students currently enrolled in a degree program as well as nondegree students.

A total of 15 semester hours is required for an ethics certificate. Students are required to write a capstone paper in an area of ethics directly related to their career and/or field of study (PHIL 3840).

Certificate Requirements

- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community **gtPATHWAYS:** GT-AH3

Choose four:

- PHIL 3002 - Ancient Greek Philosophy **gtPATHWAYS:**
- PHIL 3150 - History of Ethics **gtPATHWAYS:**
- PHIL 3200 - Social and Political Philosophy **gtPATHWAYS:**
- PHIL 3250 - Business Ethics **gtPATHWAYS:**
- PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
- PHIL 3840 - Independent Study **gtPATHWAYS:**
- PHIL 4150 - Twentieth Century Ethics **gtPATHWAYS:**
- PHIL 4242 - Bioethics **gtPATHWAYS:**

Certificate Total: 15 Hours

Non Degree

Ethics Minor

A total of 15 semester hours is required for an ethics minor, with a minimum grade of *C* (2.0) in each course.

Required Courses

- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community **gtPATHWAYS:** GT-AH3

Choose four:

- PHIL 3150 - History of Ethics **gtPATHWAYS:**
- PHIL 3200 - Social and Political Philosophy **gtPATHWAYS:**
- PHIL 3250 - Business Ethics **gtPATHWAYS:**
- PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
- PHIL 3939 - Internship **gtPATHWAYS:**
- PHIL 4150 - Twentieth Century Ethics **gtPATHWAYS:**
- PHIL 4242 - Bioethics **gtPATHWAYS:**

Minor Total: 15 Hours

For those students who major in philosophy and minor in ethics, no course can satisfy the requirements for both. For example, if a student takes PHIL 4150, Twentieth Century Ethics, it cannot satisfy the requirement in the major for a course in 19th or 20th century philosophy.

Philosophy Minor

A total of 15 semester hours is required for the minor in philosophy, with a minimum grade of *C* (2.0) in each course.

Program Requirements

Required Courses:

- PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World **gtPATHWAYS:** GT-AH3
- PHIL 3002 - Ancient Greek Philosophy **gtPATHWAYS:**
- PHIL 3022 - Modern Philosophy **gtPATHWAYS:**
  (It is recommended but not required that PHIL 3002 be taken before PHIL 3022.)

Total: 9 Hours

Electives

Choose two additional philosophy courses, one of which must be at the upper-division level.

Total: 6 Hours

Minor Total: 15 Hours

Religious studies courses cannot be used to fulfill the requirements for the minor.

Physics

Chair: Martin E. Huber
Program Assistant: Dawn Arge
Office: North Classroom, 3801
Telephone: 303-556-8344
Fax: 303-556-6257
Website: clas.ucdenver.edu/physics/

Faculty

Professors:

Martin E. Huber, PhD, Stanford University

Martin M. Maltempo, PhD, Columbia University

Alberto C. Sadun, PhD, Massachusetts Institute of Technology

Associate Professor:

Randall P. Tagg, PhD, Massachusetts Institute of Technology

Assistant Professors:

John M. Carlson, PhD, University of Michigan

Emeritus Professors:

Willard R. Chappell, PhD, University of Colorado

Clyde S. Zaidins, PhD, California Institute of Technology

Undergraduate

Physics, as the most fundamental of the sciences, is the foundation upon which many other disciplines are built. Therefore, other programs often require knowledge of the fundamentals of physics, and a physics degree is an outstanding platform for employment and advanced study in many technical disciplines. The department offers both a course of study fulfilling the bachelor of science degree and a wide range of service courses for students majoring in disciplines other than physics. Students intending to major in physics should have a high school background that includes trigonometry, advanced algebra, chemistry and physics, as well as a good preparation in the arts and humanities. Students have an option during their freshman year to overcome any deficiencies in these areas.

The Department of Physics offers two programs of study, or tracks. Students should consult with a departmental advisor prior to choosing a track. *Track 1—Pure and Applied Physics* is intended for students preparing for graduate school, teaching careers, or careers in industry or government labs. *Track 2—Biophysics and Medical Physics* is seen as a bridge to an advanced degree in the health sciences for those interested in medical research, admission to medical school, preparation for work in a hospital or clinical situation, or industrial jobs in biomedical instrumentation. For either track, students preparing for employment in an interdisciplinary area (such as environmental, geophysical or energy study) can choose to add an appropriate minor or arrange a specific major program on an individual basis.

Students interested in teaching physics in high school are encouraged to consider the CLAS educational studies minor in addition to their physics major. Students majoring in other disciplines have the option of choosing a minor in physics or in astrophysics. The department now also offers an online certificate in the scientific foundations of technical innovation at both undergraduate and graduate levels. This 12-semester-hour program is intended to foster careers in the practical application of physics and the potential commercialization of new technologies.

To enhance the employment and postgraduate study options of physics majors, the department is committed to providing students with opportunities for experimental, computational and theoretical research. On-campus opportunities are available through the faculty research programs. Questions regarding physics courses or the physics curriculum should be directed to a departmental advisor. Appointments should be made through the physics office.

REQUIREMENTS FOR MAJOR

Departmental Honors

Qualified students are encouraged to participate in the physics honors program. For these students, a senior thesis is required. This work will be conducted under the supervision of a faculty advisor. The topic and scope of this work will be chosen by the student in consultation with the thesis advisor. The student has the option of registering for up to 3 semester hours of independent study for the thesis project; regardless of registered semester hours, the student should commit the effort equivalent to a 3-semester-hour laboratory course toward completion of the thesis. The levels of passing scores are satisfactory, meritorious and excellent.

Within this framework, three levels of honors are awarded by CU Denver in conjunction with the physics major:

1. *Cum laude*: The student must have a cumulative GPA of 3.25 both in physics and overall at CU Denver. The student's senior thesis and presentation must be judged to be meritorious by the committee.
2. *Magna cum laude*: The student must have a cumulative GPA of 3.50 both in physics and overall at CU Denver. The student's senior thesis and presentation must be judged to be meritorious by the committee.
3. *Summa cum laude*: The student must have a cumulative GPA of 3.75 both in physics and overall at CU Denver. The student's senior thesis and presentation must be judged to be excellent by the committee.

Physics Minors

MINOR IN PHYSICS

MINOR IN ASTROPHYSICS

Certificate

Scientific Foundations of Technical Innovation

Bachelor of Science

Physics BS

Program Requirements

Students must declare their intention to major in physics by the time they have completed 60 semester hours and complete between 47 and 51 semester hours (depending on the track chosen) in physics and related topics. Additionally, all tracks require 16 semester hours in math ancillary courses. No grade below a *C* (2.0) can be used to meet the requirements for the major. At least 12 semester hours of the requirements for the major must be completed at CU Denver.

A senior thesis, usually from participation in research, is required for all students wishing to graduate with departmental honors. All other students are encouraged to do research leading to a project report or senior thesis.

Required Courses Common to All Tracks

Required Physics Courses

- PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
- PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
- PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
- PHYS 2341 - General Physics Lab II **gtPATHWAYS:**
- PHYS 2711 - Vibrations and Waves **gtPATHWAYS:**
- PHYS 2811 - Modern Physics I **gtPATHWAYS:**
- PHYS 3120 - Methods of Mathematical Physics **gtPATHWAYS:**
- PHYS 3711 - Junior Laboratory I **gtPATHWAYS:**
- PHYS 3811 - Quantum Mechanics **gtPATHWAYS:**

Total physics courses required for all tracks: 25 Hours

Required Ancillary Courses

- MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
- MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
- MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
- MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**

  Note: The department will accept the following combination of math courses in place of MATH 3195:
- MATH 3191 - Applied Linear Algebra **gtPATHWAYS:**
- MATH 3200 - Elementary Differential Equations **gtPATHWAYS:**

Total ancillary math courses required for all tracks: 16 Hours

Total required semester hours for all physics major tracks: 41 Hours

Pure and Applied Physics (Track 1)

Take in addition to the courses common to all tracks:

- PHYS 3211 - Analytical Mechanics **gtPATHWAYS:**
- PHYS 3411 - Thermal Physics **gtPATHWAYS:**
- PHYS 3721 - Junior Laboratory II **gtPATHWAYS:**
- ***** PHYS 4331 - Principles of Electricity and Magnetism **gtPATHWAYS:**
- PHYS 4711 - Senior Laboratory I **gtPATHWAYS:**
  (or a course in computational physics approved by advisor)

  * *Note:* Students who must *retake* PHYS 4331 may fulfill this requirement by obtaining a *C* or better in
- PHYS 4351 - Bioelectromagnetism **gtPATHWAYS:**

Elective Physics Courses

Six semester hours of physics-related electives at 3000-level or above approved by advisor, including up to 3 hours of independent study

Total Track 1 Specific Courses: 21 Hours

Plus total required courses for all physics majors: 41 hours

TRACK ONE TOTAL: 62 HOURS

Biophysics and Medical Physics (Track 2)

Take in addition to the courses common to all tracks:

- PHYS 3251 - Biophysics of the Body **gtPATHWAYS:**
- PHYS 3451 - Biophysics of the Cell **gtPATHWAYS:**
- PHYS 4351 - Bioelectromagnetism **gtPATHWAYS:**
  (recommended option)
- -OR- PHYS 4331 - Principles of Electricity and Magnetism **gtPATHWAYS:**

Biophysics electives (8-9 hours)

Biophysics electives at the 3000-level or above approved by advisor (including up to 3 semester hours independent study and/or two courses, PHYS 3151 and PHYS 3161, listed below)

-OR-

The following four courses (an option primarily for pre-med physics majors):

- * BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
- * BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
- PHYS 3151 - Biophysics Outlook I **gtPATHWAYS:**
- PHYS 3161 - Biophysics Outlook II **gtPATHWAYS:**

Plus a laboratory:

- PHYS 3721 - Junior Laboratory II **gtPATHWAYS:**

-OR-

The following two courses (an option primarily for pre-med physics majors):

- * BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
- * BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1

AND

Numerical modeling *or* probability and statistics course approved by advisor: **3 semester hours**

Total Track 2 Specific Courses: 25 Hours

Plus total required courses for all physics majors: 41 hours

TRACK TWO TOTAL: 66 HOURS

Major Total: 62-66 Hours

PRE-MED STUDENTS

Note: courses above marked * are generally required for medical school admissions. In addition, the following are generally required for medical school admissions, but NOT for the biophysics and medical physics track:

- CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
- CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
- CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
- CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
- CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**
- CHEM 3418 - Organic Chemistry Laboratory I **gtPATHWAYS:**
- CHEM 3421 - Organic Chemistry II **gtPATHWAYS:**
- CHEM 3428 - Organic Chemistry Laboratory II **gtPATHWAYS:**

Total additional pre-med (but not required for Track 2): 19 Hours

Certificate

Scientific Foundations of Technical Innovation Certificate

The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects—one for a client and one for the student's own pursuits—are combined with a series of six short courses to provide both context and substance for gaining knowledge needed to create technical prototypes. The model is based on the method by which most physical science graduate students learn technical domains on a "just-in-time" basis. It is also a method by which many corporations quickly bring new project team members up to speed on project knowledge. Entry into the certificate program requires prior completion of two semesters of calculus-based physics and two semesters of calculus **or** permission of the certificate advisor.

Undergraduate required courses

- PHYS 4850 - Physics for Design and Innovation I **gtPATHWAYS:**
- PHYS 4400 - Topics in Scientific Instrumentation and Laboratory Methods **gtPATHWAYS:**

  Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor
- PHYS 4852 - Physics for Design and Innovation II **gtPATHWAYS:**

Total: 12 Hours

Graduate required courses

Graduate versions of the courses (5000-level) require an undergraduate degree and additional work on technical analysis or connection to professional practice.

- PHYS 5850 - Physics for Design and Innovation I **gtPATHWAYS:**
- PHYS 5400 - Topics in Scientific Instrumentation and Laboratory Methods **gtPATHWAYS:**

  Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor.
- PHYS 5852 - Physics for Design and Innovation II **gtPATHWAYS:**

Total: 12 Hours

Non Degree

Astrophysics Minor

Astrophysics is an important and well-represented subdiscipline of physics. It includes the study of the solar system, galactic and extra-galactic astrophysics, as well as cosmology. A minor in this field combines a theoretical approach with observational analysis. There is also opportunity to do research in this field.

While the Department of Physics offers minors in both physics and astrophysics, it is not possible to receive minors in both fields. A physics minor is not an option for physics majors.

The astrophysics minor requires a total of 17 semester hours, in which no grade below a *C* (2.0) may be used to meet the requirements for the minor. At least 6 semester hours taken for the minor must be completed at the Denver Campus. Requirements for the minor in astrophysics may be used to fulfill the requirements of the major in physics. However, a student majoring in physics who wants to minor in astrophysics needs to take 15 semester hours in astrophysics that do not overlap with the major.

Program Requirements

Required Physics Courses:

- PHYS 1052 - General Astronomy I **gtPATHWAYS:** GT-SC1

Either of the following two sequences:

- PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
- PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1

- PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
- PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1
  Sequence Total: 10 Hours
  -OR-
- PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
- PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
- PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
- PHYS 2341 - General Physics Lab II **gtPATHWAYS:**
  Sequence Total: 10 Hours

Total Required Courses: 14 Hours

Elective Physics Courses

Choose one:

- PHYS 3040 - Modern Cosmology **gtPATHWAYS:**
- PHYS 3050 - General Astronomy II **gtPATHWAYS:**
- PHYS 3082 - Energy and the Environment **gtPATHWAYS:**
- PHYS 3411 - Thermal Physics **gtPATHWAYS:**
- PHYS 3820 - Subatomic Physics **gtPATHWAYS:**
- * PHYS 3840 - Independent Study: PHYS **gtPATHWAYS:**
- PHYS 3939 - Internship **gtPATHWAYS:**
- PHYS 4510 - Optics **gtPATHWAYS:**
- PHYS 4550 - Astrophysics **gtPATHWAYS:**
- * PHYS 4840 - Independent Study: PHYS **gtPATHWAYS:**
- * PHYS 4920 - Advanced Undergraduate Seminar **gtPATHWAYS:**
- * PHYS 4931 - Internship in Applied Physics **gtPATHWAYS:**
- * PHYS 4980 - Advanced Physics Topics **gtPATHWAYS:**

Total Electives: 3 Hours

Minor Total: 17 Hours

*Topics in these classes vary, as do the number of credits which can be earned. See departmental advisor for approval.

Physics Minor

A total of 16 semester hours is required for a minor in physics. No grade below a *C* (2.0) can be used to meet the requirements for the minor. At least 6 semester hours of the requirements for the minor must be completed at CU Denver.

Program Requirements

Required Physics Courses

Either of the following two sequences:

- PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
- PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1
- PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
- PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1
  Sequence Total: 10 Hours
  -OR-
- PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
- PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
- PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
- PHYS 2341 - General Physics Lab II **gtPATHWAYS:**
  Sequence Total: 10 Hours

Elective Physics Courses

An additional 6 semester hours of electives: 3 at the 2000 level or above, and 3 at the 3000 level or above.
Total: 6 Hours

Minor Total: 16 Hours

Political Science

Chair: Jana Everett
Program Assistant: Cory Gruebele
Undergraduate Advisor: Lucy McGuffey
Pre-law Advisor: Glenn Morris
Graduate Advisor: Thorsten Spehn
Director, New Directions Program: Kathryn Cheever
Office: King Center, 502
Telephone: 303-556-3556
Fax: 303-556-6041
Website: clas.ucdenver.edu/polisci/

Faculty

Professors:

Mike Cummings, PhD, Stanford University

Jana Everett, PhD, University of Michigan

Associate Professors:

Glenn T. Morris, JD, Harvard University School of Law

Tony Robinson, PhD, University of California, Berkeley

Stephen C. Thomas, PhD, Stanford University

Assistant Professors:

Michael J. Berry, PhD, University of Colorado

Christoph Stefes, PhD, University of Denver

Adjoint Faculty:

Kathyrn Cheever, PhD, University of Colorado

Senior Instructors:

Karen Breslin, JD, University of Denver

Amin Kazak, PhD, University of Denver

Lucy McGuffey, PhD, University of Denver

Thorsten Sphen, PhD, University of Denver

Instructor:

Harvey Bishop, MA, University of Colorado

Adjunct Faculty:

Loring Abeyta, PhD, University of Denver

Charles Norton, JD, University of Chicago

Thad Tecza, PhD, University of Colorado

Emeritus Faculty:

Joel Edelstein, PhD, University of California, Riverside

Political science is the study of people, power and the public good. Looking at a variety of societies, institutions and interpersonal situations, the discipline asks who has power, where this power comes from, how it is used, how it promotes or impairs the public good and how the public good is defined. Political science draws from other fields, such as psychology, philosophy, economics, sociology and world literature. Finally, it explores the relationship between idealism and realism, between theory and practice, between political thought and personal action.

Opportunities for students with a BA in political science include careers in business, teaching, journalism, community organizing and government service. A political science degree also serves as good preparation for professional training in law and public administration. The students' internship experiences increase their job opportunities. Students with an MA in political science may find careers in such areas as business, government research and administration and teaching at the community-college level.

Please visit the political science department website for detailed information on programs, faculty, students, courses and syllabi, community involvement and service learning, internships and photographs.

Undergraduate

REQUIREMENTS FOR THE MAJOR

REQUIREMENTS FOR THE MINOR

Departmental Honors

Requirements for honors in political science are an overall GPA (in all courses, not just political science courses) of 3.65 or better and the preparation and defense of an honors paper. Honors graduates with an overall GPA of 3.75 to 3.84 may graduate with high honors, and those with GPAs of 3.85 and higher may graduate with highest honors.

Level of honors granted depends upon both the GPA and the quality of the honors paper.

Graduate

REQUIREMENTS FOR THE MA DEGREE

MA DEGREE, NEW DIRECTIONS OPTION

Fourth World Center for the Study of Indigenous Law and Politics

Executive Director: Glenn T. Morris
Telephone: 303-556-6243

This center provides a research clearinghouse to students and faculty at CU Denver on legal and political issues that affect indigenous peoples (the Fourth World). In addition to supporting a modest library of rare books and periodicals on indigenous issues, the center also stocks video and audio resources on subjects of indigenous politics and a substantial news file archive on current developments in the Fourth World. The center has produced curricular materials, including the *Fourth World Bulletin*, for use in international relations and area-studies courses.

Center for NEW DIRECTIONS in Politics and Public Policy

Director: Kathryn Cheever
Telephone: 303-556-5950
Web site: clas.ucdenver.edu/newdirections/index.htm

This center provides academic programs, courses and research focused in the areas of politics and public policy with the purpose of developing the leadership capacities necessary to address changing public priorities for the 21st century within neighborhoods, communities, governmental jurisdictions and nonprofit entities.

The center offers both undergraduate and graduate degrees in political science with emphases in public policy and administration.

Bachelor of Arts

Political Science BA

Undergraduate students must declare their intention to major in political science by the time they have completed 60 semester hours, and must complete a minimum of 36 semester hours in political science, of which at least 21 must be upper-division courses. Fifteen of the 36 hours must be taken from CU Denver faculty. Courses are distributed among the primary fields as listed in this section, i.e., American politics, comparative politics, international relations, political theory and public policy and administration. To count for the major, all course work must be completed with a grade of *C* (2.0) or better. Two cognate courses (which don't count toward the 36 hours) from the list below must also be completed.

Traditional Option

Required Core

- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice **gtPATHWAYS:** GT-SS1
- PSCI 1101 - American Political System **gtPATHWAYS:** GT-SS1
- PSCI 3011 - Research Methods **gtPATHWAYS:**
- -OR- PSCI 4011 - GIS in Political Science **gtPATHWAYS:**

Total: 9 Hours

Choose two:

- PSCI 4207 - Theories of Social and Political Change **gtPATHWAYS:**
- PSCI 4407 - Early Political Thought **gtPATHWAYS:**
- PSCI 4417 - Modern Political Thought **gtPATHWAYS:**
- PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
- PSCI 4437 - Coercion and the State **gtPATHWAYS:**
- PSCI 4457 - American Political Thought **gtPATHWAYS:**

Total: 6 Hours

One 4000-level course in each of three fields:

American politics, comparative politics, and international relations

Total: 9 Hours

Experiential-Learning Requirement *

Choose one:

- PSCI 3914 - The Urban Citizen **gtPATHWAYS:**
- PSCI 3939 - Internship **gtPATHWAYS:**
- PSCI 4934 - CU at the Capitol **gtPATHWAYS:**
  Experiential learning project in any P SC class: **3 semester hours**

  * Students with significant volunteer experience in the community or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the requirement (36 hours still required).

Total: 3 Hours

Electives

Three political science elective courses

Total: 9 Hours

Political Science Total: 36 Hours

Required Cognate Courses

In addition to the 36 hours above, choose two of the following cognate courses:

- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
- HIST 1016 - World History to 1500 **gtPATHWAYS:**
- HIST 1026 - World History Since 1500 **gtPATHWAYS:**
- HIST 1211 - Western Civilization I **gtPATHWAYS:**
- HIST 1212 - Western Civilization II **gtPATHWAYS:**
- HIST 1361 - U.S. History to 1876 **gtPATHWAYS:** GT-HI1
- HIST 1362 - U.S. History Since 1876 **gtPATHWAYS:** GT-HI1

Total: 6 Hours

Major Total: 42 Hours

Public Policy Option

This option was designed for students who specifically desire to pursue careers in public policy and/or public administration in the public or nonprofit sectors. Grounded in basic political science theory and familiarity with American, comparative and international

politics, this BA track emphasizes the specifically political aspects of public policy processes and settings. Cases will emphasize key policy issues confronting U.S. local, state and national decision makers and citizens. A focus on politics and the policy-making process will prepare students conceptually and methodologically to move beyond partisan politics to address how leaders can best mobilize resources to achieve constituent goals consistent with the public interest.

Required Core

- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice **gtPATHWAYS:** GT-SS1
- PSCI 1101 - American Political System **gtPATHWAYS:** GT-SS1
- PSCI 3011 - Research Methods **gtPATHWAYS:**

Total: 9 Hours

One 4000-level course in each of the following three fields:

American Politics

- PSCI 4002 - Topics in Political Science **gtPATHWAYS:**
- PSCI 4014 - Media and Politics **gtPATHWAYS:**
- PSCI 4024 - Legislatures and Legislation **gtPATHWAYS:**
- PSCI 4025 - Local Governance and Globalization **gtPATHWAYS:**
- PSCI 4044 - The Presidency **gtPATHWAYS:**
- PSCI 4094 - Seminar: American Politics **gtPATHWAYS:**
- PSCI 4124 - Denver Politics **gtPATHWAYS:**
- PSCI 4324 - Politics, Public Policy and Leadership **gtPATHWAYS:**
- PSCI 4354 - Environmental Politics **gtPATHWAYS:**
- PSCI 4374 - Public Priorities for the 21st Century **gtPATHWAYS:**
- PSCI 4477 - Constitutional Law I **gtPATHWAYS:**
- PSCI 4487 - Constitutional Law II **gtPATHWAYS:**
- PSCI 4545 - Immigration Politics **gtPATHWAYS:**

Comparative Politics and International Relations

- PSCI 4085 - Comparative Public Policy **gtPATHWAYS:**
- PSCI 4124 - Denver Politics **gtPATHWAYS:**
- PSCI 4185 - Corruption in the U.S. and Abroad **gtPATHWAYS:**
- PSCI 4226 - The United Nations in World Affairs **gtPATHWAYS:**
- PSCI 4236 - American Foreign Policy **gtPATHWAYS:**

- PSCI 4266 - International Law **gtPATHWAYS:**
- PSCI 4326 - Advanced International Political Economy: Globalization **gtPATHWAYS:**
- PSCI 4645 - Comparative Political Leadership **gtPATHWAYS:**

Public Policy and Administration

- PSCI 4009 - Politics of the Budgetary Process **gtPATHWAYS:**
- PSCI 4024 - Legislatures and Legislation **gtPATHWAYS:**
- PSCI 4084 - Local Government and Administration **gtPATHWAYS:**
- PSCI 4274 - Conflict Resolution and Public Consent Building **gtPATHWAYS:**
- PSCI 4414 - Organizational Change Agents **gtPATHWAYS:**
- PSCI 4644 - Ethical Responsibilities of Leaders **gtPATHWAYS:**

Total: 9 Hours

Elective courses

Choose any two additional courses from the list above, plus choose one other upper or lower division PSCI course.

Total: 9 Hours

Two political theory courses

- PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
- PSCI 4437 - Coercion and the State **gtPATHWAYS:**

Total: 6 Hours

Experiential-Learning Requirement *

Choose one:

- PSCI 3939 - Internship **gtPATHWAYS:**
- PSCI 4934 - CU at the Capitol **gtPATHWAYS:**

  * Students with significant volunteer experience in the community or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the requirement (36 hours still required).

Total: 3 Hours

Two cognate courses

- ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
- ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1

Total: 6 Hours

Public Policy Option Total: 42 Hours

Non Degree

Political Science Minor

A student can earn an undergraduate minor in political science by completing 15 semester hours distributed as shown below. At least 9 of the 15 hours must be taken from CU Denver faculty.

Course Requirements

One lower-division course

- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice **gtPATHWAYS:** GT-SS1
- -OR- PSCI 1101 - American Political System **gtPATHWAYS:** GT-SS1

Four 4000-level courses

Choose one 4000-level course in each of four fields: political theory, American politics, comparative politics and international relations.

Minor Total: 15 Hours

Master of Arts

New Directions, Political Science MA

Director: Kathryn Cheever
Telephone: 303-556-5950

E-mail: kathryn.cheever@ucdenver.edu

An alternative track of the political science MA program (Plan II) is offered off-campus through the Center for New Directions in Politics and Public Policy at Chaparral in Douglas County and on the Fort Lewis College campus in Durango. This politics and public policy track presents courses in an intensive weekend format. The emphasis on politics and the policy-making process relates to the ability of leaders to mobilize resources and achieve constituent goals consistent with the public interest. In this context, politics entails communication, and effective politics requires communication. In short, this emphasis on political awareness seeks to help participants utilize the political process as the “art of making what appears to be impossible, possible.”

Degree Requirements

Students must complete a total of 33 graduate credit hours to complete the MA degree.

Core Courses

- PSCI 5014 - Seminar: American Politics **gtPATHWAYS:**
- PSCI 5085 - Comparative Public Policy **gtPATHWAYS:**
- PSCI 5324 - Politics, Public Policy and Leadership **gtPATHWAYS:**
- PSCI 5457 - Seminar: American Political Thought **gtPATHWAYS:**
- PSCI 5468 - Research Methods in Political Science **gtPATHWAYS:**

Total: 15 Hours

Electives

In addition to the required core courses, students must take 15 credit hours of political science electives.

[*NOTE*: Previously earned graduate credit may be submitted for approval to satisfy up to nine hours of the supportive elective requirement. The elective courses offered may change from time to time based on needs, interests and other factors.]

Below are examples of electives taken by New Directions students:

- PSCI 5007 - Beyond Political Correctness **gtPATHWAYS:**
- PSCI 5009 - Politics of the Budgetary Process **gtPATHWAYS:**
- PSCI 5024 - State Politics: Focus on Colorado **gtPATHWAYS:**
- PSCI 5084 - Local Government and Administration **gtPATHWAYS:**
- PSCI 5274 - Conflict Resolution and Public Consent Building **gtPATHWAYS:**
- PSCI 5354 - Seminar: Environmental Politics and Policy **gtPATHWAYS:**
- PSCI 5374 - Public Priorities for the 21st Century **gtPATHWAYS:**

- PSCI 5414 - Organizational Change Agents **gtPATHWAYS:**
- PSCI 5644 - Ethical Responsibilities of Leaders **gtPATHWAYS:**

Total: 15 Hours

Project Requirement

All students are required to complete a 3-credit master's project under the direction of a faculty advisor. Registration is done using the Special Processing form, rather than online.

- PSCI 5960 - Master's Project **gtPATHWAYS:**

Total: 3 Hours

Major Total: 33 Hours

Common Course Outcomes

In addition to clearly stated subject outcomes, all courses will have a common set of outcomes related to the following areas which are considered critical in developing leadership capacities necessary to address the changing public priorities for the 21st century:

Creativity and innovation
Changing public priorities
Political and social diversity
Ethical accountability
Deductive and inductive reasoning
Applied use of appropriate technology
Strategic planning and decision making
Resolution of conflicts and public consent building
Individual, organizational and cultural communication effectiveness

Course Format

All courses are offered in a weekend format that consists of two or three weekend sessions for a given course spread out over a two-month period. Three-weekend classes are held from 9:00 am to 4:00 pm on both Saturday and Sunday of each weekend session. Two-weekend classes meet from 5:00 until 9:00 p.m. on Friday evening and from 8:30 a.m. until 4:30 p.m. on Saturday and Sunday. In most cases, a student will complete all of the two or three weekend sessions of one course before starting the weekend sessions for the next course. There is typically a 2-3 week break between semesters.

Location

All of the courses for the Denver-based programs are currently offered at the University Center at Chaparral, 20 miles south of downtown Denver. The University Center is located next to the Chaparral High School, just north of Lincoln Avenue at Chambers Road in Douglas County (15653 Brookstone Drive).

Courses for the Durango-based program are currently offered on the campus of Fort Lewis College.

Political Science MA

► Graduate School Rules apply to this program

The political science department offers a master of arts (MA) degree in political science with an emphasis on building academic and practical skills in key areas of the discipline. Research and teaching in the department centers on the major fields of American politics, comparative politics, international relations, political theory and public policy; however, the department also offers more specialized training in human rights, legal studies, gender politics, race and ethnic politics, European studies, indigenous politics and urban politics. Students pursuing the MA have the option of completing the traditional track or an alternative track centered on the study on politics, public policy and leadership. Students completing the program have gone on to PhD programs across the country and work in a variety of areas, including; state and local elected office, government service, directors of community-based organizations and nongovernmental organizations, legislative analysts, UN affiliates, lobbyists, teachers, media analysis and political consulting.

Requirements for Admission

Students applying for admission to the MA program in political science should present at least 18 semester hours of previous academic work in political science, at least 9 hours of which should be at the upper-division or graduate level. The department may make exceptions to these requirements in unusual cases (for instance, if course work in related fields such as psychology, economics and history compensates for the deficiencies in political science). Applicants should present an undergraduate GPA of at least 3.0 to be considered; however, the department typically admits students with a GPA of 3.2 or higher. In their applications, students must submit transcripts and letters of recommendation (from academic sources) as specified by the Graduate School. In addition, applicants must submit a statement of academic objectives and an academic writing sample. Standardized test scores are not required of applicants, but will be considered if submitted.

In order to take graduate courses in political science, students must either be admitted to the MA program or secure permission as a nondegree student. Nondegree students may take up to 12 semester hours of graduate course work; however, they must first secure permission from the department graduate advisor to enroll in all graduate course work.

Degree Requirements

In addition to the requirements for admission and details of the program spelled out here, graduate students in political science must also abide by department rules and procedures specified in the Graduate Student Handbook . Failure to meet these policies may result in a student being dropped from the program.

Under the MA program in political science, two degree plans are available:

- Plan I requires the completion of nine graduate courses (27 semester hours) and a 6-credit thesis
- Plan II requires the completion of ten graduate courses (30 semester hours) and a 3-credit project.

Course work in both plans completed under the traditional track offered on the Downtown Campus must include:

P SC 5000. The State of the Discipline

Additionally, at least one graduate seminar is required in each of the following areas: American politics, comparative politics or international relations, political theory and research methods.

Students will complete between 12 and 15 elective semester hours, depending on whether they are working under Plan I or II, which may be fulfilled through graduate course work in political science, related disciplines, independent study or internships. Ultimately, the total combination of independent study, graduate course work in related disciplines and internship cannot exceed 9 semester hours. With either plan, students are required to complete a minimum of 16 semester hours with the political science department at the University of Colorado Denver, and maintain a minimum *B* (3.0) overall GPA or better. Students who are on probation must meet regularly with the graduate advisor and must secure approval from the advisor for all course work while on probation.

Plan II is available both under the traditional MA track offered on the Denver campus, as well as through an alternative track offered off-campus through the Center for New Directions in Politics and Public Policy. For details about this off-campus track in politics and public policy, see New Directions, MA in Political Science .

Psychology

Chair: Peter S. Kaplan
Program Assistant: Anne Beard
Administrative Assistant: Kimberly Hill
BA Undergraduate Advisor: Mitchell Handelsman
BS Undergraduate Advisor: Richard Allen
Director, Clinical Health Psychology Ph.D. Program: Kevin Masters
Director of Clinical Training: Abbie Beacham
Director, Clinical Psychology M.A. Program: Michael Zinser
Director, Psychological Services Center: Michael Zinser

Office: North Classroom, 5002
Telephone: 303-556-8565
Fax: 303-556-3520
Website: clas.ucdenver.edu/psychology/index.html

Undergraduate Programs
Graduate Programs

Faculty

Professors:

Mary Coussons-Read, PhD, University of North Carolina

James Grigsby, PhD, University of Colorado

Mitchell M. Handelsman, PhD, University of Kansas

Peter S. Kaplan, PhD, Indiana University

Kevin S. Masters, PhD, Brigham Young University

Associate Professors:

David Albeck, PhD, University of Colorado

Richard Allen, PhD, University of North Carolina at Chapel Hill

Joy L. Berrenberg, PhD, University of Colorado

Evelinn Borrayo, PhD, University of North Texas

Michael Zinser, PhD, University of Wisconsin, Madison

Assistant Professors:

Elizabeth Sandin Allen, PhD, University of North Carolina at Chapel Hill

Abbie Beacham, PhD, University of Louisville

Sondra Bland, PhD, University of Texas

Kristin Kilbourn, PhD, University of Miami

Senior Instructors:

Joan Bihun, PhD, Wayne State University

Kevin Everhart, PhD, University of South Carolina

Vivian Shyu, PhD, University of Denver

Emeritus Professors:

Rick M. Gardner, PhD, University of Nevada

Psychology is the scientific study of behavior, consisting of the following major areas of study: experimental psychology, biopsychology, animal behavior, developmental psychology, social psychology, cognitive psychology, personality, industrial/organizational psychology and abnormal psychology. The requirements for the major are designed to introduce the student to the spectrum of psychology, including an early exposure to research methods and statistics.

The psychology major prepares students for employment and for graduate study in psychology and related fields. The psychology department also offers an MA in psychology with a clinical emphasis and a PhD in clinical health psychology.

Undergraduate

REQUIREMENTS FOR THE MAJOR: BA

REQUIREMENTS FOR THE MAJOR: BS

Honors

There are two ways in which a student graduating with a Bachelor of Arts or Bachelor of Science degree in Psychology can graduate with honors. First, the College of Liberal Arts and Sciences (CLAS) awards the honor of graduating “with distinction” primarily based on the student having a high overall grade point average. See the CLAS general information section on Undergraduate Policies and Procedures, Academic Honors , in the current catalog for further information.

The second form of honors, “Latin honors,” is awarded by individual departments within CLAS, including psychology. The CU Denver Department of Psychology has approved a very rigorous set of requirements for Latin honors. Successful completion of an honors project is at least a year-long, multi-faceted process in which the student makes a contribution to our knowledge in psychology. A student who satisfies these requirements will have truly earned a noteworthy academic achievement of which they rightfully should be proud.

Students interested in research are encouraged to pursue opportunities as early in their academic career as possible. These early research experiences can be useful in helping formulate research ideas and hypotheses that can form the basis of an honors thesis project. Listed below are the policies and requirements for completing an honors project.

An honors thesis can take one of the following forms:

1. An original empirical study designed and carried out by the student. The experimental design must be substantially complex to warrant honors. Honors students may collect their own data for this project or may use archival data for the purposes of answering their own original question. A research question is considered to be substantially complex enough if the analyzed data would be of high enough quality to be presented at a local research meeting.
2. A substantive, integrative library review in an area approved by the honors committee, culminating in a high quality review article which includes proposed research directions designed by the student to gather knowledge lacking in the current scientific literature.
3. A substantive, integrative critical analysis of a major theoretical issue in the field of psychology approved by the honors committee and culminating in a high quality theoretical paper.

Eligibility

To be eligible to graduate with honors in psychology, a CU Denver psychology major must meet the following requirements:

- Student must have an overall GPA of 3.5 or higher at the start of the project (75 credit hours completed toward the degree)
- The student must have a psychology GPA of 3.5 or higher in psychology courses taken at CU Denver

Students interested in earning honors should consult with the psychology faculty during their junior year. More information about honors projects can be found on the psychology department Web site.

REQUIREMENTS FOR THE MINOR

Graduate

The psychology department offers a master of arts (MA) degree in psychology with an emphasis in clinical psychology and a doctor of philosophy (PhD) degree in clinical health psychology. In general, our programs train students within the context of the scientist-practitioner model. That is, we value an integrated approach to both the science and practice of clinical psychology. Our training emphasizes the contribution of research to the understanding, treatment and prevention of human problems, and the application of knowledge that is grounded in scientific evidence.

REQUIREMENTS FOR THE MA IN PSYCHOLOGY, CLINICAL EMPHASIS

REQUIREMENTS FOR THE PhD IN CLINICAL HEALTH PSYCHOLOGY

Bachelor of Arts

Psychology BA

Students should consult with the advisor when they declare a psychology major, which must be done once they have completed 60 semester hours of course work. Psychology BA major requirements include at least 37 and not more than 48 semester hours in psychology. Of these, at least 15 hours must be in upper-division courses taught by CU Denver faculty. No grade below *C* (2.0) will be accepted toward the major requirements. Note that a prior college-level algebra course is strongly recommended for PSYC 2090.

PSYC 3939, Internship/Cooperative Education, does NOT count toward the 37-hour minimum or the 15-hour upper-division requirement, but it does count as elective psychology credit.

Program Requirements

Required Courses

- PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3
- PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3
- PSYC 2090 - Statistics and Research Methods **gtPATHWAYS:**

- PSYC 2220 - Biological Basis of Behavior **gtPATHWAYS:** GT-SC2

Total: 13 Hours

Group A: Choose three, including one or both PSYC 3222 and PSYC 4144:

- PSYC 3104 - Behavioral Genetics **gtPATHWAYS:**
- PSYC 3222 - Principles of Learning and Behavior **gtPATHWAYS:**
- PSYC 3254 - Introduction to Animal Behavior **gtPATHWAYS:**
- PSYC 3262 - Health Psychology **gtPATHWAYS:**
- PSYC 3263 - Hormones and Behavior **gtPATHWAYS:**
- PSYC 3265 - Drugs, Brain and Behavior **gtPATHWAYS:**
- PSYC 3724 - Developmental Psychobiology **gtPATHWAYS:**
- PSYC 3810 - Neuropsychology **gtPATHWAYS:**
- PSYC 3822 - Aging, Brain and Behavior **gtPATHWAYS:**
- PSYC 4054 - Behavioral Neuroscience **gtPATHWAYS:**
- PSYC 4144 - Human Cognition **gtPATHWAYS:**
- PSYC 4164 - Psychology of Perception **gtPATHWAYS:**

Total: 9 Hours

Group B: Choose four, including at least two or all three of PSYC 3205, PSYC 3305, and PSYC 4415:

- PSYC 3090 - Research Methods in Experimental Psychology **gtPATHWAYS:**
- PSYC 3135 - Organizational Psychology **gtPATHWAYS:**
- PSYC 3205 - Human Development I: Child Psychology **gtPATHWAYS:**
- PSYC 3215 - Human Development II: Adolescence and Adulthood **gtPATHWAYS:**
- PSYC 3235 - Human Sexuality **gtPATHWAYS:**
- PSYC 3305 - Abnormal Psychology **gtPATHWAYS:**
- PSYC 3405 - Family Psychology **gtPATHWAYS:**
- PSYC 3505 - Psychology and the Law **gtPATHWAYS:**
- PSYC 3610 - Psychological Trauma **gtPATHWAYS:**
- PSYC 3611 - Psychology of Women **gtPATHWAYS:**
- PSYC 3612 - Domestic Abuse **gtPATHWAYS:**
- PSYC 4415 - Experimental Social Psychology **gtPATHWAYS:**
- PSYC 4455 - Theories of Personality **gtPATHWAYS:**
- PSYC 4485 - Psychology of Cultural Diversity **gtPATHWAYS:**
- PSYC 4500 - Psychotherapy **gtPATHWAYS:**
- PSYC 4645 - Industrial Psychology **gtPATHWAYS:**
- PSYC 4730 - Clinical Psychology: Ethics and Issues **gtPATHWAYS:**

Total: 12-13 Hours

One integrative course:

- PSYC 4511 - History of Psychology **gtPATHWAYS:**

Total: 3 Hours

BA Major Total: 37-38 Hours

PSYCHOLOGY BS REQUIREMENTS

Bachelor of Science

Psychology BS

Students must declare a major by the time they have completed 60 semester hours of course work. To be admitted to the BS major, students must have sophomore standing and have received grades of *B* or better in General Biology I and II for majors with laboratory, or the equivalent. Students must take at least 48 hours and a maximum of 56 semester hours in psychology, biology and chemistry that will count toward graduation. A minimum of 15 upper-division semester hours must be taken from CU Denver faculty. No grade below *C* is acceptable toward the major requirements; i.e., psychology, biology or chemistry courses in which a student earns a *C-* or below will not count toward the major.

Psychology Requirements

Required Psychology Courses

- PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3
- PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3
- PSYC 2090 - Statistics and Research Methods **gtPATHWAYS:**
- PSYC 2220 - Biological Basis of Behavior **gtPATHWAYS:** GT-SC2
- PSYC 4054 - Behavioral Neuroscience **gtPATHWAYS:**

Total: 16 Hours

Choose two:

- PSYC 3090 - Research Methods in Experimental Psychology **gtPATHWAYS:**

- PSYC 3104 - Behavioral Genetics **gtPATHWAYS:**
- PSYC 3222 - Principles of Learning and Behavior **gtPATHWAYS:**
- PSYC 3254 - Introduction to Animal Behavior **gtPATHWAYS:**
- PSYC 3263 - Hormones and Behavior **gtPATHWAYS:**
- PSYC 3265 - Drugs, Brain and Behavior **gtPATHWAYS:**
- PSYC 3724 - Developmental Psychobiology **gtPATHWAYS:**
- PSYC 3810 - Neuropsychology **gtPATHWAYS:**
- PSYC 3822 - Aging, Brain and Behavior **gtPATHWAYS:**
- PSYC 4164 - Psychology of Perception **gtPATHWAYS:**

Total: 6-7 Hours

Experiential Learning Requirement

Students must complete at least one of the following (all require consultation with BS advisor AND permission of instructor):

- PSYC 3939 - Internship **gtPATHWAYS:** (2.75 GPA required)
- PSYC 4840 - Independent Study: PSYC **gtPATHWAYS:**
  Honors Project in Psychology (3.5 GPA required): **3 Semester Hours**

Total: 3 Hours

Physical and Biological Science Requirements

Required Courses

- BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
- BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
- BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
- BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
- CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
- CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
- CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
- CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1

Total: 17 Hours

Choose two:

- BIOL 3225 - Human Physiology **gtPATHWAYS:**
- BIOL 3244 - Human Anatomy **gtPATHWAYS:**

- BIOL 3611 - General Cell Biology **gtPATHWAYS:**
- BIOL 3654 - General Microbiology **gtPATHWAYS:**
- BIOL 3832 - General Genetics **gtPATHWAYS:**
- BIOL 4134 - Human Genetics **gtPATHWAYS:**
- BIOL 4165 - Neurobiology **gtPATHWAYS:**
- BIOL 4621 - Immunology **gtPATHWAYS:**
- CHEM 4810 - General Biochemistry I **gtPATHWAYS:**

Total: 6-8 Hours

BS Major Total: 48-51 Hours

Additional elective courses in psychology, biology and chemistry may be taken up to the maximum of 56 hours.

PSYCHOLOGY BA REQUIREMENTS

Non Degree

Psychology Minor

Program Requirements

A minor in psychology requires the completion of 15 semester hours with a grade of *C* (2.0) or better in each course, including the following courses:

Two introductory courses:

- PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3
- PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3

One of the following courses:

- PSYC 3222 - Principles of Learning and Behavior **gtPATHWAYS:**
- PSYC 4144 - Human Cognition **gtPATHWAYS:**

One of the following courses:

- PSYC 3205 - Human Development I: Child Psychology **gtPATHWAYS:**
- PSYC 3305 - Abnormal Psychology **gtPATHWAYS:**
- PSYC 4415 - Experimental Social Psychology **gtPATHWAYS:**

One capstone (final) course:

- PSYC 4511 - History of Psychology **gtPATHWAYS:** (Prereq: 12 credit hours in psychology)

At least 6 upper-division semester hours must be taken from CU Denver faculty. Further information about the department may be obtained from department advisors or by calling 303-556-8565.

Master of Arts

Psychology MA

► Graduate School Rules apply to this program

Objectives and Requirements

The major objective of the MA program is to prepare graduates for doctoral-level study in both PhD and PsyD programs. Assessment training includes theory, diagnostic interviewing, intelligence testing and some personality testing with both children and adults. We introduce students to the theory and application of major models of psychotherapy and to psychopathology theory and research. We also emphasize the ethical principles that permeate clinical psychology and the application of these principles to problems in mental health practice, teaching and research. Finally, students become well versed in statistical methods. Students take the required courses during their first year in the program. During the second year, they choose to specialize by opting for a research-based thesis and/or an applied internship at a mental health agency. Students also demonstrate competency by defending a thesis or an internship competency project. Students can complete the program in slightly less than two years, and have up to five years to complete the program according to Graduate School Rules.

Admissions

The application deadline is February 1 for the following fall. Applicants are responsible for making sure all materials are in on time. We do not consider late applications. International students should be sure to submit all materials at least two weeks before this deadline (by January 15) so that they arrive at our department on time. Below is condensed information; see the psychology department website for complete information.

Admission Requirements:

- BA or BS from an accredited college or university, with a minimum GPA of 3.5 based on all college course work. However, successful applicants over the past several years have typically held GPAs above 3.5, with an average GPA of 3.7.
- Undergraduate courses in: introductory psychology, psychological statistics and abnormal psychology. Additional courses in psychology are highly desirable; our

admissions committee will also look favorably upon courses in the biological and physical sciences.
- Two official transcripts from each college and university attended.
- Graduate Record Exam (GRE) General Test (verbal, quantitative, analytical writing) is required for all applicants. The subject test in psychology is not required, but is strongly recommended for applicants who do not hold an undergraduate degree in psychology. Successful applicants in recent years have typically had GRE verbal plus quantitative scores above 1100. Take the exam at least six weeks before the February 1 deadline so that the scores arrive on time.
- Three letters of recommendation, at least two of which must be academic references, accompanied by the Request for Recommendation form.
- Graduate Application Form, with answers as informative as possible.
- Application fee of $50 ($75 for International Students). This fee can be paid online; however, if paying by check, please specify “PSY M.A. CLN” on the memo line in the lower left corner of your check.

Financial Information

The University of Colorado Denver administers various forms of financial aid for graduate students: fellowships, scholarships and a number of awards from outside agencies. See the Office of Financial Aid for further information. Additionally, the psychology department offers teaching assistantships each year in such courses as introductory psychology, statistics, research methods and human development. Teaching Assistantships are not guaranteed.

Contingent upon the availability of grant money, faculty may also offer part-time research assistantships to qualified students. The typical RA position involves data collection and analysis, library research, etc. Some computer and statistical skills are usually required. RA positions may arise on very short notice.

Please note: Neither teaching nor research assistantships confer in-state tuition status or include tuition waivers.

Degree Requirements

A total of 30 (for thesis students) or 33 (for internship students) semester hours are required for graduation: 24 for required courses and either six thesis hours or eight internship hours. Internship students must also register for one credit for the Internship Competency Project. Students must maintain a 3.0 grade point average.

Demonstration of competence

Upon completion of the 24 hours of course work (eight courses), students must demonstrate competence in several core areas (e.g., statistics and methods, ethics,

assessment, psychotherapy, psychopathology) by completing a thesis or an internship competency project (ICP).

Internship or Thesis

Students have the option of completing a master's thesis and/or pursing an internship. The thesis involves a research project that makes a significant contribution to the field. Topics pursued by students in our master's program have included body image in eating disorders, HIV infection and childhood abuse, humor as a moderator between social conflict and psychological distress, and ethical issues regarding informed consent for psychotherapy.

Students who are particularly interested in going on to PhD programs should strongly consider the thesis option, since most PhD programs prefer individuals who have prior research experience. Applicants who are interested in the thesis option and whose research interests/experience overlap with those of a faculty member should contact that faculty member directly.

Alternatively, students may begin work on an 800-hour internship following successful completion of their courses. Students select internships (subject to program approval) based on personal interests. The greater Denver area offers a rich variety of internship possibilities, and our students have worked at a variety of agencies, including community mental health centers, inpatient and residential treatment facilities, social services, hospitals, probation and diversion programs and university counseling centers.

At minimum, students must complete either an 800-hour internship or a thesis. Students also have the option to complete both or to do a thesis and a 400-hour internship.

Doctor of Philosophy

Clinical Health Psychology PhD

► Graduate School Rules apply to this program

Objectives of the Program

A primary focus of clinical health psychology is the development of effective disease prevention interventions for populations at high risk for medical problems. A second focus of clinical health psychology is the development of strategies to help individuals who are already ill to manage their disease, increase their ability to collaborate with medical professionals and improve their coping skills. Students in this program will be trained to work within the community to use psychological tools and techniques to promote health, prevent and treat illness and improve the health care system. In addition to course work, students acquire expertise in research by completing a second-year

project and doctoral dissertation, and demonstrate competence in clinical assessment and intervention through several applied practicum experiences, a clinical competency project and a pre-doctoral internship. Students can complete the program in five years and have up to eight years to complete the program according to Graduate School Rules.

Admissions

The application deadline is December 15 for the following fall. You are responsible for making sure all materials are in on time. We do not consider late applications. International students should be sure to submit all materials at least two weeks before this deadline (by December 1) so that they arrive at our department on time. Below is condensed information; see the department website for complete information.

Admission Requirements:

- BA or BS from an accredited college or university, with a minimum GPA of 3.5 based on all college course work.
- Undergraduate courses in: introductory psychology, psychological statistics, research methods and abnormal psychology. Additional courses in psychology are highly desirable; our admissions committee will also look favorably upon courses in the biological and physical sciences.
- Two official transcripts from each college and university attended.
- Graduate Record Exam (GRE): The GRE General Test (verbal, quantitative, analytical writing) is required. General test: minimum score of 1100 for the combined verbal and quantitative sections is expected. The GRE should be taken at least six weeks before the December 15 deadline so that the scores arrive on time.
- Three letters of recommendation, at least two of which must be academic references, accompanied by the Request for Recommendation form.
- Graduate Application, with answers as informative as possible.
- Application fee of $50 ($75 for International Students). This fee can be paid online; however, if paying by check, please specify "CHP PhD" on the memo line in the lower left corner of your check.

Financial Information

The University of Colorado Denver administers various forms of financial aid for graduate students: fellowships, scholarships and a number of awards from outside agencies. See the Office of Financial Aid for further information. Additionally, the psychology department offers teaching assistantships each year in such courses as introductory psychology, statistics, research methods, human development and other courses. Although we do not guarantee TA positions, we generally have been able to offer positions to most of our interested students.

Contingent upon the availability of grant money, faculty may also offer part-time research assistantships to qualified students. The typical RA position involves data collection and analysis, library research, etc. Some computer and statistical skills are usually required. RA positions are less available than TA positions, and they may arise on very short notice.

In-state tuition waivers and additional stipend monies may be available for doctoral students. We do guarantee to pay a full stipend, usually in the form of an assistantship, plus tuition for the first year. We will make every effort to do so for four years.

Please note: Neither teaching nor research assistantships confer in-state tuition status.

Degree Requirements

Course Work:
Approximately 60 credits of course work are required for graduation. Typically, students will take 4 courses each semester of their first year, 3 courses each semester of their second and third years, 2 courses in the first semester of their fourth year and at least 1 course in the second semester of their fourth year in the program. Students must maintain a 3.0 grade point average, and no grade below a *B-* will count toward the requirements.

In addition to the minimum required 60 credits of course work, students must also register for a minimum of 24 clinical practicum hours. Students must also register for and complete a doctoral dissertation. Students must also register for 3 credits of pre-doctoral internship each of the three semesters of their internship year, for a total of 120 credits. Students can complete the program in five years and have up to eight years to complete the program according to Graduate School Rules.

Second Year Project:
All students must complete a second year research project. This thesis involves a research project that makes a significant contribution to the field. Although the question must be the student's own original question, use of archival data and pilot studies are encouraged for this project.

Clinical Practica:
A minimum of 500 face-to-face intervention and assessment hours and 1200 total practicum hours [face-to-face intervention and assessment hours, plus supervision, plus support hours as defined by the Association of Psychology Postdoctoral and Internship Centers (APPIC)] will be required in preparation for applications to pre-doctoral internships. A minimum of 50% of required practica will be conducted in medical settings. Beyond the minimum requirements, students select practica based on personal interests. All field placements must be approved by the Director of Clinical Training (DCT) in advance.

Demonstration of competence:
Upon completion of the first two years of course work (42 credits), in the third year of training, students must demonstrate competence in clinical psychology by completing a clinical competency project (CCP). This project is designed to demonstrate competency in applied clinical skills relevant to assessment and intervention and to encourage integration of empirical research and applied clinical work.

Dissertation:
Students must complete a dissertation that involves original empirical work and is distinct from other research projects and publications. The dissertation proposal must be completed and defended prior to making application for the pre-doctoral internship. Students must have a dissertation committee composed of four members. When the dissertation is completed to the satisfaction of the primary advisor, the student must orally defend the dissertation to the committee.

Internship:
Students must complete a 12-month, full-time pre-doctoral clinical internship, preferably at an APA-accredited site. This internship is required of all clinical psychologists and is the capstone of clinical training in the doctoral program.

Religious Studies

Director: Sharon L. Coggan
Office: Plaza Building, M108K
Telephone: 303-556-4715
Website: clas.ucdenver.edu/religiousStudies/

Faculty (concurrently appointed)

Associate Professors:

Nancy Ciccone (English)
Colleen Donnelly (English)
Robert Metcalf (Philosophy)

Instructors:
Edward Casteel (Sociology)
Sharon Coggan (Philosophy/Religious Studies)
Amin Kazak (Political Science)
Lucy McGuffey (Political Science)
Daryl Mehring (Philosophy)

Lecturers:
Shelby Balik (History)

Celeste Rossmiller (Religious Studies)
Richard Smith (History)
Constance Wise (Religious Studies)

An undergraduate minor is offered in religious studies, a discipline that overlaps with many other fields of study: anthropology, literature, philosophy, psychology and others. Religion has played a vital role in history and continues to do so in contemporary life. The degree of interaction between a religious tradition and its host society is profound. Knowledge of its religion(s) is essential for a genuine understanding of each culture. Students will study the nature of the belief systems of the world's great religious traditions. Specific courses will offer the possibility of focusing one's studies in the areas of ancient myth and shamanic traditions, Judaic and Christian studies, Islam, Asian religions, psychology of religion, philosophy of religion, anthropology and sociology of religion, religion and literature and biblical studies.

REQUIREMENTS FOR THE MINOR

Non Degree

Religious Studies Minor

Eighteen semester hours, at least 9 of which must be upper division and at least 9 semester hours taken with CU Denver faculty. A minimum cumulative GPA of 2.0 for all CU Denver courses taken in the minor is required, with no individual course grade lower than a *C* (2.0).

Program Requirements

Required Courses (9 hours):

- RLST 1610 - Introduction to Religious Studies **gtPATHWAYS:** GT-AH3

One course in Western religions chosen from approved list:

- * RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3
- RLST 2700 - The Bible as Literature **gtPATHWAYS:**
- -OR- ENGL 2520 - The Bible as Literature **gtPATHWAYS:**
- RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference **gtPATHWAYS:**
- RLST 3060 - History of Early Christianity **gtPATHWAYS:**
- RLST 3740 - Biblical Traditions: Old Testament **gtPATHWAYS:**

- RLST 3760 - Biblical Studies: New Testament **gtPATHWAYS:**
- RLST 3770 - Archaeological Discoveries Relating to the Bible **gtPATHWAYS:**
- RLST 4070 - Western Religious Thought **gtPATHWAYS:**
- -OR- PHIL 4710 - Western Religious Thought **gtPATHWAYS:**
- RLST 4400 - Differing Concepts of God **gtPATHWAYS:**
- -OR- PHIL 4650 - Differing Concepts of God **gtPATHWAYS:**
- * RLST 4440 - Concepts of the Soul **gtPATHWAYS:**
- -OR- * PHIL 4470 - Concepts of the Soul **gtPATHWAYS:**
- * RLST 4460 - Death and Concepts of Afterlife **gtPATHWAYS:**

  * Fulfills requirement for either Eastern or Western religion, but not both simultaneously

One course in Eastern religions chosen from approved list:

- * RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3
- RLST 3400 - Asian Philosophies and Religions **gtPATHWAYS:**
- -OR- PHIL 3666 - Asian Philosophies and Religions **gtPATHWAYS:**
- RLST 3500 - Religions of India **gtPATHWAYS:**
- RLST 3660 - Chinese Philosophy and Culture **gtPATHWAYS:**
- -OR- PHIL 3981 - Chinese Philosophy and Culture **gtPATHWAYS:**
- RLST 4080 - Eastern Religious Thought **gtPATHWAYS:**
- -OR- PHIL 4720 - Eastern Religious Thought **gtPATHWAYS:**
- RLST 4160 - Mysticism **gtPATHWAYS:**
- * RLST 4440 - Concepts of the Soul **gtPATHWAYS:**
- -OR- * PHIL 4470 - Concepts of the Soul **gtPATHWAYS:**
- * RLST 4460 - Death and Concepts of Afterlife **gtPATHWAYS:**

  * Fulfills requirement for either Eastern or Western religion, but not both simultaneously

Elective courses (9 hours):

The remaining 9 hours to equal the required 18 hours will count as electives, to be chosen from the full list of courses (below).

Other courses, such as certain special topics, art history courses featuring religious themes and others may count toward the minor at the discretion of the course instructor and the director.

- RLST 1610 - Introduction to Religious Studies **gtPATHWAYS:** GT-AH3
- * RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3
- RLST 2680 - The American Indian Experience **gtPATHWAYS:**
- -OR- ETST 2606 - The American Indian Experience **gtPATHWAYS:**

- RLST 2700 - The Bible as Literature **gtPATHWAYS:**
- -OR- ENGL 2520 - The Bible as Literature **gtPATHWAYS:**
- RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference **gtPATHWAYS:**
- RLST 3060 - History of Early Christianity **gtPATHWAYS:**
- RLST 3080 - Reformation Europe **gtPATHWAYS:**
- -OR- HIST 4022 - Reformation Europe **gtPATHWAYS:**
- RLST 3100 - Islamic Politics and Culture **gtPATHWAYS:**
- -OR- PSCI 4165 - Islamic Politics and Culture **gtPATHWAYS:**
- RLST 3300 - Shamanic Traditions **gtPATHWAYS:**
- RLST 3400 - Asian Philosophies and Religions **gtPATHWAYS:**
- -OR- PHIL 3666 - Asian Philosophies and Religions **gtPATHWAYS:**
- RLST 3500 - Religions of India **gtPATHWAYS:**
- RLST 3660 - Chinese Philosophy and Culture **gtPATHWAYS:**
- -OR- PHIL 3981 - Chinese Philosophy and Culture **gtPATHWAYS:**
- RLST 3720 - Religious Narratives **gtPATHWAYS:**
- -OR- ENGL 3520 - Religious Narratives **gtPATHWAYS:**
- RLST 3740 - Biblical Traditions: Old Testament **gtPATHWAYS:**
- RLST 3760 - Biblical Studies: New Testament **gtPATHWAYS:**
- RLST 3770 - Archaeological Discoveries Relating to the Bible **gtPATHWAYS:**
- RLST 4000 - Religion and Cultural Diversity **gtPATHWAYS:**
- RLST 4010 - Comparative Religious Systems **gtPATHWAYS:**
- -OR- ANTH 4130 - Comparative Religious Systems **gtPATHWAYS:**
- RLST 4020 - Sociology of Religion **gtPATHWAYS:**
- -OR- SOCY 4610 - Sociology of Religion **gtPATHWAYS:**
- RLST 4040 - Psychology of Religion **gtPATHWAYS:**
- RLST 4060 - Philosophy of Religion **gtPATHWAYS:**
- -OR- PHIL 4600 - Philosophy of Religion **gtPATHWAYS:**
- RLST 4070 - Western Religious Thought **gtPATHWAYS:**
- -OR- PHIL 4710 - Western Religious Thought **gtPATHWAYS:**
- RLST 4080 - Eastern Religious Thought **gtPATHWAYS:**
- -OR- PHIL 4720 - Eastern Religious Thought **gtPATHWAYS:**
- RLST 4100 - Special Topics in Religion **gtPATHWAYS:**
- RLST 4160 - Mysticism **gtPATHWAYS:**
- RLST 4260 - Kosmos: Theories of the Universe **gtPATHWAYS:**
- -OR- PHIL 3420 - Kosmos: Theories of the Universe **gtPATHWAYS:**
- RLST 4280 - Current Perspectives on the Evolution of Consciousness and Culture **gtPATHWAYS:**
- -OR- GEOL 3100 - Current Perspectives on the Evolution of Consciousness and Culture **gtPATHWAYS:**
- -OR- PHIL 3100 - Current Perspectives on the Evolution of Consciousness and Culture **gtPATHWAYS:**
- RLST 4300 - Myth and Symbol **gtPATHWAYS:**
- RLST 4320 - Spirituality in the Modern World **gtPATHWAYS:**

- RLST 4340 - The Hero's Journey **gtPATHWAYS:**
- -OR- ENGL 3530 - The Hero's Journey **gtPATHWAYS:**
- RLST 4360 - Freudian and Jungian Perspectives in Dream Analysis **gtPATHWAYS:**
- RLST 4400 - Differing Concepts of God **gtPATHWAYS:**
- -OR- PHIL 4650 - Differing Concepts of God **gtPATHWAYS:**
- RLST 4420 - Goddess Traditions **gtPATHWAYS:**
- -OR- WGST 4420 - Goddess Traditions **gtPATHWAYS:**
- * RLST 4440 - Concepts of the Soul **gtPATHWAYS:**
- -OR- * PHIL 4470 - Concepts of the Soul **gtPATHWAYS:**
- * RLST 4460 - Death and Concepts of Afterlife **gtPATHWAYS:**
- RLST 4480 - Perspectives on Good and Evil **gtPATHWAYS:**
- -OR- PHIL 4480 - Perspectives on Good and Evil **gtPATHWAYS:**
- RLST 4500 - Religion and Politics **gtPATHWAYS:**
- -OR- PSCI 4057 - Religion and Politics **gtPATHWAYS:**
- RLST 4730 - Whores and Saints: Medieval Women **gtPATHWAYS:**
- -OR- ENGL 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
- -OR- WGST 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
- RLST 4840 - Independent Study: RLST **gtPATHWAYS:**

Minor Total: 18 Hours

Social Justice

Director: Chad Kautzer, Philosophy
Office: Plaza M108G
Telephone: 303-556-6275
E-mail: chad.kautzer@ucdenver.edu
Website: clas.ucdenver.edu/socialJustice/

Faculty

(concurrently appointed)

Professors:

Jana Everett (Political Science)

Donna Langston (Ethnic Studies)

Associate Professors:

Nancy Ciccone (English)

Candan Duran-Aydintug (Sociology)

David Hildebrand (Philosophy)

Omar Swartz (Communication)

Barbara Walkosz (Communication)

Catherine Wiley (English)

Assistant Professors:

Christopher Agee (History)

Chad Kautzer (Philosophy)

Senior Instructor:

Lucy McGuffey (Political Science)

Instructor:

Harvey Bishop (Political Science)

Undergraduate Minor

Twenty-first century students need global perspectives on citizenship that are informed by and can contribute to processes of civic engagement locally and in all parts of the world. This minor encourages students to recognize how social justice, critical consumption of goods and ideas and civic engagement intersect. It reinforces the many ways that our students are already engaged as citizens, and it helps solidify their power to effect real change.

STUDENT LEARNING GOALS

As minors in social justice, students will hone skills in critical thinking, oral and written discourse and problem solving so that they can reflect on their own moral values and civic responsibilities. They will also critically assess how they are defined and influenced by various sources such as media and institutions that describe and prescribe our and

others' cultures and learn to understand others' beliefs and values despite differences. Finally, social justice minors will engage in dialogue to resolve conflicts and design solutions by working in a collaborative manner to create change.

REQUIREMENTS FOR THE MINOR

Non Degree

Social Justice Minor

Requirements for the Minor

The minor consists of 18 semester hours, structured as follows:

- A required introductory class (with either a social science or humanities focus); see below.
- An experiential learning component of 3 semester hours.
- Upper-division course work to be determined by individual students in consultation with the social justice minor director. At least two disciplines must be represented.
- A 3-semester-hour capstone seminar that will provide opportunity for further reflection on the experiential learning projects and student group projects.

Required course

Choose one:

- SJUS 2000 - Democratic Participation and Social Justice **gtPATHWAYS:**
- SJUS 2010 - Social Justice: Theories, Narratives, and Technologies **gtPATHWAYS:**

Total: 3 Hours

Internship

A 3-semester-hour internship in any discipline of the social sciences or humanities, involving community work and including a reflective component and public dissemination or report.

Total: 3 Hours

Upper-Division Courses

Choose three (below is a sample list of upper-division courses, but other courses may be considered):

- ANTH 3142 - Cultural Diversity in the Modern World **gtPATHWAYS:**
- ANTH 4070 - Culture of Development and Globalization **gtPATHWAYS:**
- COMM 4022 - Critical Analysis of Communication **gtPATHWAYS:**
- COMM 4200 - Persuasion **gtPATHWAYS:**
- COMM 4260 - Communication and Conflict **gtPATHWAYS:**
- ENGL 3795 - Race and Ethnicity in American Literature **gtPATHWAYS:**
- ENGL 4280 - Proposal and Grant Writing **gtPATHWAYS:**
- ETST 3108 - Chicano/a and Latino/a History **gtPATHWAYS:**
- ETST 3274 - Power, Poverty, Culture **gtPATHWAYS:**
- ETST 3396 - History of the American Indian **gtPATHWAYS:**
- ETST 3704 - Culture, Racism and Alienation **gtPATHWAYS:**
- GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
- GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
- GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
- HBSC 3041 - Health, Culture and Society **gtPATHWAYS:**
- HBSC 4021 - Community Health Assessment **gtPATHWAYS:**
- HIST 3345 - Immigration and Ethnicity in American History **gtPATHWAYS:**
- HIST 4217 - Consumer Culture **gtPATHWAYS:**
- HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present **gtPATHWAYS:**
- PHIL 3200 - Social and Political Philosophy **gtPATHWAYS:**
- PHIL 3280 - War and Morality **gtPATHWAYS:**
- PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
- PHIL 4920 - Philosophy of Media and Technology **gtPATHWAYS:**
- -OR- PHIL 5920 - Philosophy of Media and Technology **gtPATHWAYS:**
- PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
- PSCI 4025 - Local Governance and Globalization **gtPATHWAYS:**
- PSCI 4207 - Theories of Social and Political Change **gtPATHWAYS:**
- RLST 4000 - Religion and Cultural Diversity **gtPATHWAYS:**
- SOCY 3001 - Urban Sociology **gtPATHWAYS:**
- SOCY 3030 - Social Change **gtPATHWAYS:**
- SOCY 4440 - Social Inequality **gtPATHWAYS:**

Total: 9 Hours

Capstone

Total: 3 Hours

Minor Total: 18 Hours

Social Science, Master of

Director: Omar Swartz
Assistant Director: Myra Bookman
Office: Modular #1, MC01 (east of Tivoli Student Union)
Telephone: 303-556-2305
Fax: 303-352-3872
E-mail: masterhs@ucdenver.edu
Website: clas.ucdenver.edu/ict/index.html

Faculty

Associate Professor:
Omar Swartz, JD, Duke University; PhD, Purdue University

Senior Instructors:
Myra Bookman, PhD, University of Colorado
Margaret Woodhull, PhD, University of Texas, Austin

The master of social science (MSS) program is designed to meet the needs of students who prefer flexibility in constructing an individualized course of study in social science. Emphasis is placed on the integration of knowledge across and beyond traditional disciplinary boundaries. This is accomplished through three required seminars, courses from a variety of disciplines chosen with the approval of advisors and program directors, and a project or thesis. Courses can be chosen from the social science disciplines: anthropology, communication, economics, geography, history, law, political science, psychology and sociology, as well as from other disciplines and programs, e.g., English, philosophy, education, public affairs and architecture.

The MSS program is intended for students interested in developing their own interdisciplinary perspectives in such areas as social thought, public policy, women's studies, educational reform and cross-cultural studies or politics. The program can provide: training for advancement in the professions of education, business, social service and government; a basis for further graduate studies in a specific social science discipline or professional field; a means for teachers and other working students to tailor degree programs to fit their personal career development needs; and a nontraditional approach for recent university graduates or adults re-entering the university to pursue liberal educational goals in the social sciences.

MSS REQUIREMENTS

Master of Social Science

Social Science MSS

► Graduate School Rules apply to this program

Requirements for Admission

General rules for admission into the Graduate School apply to admission into the MSS program.

For admission as a regular graduate student, applicants must:

- have earned a bachelor's degree
- submit two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0
- have appropriate undergraduate training or professional background or indicators that supply evidence of ability to pursue the MSS degree
- include a writing sample
- submit three letters of recommendation (at least two from academic sources)
- submit a written statement specifying the goal of advanced study in the social sciences, expressed in clear, correct and effective English
- standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

Provisional Admission:

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

Non-degree Students:

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor’s degree) if they:

1. Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program
   –or–
2. Wish to start courses in the program prior to completing their application. Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted into the program (the 12-hour limit also includes graduate work from another university).

International Students:

International students must also meet UC Denver requirements for international admission. See the Information for International Students section of this catalog or call 303-315-2230 for further information.

Degree Requirements

The MSS is a 36-semester-hour program, of which 30 hours must meet all specifications of the Graduate School . Throughout their work toward the MSS degree, students must maintain at least a *B* (3.0) average in all courses. A grade below *B*- will not be counted toward the degree.

Students may pursue courses around any coherent theme with the approval of MSS program directors and advisors. In addition to the unlimited self-structured options, there are five tracks in place from which students can select: women's and gender studies, international studies, social justice, society and environment and community health science.

Three Required Core Seminars

The following two courses must be taken during the first year following entrance to the program:

- SSCI 5013 - Philosophical Problems in the Social Sciences and Humanities **gtPATHWAYS:**
  (Offered spring only)
- SSCI 5020 - Elements of Social Thought **gtPATHWAYS:**
  (Offered fall only)

The third required course should be taken later in the program when students are ready to write a proposal for the thesis or project:

- SSCI 5023 - Research Perspectives in Social Science **gtPATHWAYS:**
  (Offered spring only)

Total: 9 Hours

Electives

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-structured portion of the program must be selected with the approval of one of the MSS program directors.

A total of two independent study courses and two 4000-level undergraduate courses taken while enrolled in the program may count toward the degree. All independent study

contracts must be approved by one of the program directors. The remaining course work must be 5000/6000-level courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

Total: 21-24 Hours

Thesis or Project

In order to proceed with a thesis or project, all students must submit a proposal approved by three faculty members (and approved by one of the program directors in cases where one of the directors is not serving on the committee). Students must also pass an oral comprehensive exam to graduate. Total hours required are: 3 hours of project and 6 hours of thesis.

- SSCI 6950 - Master's Thesis **gtPATHWAYS:**
- SSCI 6960 - Master's Project or Report **gtPATHWAYS:**

Total: 3-6 Hours

Degree Total: 36 Hours

Sociology

Chair: John Freed
Program Assistant: Rachel Watson
Office: Lawrence Street Center, Suite 420
Telephone: 303-315-2148
Fax: 303-315-2149
Website: clas.ucdenver.edu/sociology/

Undergraduate Programs
Graduate Program

Faculty

Professors:

Karl H. Flaming, PhD, Syracuse University

John Freed, PhD, Stanford University

Associate Professors:

Candan Duran-Aydintug, PhD, Washington State University

Assistant Professors:

Stacey Bosick, PhD, Harvard University

Paula Fomby, PhD, University of Wisconsin-Madison

Akihiko Hirose, PhD, University of California, Riverside

Patrick Krueger, PhD, University of Colorado Boulder

Senior Instructor:

Lucy Dwight, PhD, The Pennsylvania State University

Instructors:

Edward Casteel, MSW, University of Denver

Andrea Haar, MA, University of Colorado Denver

Pete Padilla, PhD, Arizona State University

Associate Professor Emeritus:

Richard H. Anderson, PhD, University of Oregon

Undergraduate

Sociology is the scientific study of groups, social process and behavior. The major in sociology is designed to familiarize the student with these areas through an understanding of theory, method and statistical procedures employed within them. Concentration is possible at the undergraduate level. However, the faculty believes the

undergraduate should have a foundation in the basics of the discipline upon which to build a future specialization. Such specialization is more appropriate at the advanced levels.

Many career opportunities combine a foundation in sociology with business, computer science or community development. Opportunities within the field of sociology proper usually require graduate study. The major will prepare the student for such advanced work as well as for pursuit of career options with only the BA degree. For example, graduates with a sociology BA are employed in the human services field and with state and local government agencies.

The department has developed the following rationale for courses offered:

1. Lower-division courses (for majors and nonmajors)
    a. 1000-level courses provide an introduction to the broad sociological perspective as it applies to social life, social systems and society.
    b. 2000-level courses introduce the student to somewhat more specific content areas: population study, human ecology, social psychology, etc.
2. Upper-division courses (3000 and 4000)
    a. 3000-level courses serve as advanced surveys of some specific area of concentration. They are designed to acquaint the student with the issues, methods, concepts and theoretical frameworks employed in the content area. Such courses as urban sociology, race and ethnicity, etc. are offered at this level. Many of these courses are open courses, in that students from other departments and colleges are encouraged to enroll in them.
    b. 4000-level courses are devoted to a more detailed in-depth examination of specific issues, approaches and concepts within the previously identified content areas. These are advanced courses and are geared more directly to sociology and social science majors.
    c. Undergraduate students can enroll in a course at the 4000/5000 level only if they are classified at junior or senior standing.

REQUIREMENTS FOR THE MAJOR

REQUIREMENTS FOR THE MINOR

Departmental Honors

Students wishing to graduate with departmental honors in sociology (*cum laude, magna cum laude,* or *summa cum laude)* must have a minimum cumulative GPA of 3.2 and a 3.2 or higher in all sociology courses. Additional requirements are available in the sociology office. Qualified students are encouraged to apply for the honors program no later than the beginning of their senior year.

Graduate

The MA degree in sociology focuses on social psychology, sociology of the family, criminology, medical sociology, urban sociology and applied sociology. The program's urban emphasis complements professional degree programs in design and planning, medicine, nursing, community health, physical engineering, public and business administration, education and fine arts by providing advanced seminars and planning and research opportunities in theory and research.

Admission Requirements

Application to the MA program is open to all students holding a BA, BS or higher degree in any field. Students without prior training in sociology, but with otherwise exemplary records, may be admitted and may be required to make up deficiencies without graduate credit depending upon the results of the mandatory diagnostic exams in the areas of theory, methods and statistics.

Recommended Academic Standards

- A combined GPA of at least 3.3 for all courses taken at the undergraduate or graduate level prior to admission
- A combined GPA of at least 3.5 for all **sociology** courses taken at the undergraduate or graduate level prior to admission

Application Materials

- Complete application form
- Three letters of recommendation (at least two must be from academic/professional sources)
- Two copies of official transcripts sent directly to the Department of Sociology from all schools where BA credit hours were taken
- A statement of purpose and goal of graduate study
- Writing sample
- GRE score may be optionally submitted to aid application file
- **International Students:** You must complete an International Student Application. Minimum TOEFL score of 525 required.

Application Deadlines

Applications are accepted for **fall** admission only. All application materials are due on February 15th.

REQUIREMENTS FOR THE MA IN SOCIOLOGY

Bachelor of Arts

Sociology BA

Students must declare a major by the time they have completed 60 semester hours of course work. The major requires a total of 34 hours with an average grade of *C* (2.0) in all courses. At least 16 of the 34 hours must be upper-division (3000-4000 level) courses. The maximum number of hours allowed in sociology is 48.

Course Requirements

Core Courses

The core consists of the following group of courses, all of which must be completed with a grade of *C* (2.0) or better:

- SOCY 1001 - Introduction to Sociology **gtPATHWAYS:** GT-SS3
- SOCY 3001 - Urban Sociology **gtPATHWAYS:**
- * SOCY 3111 - Research Methods **gtPATHWAYS:**
- * SOCY 3121 - Statistics **gtPATHWAYS:**
- * SOCY 4150 - History of Sociological Theory **gtPATHWAYS:**
- * SOCY 4160 - Contemporary Sociological Theory **gtPATHWAYS:**

Total: 19 Hours

*Must be taken from Downtown Campus faculty

Electives: 15 Hours

Choose a minimum of 15 hours and a maximum of 29 hours of electives in sociology, with an average grade of *C* (2.0) in all courses.

Major Total: 34 Hours

All prospective majors should contact the department as early in their academic careers as possible for information and for assignment to a major advisor. Transfer or returning students should consult with the department chairman concerning completion of the core courses.

The department requires that at least 13 hours of sociology be taken from Downtown Campus faculty, including the following courses: SOC 3111, 3121, 4150 and 4160.

Non Degree

Sociology Minor

For an undergraduate minor in sociology, a minimum of 15 semester hours in sociology must be completed with a grade of *C* or better. Nine of these hours must be taken from CU Denver faculty.

Course Requirements

Required Courses

- SOCY 1001 - Introduction to Sociology **gtPATHWAYS:** GT-SS3
- SOCY 4150 - History of Sociological Theory **gtPATHWAYS:**

Total: 6 Hours

Electives

Nine hours of sociology elective courses, completed with a grade of *C* or better.

Total: 9 Hours

Minor Total: 15 Hours

Master of Arts

Sociology MA

► Graduate School Rules apply to this program

Program Requirements

Two plans of study are available for students. Both options require a minimum of 36 hours. A thesis is required for the thesis option, and a project and internship are required for the nonthesis option. Before beginning the required course work, attendance at an orientation is required for incoming cohorts as well as the completion of mandatory diagnostic exams.

Required Courses

Core courses are required for all graduate students, regardless of plan. Students who are officially admitted to the program are required to follow a sequential plan. SOCY 5000 must be taken in the first fall semester. Students must take SOCY 5014 before taking SOCY 5015. Similarly, SOCY 5024 must be taken before SOCY 5183.

- SOCY 5000 - Professional Seminar: Sociological Inquiry **gtPATHWAYS:**
- SOCY 5014 - Classical Sociological Theory **gtPATHWAYS:**
- SOCY 5015 - Contemporary Sociological Theory **gtPATHWAYS:**
- SOCY 5024 - Seminar: Research Methods I **gtPATHWAYS:**
- SOCY 5183 - Seminar: Quantitative Data Analysis **gtPATHWAYS:**

Total: 15 Hours

PLANS OF STUDY

Students must also choose **one** of the following options:

Thesis Option Requirements

Core course requirements	15 Hours
Five elective courses	15 Hours
Master's thesis	6 Hours total required

- SOCY 5955 - Master's Thesis **gtPATHWAYS:**

Thesis Option Total: 36 Hours

Nonthesis Option Requirements

Core course requirements	15 Hours
Five elective courses	15 Hours
Internship	3 Hours
Master's project	3 Hours

- SOCY 5964 - Master's Report **gtPATHWAYS:**

Nonthesis Option Total: 36 Hours

Elective Credit Requirements (15 semester hours for both options)

Students can take an unlimited number of sociology graduate (5000-level) seminars to fulfill their 15 elective semester hours, or a combination of the following:

- Independent study: maximum 6 semester hours
- Courses in other departments: maximum 6 semester hours
- Internship: maximum 3 semester hours

For further information about the Department of Sociology or the MA program, visit the Sociology website.

Sustainability

Director: Stephen Koester (Anthropology)

Office: Administration Building, 270

Telephone: 303-556-6795

E-Mail: steve.koester@ucdenver.edu

Website: clas.ucdenver.edu/sustainability/

Faculty

(concurrently appointed)

Professors:

Larry G. Anderson, Chemistry

Stephen Koester, Anthropology

Diana F. Tomback, Integrative Biology

Associate Professors:

Thomas G. Andrews, History

Steven R. Beckman, Economics

John Brett, Anthropology

Greg Cronin, Integrative Biology

Larry Erbert, Communication

Randall P. Tagg, Physics

Deborah S. K. Thomas, Geography

John W. Wyckoff, Environmental Sciences

Assistant Professors:

Casey Allen, Geography/Environmental Sciences

Laurel Hartley, Integrative Biology

Rafael Moreno-Sanchez, Geography

Maria L. Talero, Philosophy

Bryan S. Wee, Geography

Adjoint Faculty:

Kathryn Cheever, Political Science

Questions of sustainability are currently among the most important facing humankind and are receiving tremendous attention in the media. Because issues of sustainability do not arise from single causes, nor can solutions be developed from within narrow disciplinary frameworks, a multidisciplinary perspective is not only desirable but necessary to identify and understand problems, and create, evaluate and implement solutions.

Specializations in this critical area of study include: health and the environment, sustainable ecology, environmental ethics, environmental policymaking and policy analysis, institutional behavior, community-based and participatory approaches to sustainable development and conservation, environmental justice, sustainable food production and critical consumerism. The sustainability minor offers a holistic approach to development and daily living, which demands scientific, economic, environmental and social perspectives to understand and implement actions that can inform the public, business, industry, government and service organizations on how their activities affect the environment.

REQUIREMENTS FOR THE SUSTAINABILITY MINOR

Non Degree

Sustainability Minor

The sustainability minor is interdisciplinary, drawing on the expertise across CLAS departments: anthropology, biology, chemistry, communication, economics, environmental sciences, geography, geology, history, economics, philosophy, physics and political science. The core courses are taught by a faculty team from natural sciences and social sciences, who will present the concepts from the empirical and humanistic perspectives. The teaching team changes each term so that faculty from any given CLAS department will rotate through the core courses every 3-4 years.

The minor comprises 18 hours, distributed as follows:

- two core courses that introduce students to the systems theories that document how living things affect and are affected by their environments
- two electives chosen from an approved list of CLAS courses
- students select either a field study, internship, service learning or related travel study course
- capstone course in sustainability

Requirements for the Minor

Core Courses

- SUST 3010 - The Non-Sustainable Past **gtPATHWAYS:**
- SUST 3011 - Toward a Sustainable Future **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two from the following list of approved electives:

Anthropology

- ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3
- ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1

- ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
- ANTH 3006 - Sustainable Development and Equity **gtPATHWAYS:**
- ANTH 3301 - World Prehistory **gtPATHWAYS:**
- ANTH 3512 - Human Evolution **gtPATHWAYS:**
- ANTH 4030 - Ethnobiology **gtPATHWAYS:**
- ANTH 4060 - Evolutionary Medicine **gtPATHWAYS:**
- ANTH 4070 - Culture of Development and Globalization **gtPATHWAYS:**
- ANTH 4170 - Culture and the Environment **gtPATHWAYS:**
- ANTH 4220 - Community in Global Context **gtPATHWAYS:**
- ANTH 4250 - Culture Change in the Modern World **gtPATHWAYS:**
- ANTH 4450 - Development and Conservation: Contemporary Issues **gtPATHWAYS:**
- ANTH 4460 - Development and Conservation: Theory and Practice **gtPATHWAYS:**
- ANTH 4560 - Human Ecology **gtPATHWAYS:**

Biology

- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1
- BIOL 3330 - Plant Diversity **gtPATHWAYS:**
- BIOL 3411 - Principles of Ecology **gtPATHWAYS:**
- BIOL 3412 - Fundamentals of Applied Ecology **gtPATHWAYS:**
- BIOL 3521 - Vertebrate Biology **gtPATHWAYS:**
- BIOL 4154 - Conservation Biology **gtPATHWAYS:**

Business

- MGMT 4950 - Special Topics in Management **gtPATHWAYS:**
  when offered as Business and Sustainability
- MKTG 4950 - Special Topics **gtPATHWAYS:**
  when offered as Nonprofit and Social Marketing

Chemistry

- CHEM 1474 - Core Chemistry: Chemistry For the Consumer **gtPATHWAYS:** GT-SC1
- CHEM 4700 - Environmental Chemistry **gtPATHWAYS:**
- CHEM 5700 - Environmental Chemistry **gtPATHWAYS:**

Communication

- COMM 4282 - Environmental Communication **gtPATHWAYS:**
- COMM 5282 - Environmental Communication **gtPATHWAYS:**

Economics

- ECON 4530 - Economics of Natural Resources **gtPATHWAYS:**
- ECON 4540 - Environmental Economics **gtPATHWAYS:**
- ECON 4770 - Economic Development--Theory and Problems **gtPATHWAYS:**
- ECON 5530 - Economics of Natural Resources **gtPATHWAYS:**
- ECON 5540 - Environmental Economics **gtPATHWAYS:**

Geography / Geology / Environmental Science

- ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1
- ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
- ENVS 3082 - Energy and the Environment **gtPATHWAYS:**
- GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
- GEOG 3302 - Water Resources **gtPATHWAYS:**
- GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
- GEOG 4010 - Landscape Geochemistry **gtPATHWAYS:**
- GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
- GEOL 4030 - Environmental Geology **gtPATHWAYS:**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
- GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
- GEOG 4350 - Environment and Society in the American Past **gtPATHWAYS:**
- GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
- GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
- GEOG 5640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**

History

- HIST 3350 - Colonial Latin America **gtPATHWAYS:**
- HIST 3360 - Denver History **gtPATHWAYS:**
- HIST 3366 - Environmental History of North America **gtPATHWAYS:**
- HIST 3451 - Introduction to African History **gtPATHWAYS:**
- HIST 3460 - Introduction to Latin American History **gtPATHWAYS:**
- HIST 3470 - Introduction to Asian History **gtPATHWAYS:**
- HIST 3606 - Science, Technology, and Society in the Modern World **gtPATHWAYS:**

- HIST 4217 - Consumer Culture **gtPATHWAYS:**
- HIST 4226 - U.S. Business History **gtPATHWAYS:**
- HIST 4227 - American West **gtPATHWAYS:**
- HIST 4236 - Colorado Mining and Railroads **gtPATHWAYS:**
- HIST 4411 - Modern Mexico **gtPATHWAYS:**
- HIST 4417 - Commodities and Globalization: Dessert in World History **gtPATHWAYS:**
- HIST 4421 - Modern China **gtPATHWAYS:**
- HIST 4431 - Modern Japan **gtPATHWAYS:**
- HIST 4451 - Southern Africa **gtPATHWAYS:**
- HIST 4461 - The Modern Middle East **gtPATHWAYS:**
- HIST 4501 - World History for Educators **gtPATHWAYS:**
- HIST 4503 - Topics in History of Science **gtPATHWAYS:**
- HIST 4504 - Animals in U.S. History **gtPATHWAYS:**

Physics

- PHYS 3082 - Energy and the Environment **gtPATHWAYS:**
- PHYS 4850 - Physics for Design and Innovation I **gtPATHWAYS:**
- PHYS 4852 - Physics for Design and Innovation II **gtPATHWAYS:**
  Note: PHYS 4850 is prerequisite for PHYS 4852
- PHYS 5850 - Physics for Design and Innovation I **gtPATHWAYS:**
- PHYS 5852 - Physics for Design and Innovation II **gtPATHWAYS:**
  Note: PHYS 5850 is prerequisite for PHYS 5852

Philosophy

- PHIL 4250 - Environmental Ethics **gtPATHWAYS:**
- PHIL 5250 - Environmental Ethics **gtPATHWAYS:**

Political Science

- PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
- PSCI 3035 - Political Movements: Race and Gender **gtPATHWAYS:**
- PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**
- PSCI 3914 - The Urban Citizen **gtPATHWAYS:**
- PSCI 4009 - Politics of the Budgetary Process **gtPATHWAYS:**
- PSCI 4014 - Media and Politics **gtPATHWAYS:**
- PSCI 4025 - Local Governance and Globalization **gtPATHWAYS:**
- PSCI 4085 - Comparative Public Policy **gtPATHWAYS:**
- PSCI 4144 - Indigenous Political Systems **gtPATHWAYS:**
- PSCI 4206 - Social Movements, NGOs and Global Politics **gtPATHWAYS:**
- PSCI 4207 - Theories of Social and Political Change **gtPATHWAYS:**

- PSCI 4215 - Women's Rights, Human Rights: Global Perspectives **gtPATHWAYS:**
- PSCI 4226 - The United Nations in World Affairs **gtPATHWAYS:**
- PSCI 4248 - Gender, Globalization and Development **gtPATHWAYS:**
- PSCI 4324 - Politics, Public Policy and Leadership **gtPATHWAYS:**
- PSCI 4326 - Advanced International Political Economy: Globalization **gtPATHWAYS:**
- PSCI 4354 - Environmental Politics **gtPATHWAYS:**
- PSCI 4365 - Global Ecological Crises **gtPATHWAYS:**
- PSCI 4374 - Public Priorities for the 21st Century **gtPATHWAYS:**
- PSCI 4545 - Immigration Politics **gtPATHWAYS:**
- PSCI 4555 - International Women's Resistance **gtPATHWAYS:**
- PSCI 4645 - Comparative Political Leadership **gtPATHWAYS:**

Total: 6 Hours

Experiential learning course

Students choose a field study, internship, service learning or related travel study course.

Total: 3 Hours

Capstone

- SUST 4960 - Capstone in Sustainability **gtPATHWAYS:**

Total: 3 Hours

Total: 18 Hours

Women's and Gender Studies

Director: Gillian Silverman (English)
Graduate Advisor: Margaret Woodhull (Humanities)
Office: 1050 9th Street, #102
Telephone: 303-556-4529
Fax: 303-556-2959
Website: clas.ucdenver.edu/wgst/

Associated Faculty

Joanne Addison (English)

Brenda J. Allen (Communication)

Elizabeth Allen (Psychology)

Sharon Araji (Sociology)

Laura Argys (Economics)

Pompa Banerjee (English)

Myra Bookman (Humanities and Social Sciences)

Michelle Comstock (English)

Mary Coussons-Read (Psychology)

Jennifer Davis (English)

Candan Duran-Aydintug (Sociology)

Paula Espinoza (Ethnic Studies)

Jana Everett (Political Science)

Sonja Foss (Communication)

Andrea Haar (Sociology)

Rachel Harding (Ethnic Studies)

Pamela Laird (History)

Donna Langston (Ethnic Studies)

Marjorie Levine-Clark (History)

Myra Rich (History)

Candice Shelby (Philosophy)

Cate Wiley (English)

Women's and gender studies (WGST) is an interdisciplinary program that focuses on the centrality of gender and sexuality to understanding our past and present worlds. Students and faculty probe assumptions about men and women and question structures of inequality as they play out in local and global contexts. Through a study of gender and sexuality, we expand our thinking about other relations of power, such as race, class,

ethnicity, nationality and physical ability. WGST fosters connections with the local community and promotes advocacy of human rights and social justice.

Undergraduate Studies

WOMEN'S AND GENDER STUDIES MINOR

Individually Structured Major

Students interested in a major in women's and gender studies may develop one through the individually structured major (ISM). The ISM is an interdisciplinary major based on an individual contract rather than a preset list of courses. By choosing an ISM, students can pursue their interests in WGST across a variety of departments. For more information on an ISM in women's and gender studies, contact Gillian Silverman, and see the individually structured major section of this catalog.

Graduate Studies

At the graduate level, students may pursue women's and gender studies as a track in the master of social science degree program . Students learn to think critically about the condition of women and the role of gender in both historical and contemporary experience. Course work focuses on conceptual models for understanding women and gender, such as feminist, queer, post-colonial and race theories as they operate through culture, language, politics, visual representation and history. For more information, contact Margaret Woodhull.

The WGST program also offers a graduate certificate in women's and gender studies for students pursuing master's degrees in departments in the College of Liberal Arts and Sciences as well as non-degree seeking students.

WOMEN'S AND GENDER STUDIES GRADUATE CERTIFICATE

Certificate

Women's and Gender Studies Graduate Certificate

The women's and gender studies certificate is administered through the Women's and Gender Studies program in the College of Liberal Arts and Sciences at the University of Colorado Denver. It is designed to provide members of the CU Denver population and public with specialized knowledge of the history, politics, literature and social practices related to women's and gender concerns. Students must complete 12 credit hours of

course work in order to receive the certificate. Acceptance into the certificate program is subject to CU Denver Graduate School Rules 11-12.

The WGST certificate is available to any qualified graduate student or non-degree seeking, graduate-level student at CU Denver. Students begin with a required, graduate-level methodology or foundational course before pursuing a combination of WGST-related course work. Upon completion of the certificate, students will have foundational and theoretical knowledge of the major concerns of women's and gender studies.

All prospective students must complete and submit an application to the program. Upon admission to the certificate program, students are eligible for the certificate. All course work must be taken at CU Denver.

Courses

(Please note that some of the following courses may have prerequisites that *must* be met.)

Required Course

Choose one of the following:

- SSCI 6010 - Methods and Theories of Feminism and Gender Studies **gtPATHWAYS:**
- -OR- WGST 6010 - Methods and Theories of Feminism and Gender Studies **gtPATHWAYS:**
- ENGL 5306 - Survey of Feminist Thought **gtPATHWAYS:**
- -OR- HIST 5306 - Survey of Feminist Thought **gtPATHWAYS:**
- -OR- WGST 5306 - Survey of Feminist Thought **gtPATHWAYS:**

Total: 3 Hours

Elective Courses (choose three)

These courses must be explicitly women's and/or gender and/or identity-based courses. They can be taken through any CU Denver department or program with the approval of an advisor. Only one 4000-level elective may be counted toward the certificate. All other course work must be 5000-level or above.

The following is a representative listing of WGST-related courses that may be taken toward the certificate; it is not comprehensive. Please note that some of these courses may be taught sporadically. Students should meet with their advisor to plan their course of study.

- ANTH 5200 - Gender in Cross-Cultural Perspective **gtPATHWAYS:**
- COMM 5020 - Feminist Perspectives on Communication **gtPATHWAYS:**
- COMM 5045 - Female-Male Friendships **gtPATHWAYS:**
- COMM 5265 - Gender and Communication **gtPATHWAYS:**
- CRJU 5553 - Women and Crime **gtPATHWAYS:**
- ENGL 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
- -OR- ENGL 5510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
- ENGL 5000 - Studies of Major Authors **gtPATHWAYS:**
  (depending on author being studied; e.g., Virginia Woolf, George Sand, etc.)
- ENGL 5306 - Survey of Feminist Thought **gtPATHWAYS:**
- -OR- HIST 5306 - Survey of Feminist Thought **gtPATHWAYS:**
- -OR- WGST 5306 - Survey of Feminist Thought **gtPATHWAYS:**
- ETST 4555 - International Women's Resistance **gtPATHWAYS:**
- -OR- PSCI 5555 - International Women's Resistance **gtPATHWAYS:**
- ETST 4827 - Women and the Law **gtPATHWAYS:**
- -OR- PSCI 4827 - Women and the Law **gtPATHWAYS:**
- HIST 5303 - Sex and Gender in Modern Britain **gtPATHWAYS:**
- HIST 5307 - History of Sexuality **gtPATHWAYS:**
- HIST 5345 - Gender, Science, and Medicine: 1600 to the Present **gtPATHWAYS:**
- HUMN 5720 - Sexuality, Gender and Their Visual Representation **gtPATHWAYS:**
- -OR- SSCI 5720 - Sexuality, Gender and Their Visual Representation **gtPATHWAYS:**
- PSCI 4215 - Women's Rights, Human Rights: Global Perspectives **gtPATHWAYS:**
- PSCI 4564 - Gender and Politics **gtPATHWAYS:**
- PSCI 5245 - Gender, Globalization and Development **gtPATHWAYS:**
- PUAD 5910 - Women and Violence: A Sociological Perspective **gtPATHWAYS:**
- PUAD 5920 - Psychology of Violence Against Women **gtPATHWAYS:**
- PUAD 5930 - Battered Women and the Legal System **gtPATHWAYS:**
- SOCY 5550 - Seminar: Sociology of the Family **gtPATHWAYS:**
- SSCI 6010 - Methods and Theories of Feminism and Gender Studies **gtPATHWAYS:**
- -OR- WGST 6010 - Methods and Theories of Feminism and Gender Studies **gtPATHWAYS:**
- WGST 5900 - Smart Girl Coaching Training and Practicum **gtPATHWAYS:**

Total: 9 Hours

For more information about this certificate program, contact the Women’s and Gender Studies Director, Gillian Silverman, 303-556-4529, or Margaret Woodhull, 303-352-3926.

Non Degree

Women’s and Gender Studies Minor

The women’s and gender studies minor gives students the opportunity to explore gender issues in the humanities and social sciences. To minor in WGST, a student must complete 18 semester hours in WGST courses with a grade of *C* or better. At least 12 semester hours for the WGST minor must be taken with CU Denver faculty, and all courses for the minor must be approved by a WGST advisor.

Requirements for the Minor

1. Required Course: WGST 1050 (3 semester hours)

This course provides an introduction to key concepts, themes and approaches to the interdisciplinary field of women’s and gender studies. It helps students develop an overall framework for WGST in which to place their electives and internship.

- WGST 1050 - Introduction to Women's and Gender Studies **gtPATHWAYS:**

2. WGST-related courses at the 3000 level or above (12 semester hours)

These courses combine humanities and social science fields. Advisor approval is required for course selection. Students are strongly urged to take at least one course that focuses on women’s and gender issues in international perspective. Courses which are eligible for WGST credit include (but are not limited to):

Humanities

- ENGL 3450 - Twentieth Century Women Writers **gtPATHWAYS:**
- ENGL 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
- FREN 4510 - French Women Writers **gtPATHWAYS:**
- HIST 3343 - Women in U.S. History **gtPATHWAYS:**
- HIST 4230 - Women in the West **gtPATHWAYS:**
- HIST 4303 - Sex and Gender in Modern Britain **gtPATHWAYS:**
- HIST 4307 - History of Sexuality **gtPATHWAYS:**
- HIST 4345 - Gender, Science, and Medicine: 1600 to the Present **gtPATHWAYS:**
- PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
- PHIL 4933 - Philosophy of Eros **gtPATHWAYS:**
- RLST 4420 - Goddess Traditions **gtPATHWAYS:**
- SPAN 4540 - Race, Class, and Gender in Spanish Golden Age Literature **gtPATHWAYS:**

- WGST 4306 - Survey of Feminist Thought **gtPATHWAYS:**
- -OR- ENGL 4306 - Survey of Feminist Thought **gtPATHWAYS:**
- -OR- HIST 4306 - Survey of Feminist Thought **gtPATHWAYS:**

Social Sciences

- ANTH 4200 - Gender in Cross-Cultural Perspective **gtPATHWAYS:**
- ANTH 4260 - Human Reproductive Ecology **gtPATHWAYS:**
- COMM 4020 - Feminist Perspectives on Communication **gtPATHWAYS:**
- COMM 4045 - Female-Male Friendships **gtPATHWAYS:**
- COMM 4265 - Gender and Communication **gtPATHWAYS:**
- COMM 4268 - Communication and Diversity in U.S. History **gtPATHWAYS:**
- COMM 4275 - Family Communication **gtPATHWAYS:**
- ECON 3100 - Economics of Race and Gender **gtPATHWAYS:**
- ECON 3400 - Economics of Sex and Drugs **gtPATHWAYS:**
- HBSC 3010 - Human Sexuality and Public Health **gtPATHWAYS:**
- PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
- PSCI 3035 - Political Movements: Race and Gender **gtPATHWAYS:**
- PSCI 4215 - Women's Rights, Human Rights: Global Perspectives **gtPATHWAYS:**
- PSCI 4248 - Gender, Globalization and Development **gtPATHWAYS:**
- PSCI 4555 - International Women's Resistance **gtPATHWAYS:**
- PSCI 4564 - Gender and Politics **gtPATHWAYS:**
- PSCI 4827 - Women and the Law **gtPATHWAYS:**
- PSYC 3235 - Human Sexuality **gtPATHWAYS:**
- PSYC 3405 - Family Psychology **gtPATHWAYS:**
- PSYC 3611 - Psychology of Women **gtPATHWAYS:**
- PSYC 3612 - Domestic Abuse **gtPATHWAYS:**
- SOCY 3010 - Sociology of Human Sexuality **gtPATHWAYS:**
- SOCY 3080 - Sex and Gender **gtPATHWAYS:**
- SOCY 3700 - Sociology of the Family **gtPATHWAYS:**
- SOCY 4120 - Popular Culture and the American Family **gtPATHWAYS:**
  See the WGST Web site for this semester's course offerings.

3. WGST Community Internship (3 semester hours)

An internship working in the community around issues related to women and gender. Working with a WGST advisor and the CU Denver Experiential Learning Center (ELC), students will choose an internship related to their interests in WGST. Through the ELC, students sign up for their internship under WGST 3939. Students will be required to complete a critical writing component comprising an ongoing log about the internship experience and an 8-10 page final paper discussing the interrelationships between the practical internship experience and the theoretical/scholarly insights of women’s and

gender studies. Students may also choose to use WGST 2900, Smart Girl Leadership Training, in lieu of their internship and must follow the requirements of that course and practicum. Students must have taken WGST 1050 before enrolling for their internship.

- WGST 3939 - Internship **gtPATHWAYS:**
- -OR- WGST 2900 - Smart Girl Leadership Training and Practicum **gtPATHWAYS:**

Total: 18 Hours

School of Public Affairs

Dean: Paul Teske
Associate Dean: Linda deLeon
Associate Dean, Colorado Springs: Teresa Schwart
Assistant Deans, Denver:
Jeanne Paradeis
Kelly Hupfeld

Contact

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Prospective Student Inquiries - PhD & MPA
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Prospective Student Inquiries - BA & MCJ
Brendan Hardy
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Application Deadlines

Undergraduate
Fall—July 22
Spring—December 1
Summer—May 3

MPA &MCJ

Preferred Deadline		**Final**
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

PhD
Fall admission only—
Feb. 1

Graduates of the School of Public Affairs (SPA) are prepared to **lead** *the field,* **solve** *pressing social issues and* **change** *communities for the better. Nationally ranked for excellence, SPA offers programs in multiple locations: on the CU Denver campus, at the CU Colorado Springs campus, on the Western Slope (Grand Junction) and through the nation's oldest online MPA and brand new online MCJ. The school offers four degrees: the bachelor of arts in criminal justice, the master of public administration (MPA), the master of criminal justice (MCJ) and the PhD in public affairs. Qualified senior managers may elect to participate in the school's executive MPA option, an innovative partnership between the school and the federal management development centers. SPA offers an*

accelerated MPA option as well as a variety of concentrations and dual degrees in law, economics and urban and regional planning for students with diverse interests.

SPA Students

The School of Public Affairs (SPA) attracts a dynamic mix of students, from undergraduates just beginning their public service careers to well-seasoned professionals already immersed in public or nonprofit management and policy. Students encompass a range of age and experience, and they represent the diversity of the Denver metropolitan area. SPA classrooms promote interaction among students, and the variety of backgrounds including domestic, international, pre-career and mid-careeer students enriches learning enormously.

Our graduates are leaders. They include state legislators and department heads, city managers and mayors, police chiefs and correctional administrators, nonprofit and for-profit executives, school superintendents, university presidents and faculty.

The School of Public Affairs is accredited by the National Association of Schools of Public Affairs and Administration's (NASPAA) Commission on Peer Review and Accreditation.

The Mission of SPA

The School of Public Affairs will improve the quality of public life in Colorado and the Rocky Mountain West.

To achieve this mission, SPA has set the following objectives:

- **build educational and research excellence**, establishing the School of Public Affairs as the best school of public affairs in the Rocky Mountain West and a top-ranked national school
- **focus on solving pressing public problems**, both by helping students to build strong problem-solving skills and by committing the entire SPA community to participation in problem-solving efforts
- **strengthen SPA's contribution to successful student career development**
- **serve all of Colorado, the Mountain West and the global community**

A Commitment to Community, to Public Service and to Problem Solving

The School of Public Affairs seeks students committed to public service. It prepares those students through a rigorous course of study that combines scholarship and theory while building practical analytical, management and policymaking skills. SPA faculty frequently engage students in community-centered research projects, and the school

offers a variety of opportunities for students to engage in the work of its centers or to participate in events featuring visiting experts.

The Centers

The centers at the School of Public Affairs create bridges between the research-driven world of academia and the public and nonprofit sectors. This is how SPA contributes to the community—and how the school in turn seeks to provide leadership, policy solutions and ideas for societal change. The centers also enable students to engage first-hand in public policy research, work with client organizations, participate in internships and attend conferences and seminars. The SPA centers involve themselves in an impressive array of projects, from working with the Colorado Trust to helping Colorado communities establish health-delivery partnerships and studying Colorado's homeless population.

SPA Centers

- Institute for Policy Research and Implementation
- Center on Domestic Violence
- Wirth Chair in Environmental and Community Development Policy
- Center for Education Policy Analysis
- Center for Public/Private Sector Cooperation
- Center for the Improvement of Public Management
- Center on Reinventing Public Education—Denver

Departments and Programs

Bachelor of Arts

Criminal Justice BA

Program Director: Mary Dodge, PhD
Prospective Students: 303-315-2227
Current Students and Advising: 303-315-2227

Faculty

Professors:

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

Associate Professors:

Mary Dodge, PhD, University of California, Irvine
Angela Gover, PhD, University of Maryland
Callie Rennison, PhD, University of Houston
Paul Stretesky, PhD Florida State University

Assistant Professor:

Deanna Perez, PhD, University of Maryland

Associate Research Professor:

Jerry Williams, DPA, University of Colorado

The School of Public Affairs is excited to offer a new bachelor of arts program in criminal justice. It is an interdisciplinary program that combines specific course work in criminal justice with a liberal arts focus. The criminal justice degree offers training for specific occupations within criminal justice agencies and provides students with the critical thinking, writing and presentation skills necessary for career advancement and graduate study. The course work explores the complex nature of crime causation, criminal justice organizations and the implications of public policies that allow graduates to adapt to the evolving nature of the field.

As with all undergraduate degrees, students are required to complete the requirements of the CU Denver core curriculum, providing an education that draws heavily on social and natural sciences as well as liberal arts. The program will not only provide a direct line to employment in the growing field of criminal justice, but will also facilitate the movement of outstanding students into SPA's MCJ and PhD graduate programs. Junior and senior criminal justice students may be permitted to enroll in a graduate level MCJ course by advisement. Students will be well prepared to pursue additional advanced degrees in fields where critical thinking and analytical skills are required.

Admissions Requirements

Entering freshmen, current CU Denver students and transfer students are eligible for admission to the program. All students must meet the admission requirements described in the Information for Undergraduate Students chapter of this catalog.

Transfer Students

Students who have attended another college or university are expected to meet general requirements for admission of transfer students as described in the Information for Undergraduate Students chapter. A maximum of 15 semester credits of criminal justice course work can be accepted and applied to th criminal justice major. The BACJ program director has the final discretionary authority to accept or reject criminal justic transfer credits. Transfer students with at least 30 semester hours of transferable credit who have been denied admission to the college by the Denver campus Office of Admissions, and who have special circumstances not covered by the regular admission policies,may petition the SPA Academic Standards for provisional admission. The Academic Standards Committee requires evidence of academic performance before provisional admission is granted. Policies and procedures for the SPA Academic Standards Committee are available through the SPA Advising Office.

Advising and Student Services

Upon matriculation into the criminal justice program, students will receive advising from the undergraduate academic advisor. The academic advisor will assist students with registration, clarify university and department policy and facilitate the graduation checkout. Advising will ensure that students take appropriate courses in the core curriculum to provide a foundation for their course work in the program. Students will also be assigned a faculty advisor who will assist them with questions about their majors, concentrations and career directions.

Grading and Policies

Dean's List Criteria

CU Denver will use a fixed criterion across all colleges for determining eligibility for the Dean’s List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete 9 hours in the semester upon which to determine grade point. These courses can be both within and outside of the School of Public Affairs. MSCD Pooled courses will not be included in the calculation nor will they count towards the 9 hours required for consideration. The GPA set for inclusion in the Dean’s List is 3.75. In the summer semesters, students must complete 6 hours as a basis for inclusion in the Dean’s List. Course inclusion will be the same as in fall and spring semesters. The GPA for Dean’s List in summer will also be 3.75 Colleges will collect data each semester on the number of students making the Dean’s List and report the number and percentage of total students in the college. Students who make the Dean’s List for both fall and spring semesters may be eligible of

a Dean's List scholarship award. Dean's List Scholarship awards vary in amount each semester depending on funding and the number of BACJ students who achieve Dean's List status. The Registrar's Office will calculate the semester GPAs for all students two weeks prior to the due date for semester grades. Those GPAs will be the basis for determining the Dean's List. Incompletes will not be considered in the calculation of minimum number of hours. The Dean's List will not be recalculated to include completed incompletes.

Academic Probation and Suspension

Students at the university are expected to maintain progress in their degree program, as defined by being in "good academic standing." Good academic standing requires minimally a cumulative grade point average (GPA) of 2.0 on all University of Colorado course work.

Academic Probation

- Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.
- Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via University-assigned email and postal letter) of their academic probation status.
- Students on Academic Probation will be required to complete the Academic Success Plan during their first semester on Academic Probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed Academic Success Plan before they will be allowed to register for the subsequent term.
- Students on Academic Probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on Academic Probation before they will be allowed to register.
- Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing. Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on Academic Suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from Academic Probation and notified via University-assigned email that s/he is in Academic Good Standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students are informed in writing (via University-assigned email and postal letter) of Restricted Academic Probation status.
- Students on Restricted Academic Probation will be allowed to enroll for a maximum of 6 credits/2 classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on Restricted Academic Probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.
- Students on Restricted Academic Probation will not be able to register online; they will need to register for courses using a Schedule Adjustment Form, which must be submitted to the Service Center (North Classroom #1003) for processing.
- Restricted Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Students must achieve a minimum 2.0 cumulative CU GPA to return to good academic standing and to meet graduation requirements.
- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours on Academic Probation and Restricted Academic Probation will be placed on Academic Suspension.

Academic Suspension

- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students are informed in writing via certified/registered letter of their Academic Suspension status.
- The minimum duration of Academic Suspension is for a period of one year (three semesters, including summer term). Students placed on Academic Suspension will be unable to take courses from any CU campus during this time.
- Should a student be placed on Academic Suspension while registered for the next semester, s/he will be administratively dropped from their courses by the University.
- A student's Academic Suspension status is permanently indicated on his/her official University of Colorado transcript. During the one-year Academic Suspension period, students who wish to return to the University should consider one (or both) of the following actions:
    - Attend another regionally-accredited college/university.
      Students who choose to attend another institution while on Academic Suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work. Students should consult their academic advisor to discuss appropriate course work.

    - Use the time off to directly address and resolve the factors that contributed to the academic difficulty.
- After the one-year suspension period has elapsed, students must petition the appellate committee (of the school or college they wish to enter) for readmission and meet and document at least one of the following criteria:
    - Attendance at another regionally accredited college/university where they earned a minimum cumulative GPA of 2.75 in transferable credit.
    - Explanation of their previous academic difficulty, demonstration of what has changed, and how this will allow them to now achieve and maintain Good Academic Standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0).
- Students who choose to petition the School of Public Affairs appellate committee for readmission must submit their petitions by the following deadlines:
    - For fall admission: June 1
    - For spring admission: December 1
    - For Maymester/summer admission: April 1
- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be readmitted on Restricted Academic Probation. These students must meet the condition of Restricted Academic Probation every semester until their cumulative CU GPA is at least a 2.0.

Second Suspension

- Students who are readmitted after their first Academic Suspension and fail to meet the conditions of Restricted Academic Probation for a second time are placed on a second suspension for an indefinite period of time.
- Students on a second suspension may be readmitted to the University only by petition to the college's appellate committee.
- Students will not be considered for readmission unless they have demonstrated significant improvement in academic performance at the college/university level, and/or considerable and positive change in personal circumstances.

Grade Policy

The University of Colorado Grading System is based on a 4.0 absolute scale.

Incomplete Grades

An incomplete grade of "I" can be issued at faculty discretion when there are special circumstances that preclude course completion. Incomplete grades are only issued when a small portion of the course remains. At minimum, 75% of the work in the course must be completed. Students are allowed up to 12 months to complete the unfinished portion of the course. After 12 months an "I" grade that has not been completed will become an "F."

Pass/Fail Grades

Core knowledge area and general electives are the only courses that can be completed pass/fail. Grades of "D-" of better is translated by the Records Office to a P (pass) grade. P grades do no affect students' GPA. F grades do affects students; GPA. Students interested in completing a course as pass/fail must submit a Schedule Adjustment Form during the add/drop during the respective semester to the BACJ Academic Advisor. Students need to consult the academic calendar posted on the Office of the Registrar's webpage for add/drop dates. Up to 16 credits may be completed as pass/fail and credited toward the bachelor degree. Students can complete a maximum of 6 credits as pass/fail in any one semester.

The Internship Program

Undergraduate students without experience in the field will be expected to complete an internship for credit under the direction of a faculty sponsor. Internships are helpful for career exploration early in a student's academic career or for job experience after developing academic content in the major. Students must have a minimum 2.0 cumulative GPA and a minimum of 15 semester hours completed at UC Denver before registering for the internship. A maximum of 3 semester hours of internship per semester and 6 semester hours total may be counted toward the 120 semester hours necessary for graduation.

Undergraduate students should contact the Experiential Learning Center for details on internship placements, paperwork and requirements.

Program Requirements

Students completing a BA in criminal justice at CU Denver will complete a minimum of 120 semester hours including:

- 34–36 general education core curriculum semester hours
- 21 undergraduate criminal justice semester hours, including 18 upper-division semester hours
- 15 elective semester hours in criminal justice and ancillary fields for the selected area of concentration (including an internship)
- 46–48 elective semester hours, an optional CLAS or language minor (15-21 hours), optional electives or internship
- students without experience in the field of criminal justice must complete a 3-semester-hour internship

Students must receive a minimum of a C (2.0) in each undergraduate course applied to satisfy major or minor degree requirements.

Required Criminal Justice Courses

- CRJU 1001 - Introduction to Criminal Justice **gtPATHWAYS:**
- CRJU 2041 - Crime Theory and Causes **gtPATHWAYS:**
- CRJU 3100 - Criminal Justice Research Methods **gtPATHWAYS:**
- CRJU 3150 - Statistics for Criminal Justice **gtPATHWAYS:**
- CRJU 4042 - Corrections **gtPATHWAYS:**
- CRJU 4043 - Law Enforcement **gtPATHWAYS:**
- CRJU 4044 - Courts and Judicial Process **gtPATHWAYS:**

Total: 21

Criminal Justice Electives

Criminal Justice Electives—15 semester hours, with 9 hours from the Department of Criminal Justice and 6 from other departments

- CRJU 3510 - Drugs, Alcohol and Crime **gtPATHWAYS:**
- CRJU 3410 - Probation and Parole **gtPATHWAYS:**
- CRJU 3320 - Police-Community Relations **gtPATHWAYS:**
- CRJU 3520 - Juvenile Justice Administration **gtPATHWAYS:**
- CRJU 3160 - White-Collar Crime **gtPATHWAYS:**
- CRJU 3220 - Community-Based Corrections **gtPATHWAYS:**
- CRJU 3250 - Violence in Society **gtPATHWAYS:**
- CRJU 3252 - Violent Offenders **gtPATHWAYS:**
- CRJU 3310 - Police in Contemporary Society **gtPATHWAYS:**
- CRJU 3420 - Pleas, Trials and Sentences **gtPATHWAYS:**
- CRJU 3540 - Crime and Delinquency Prevention **gtPATHWAYS:**
- CRJU 4120 - Race, Class and Crime **gtPATHWAYS:**
- CRJU 4130 - Poverty and Crime **gtPATHWAYS:**
- CRJU 4140 - Domestic Violence and Crime **gtPATHWAYS:**
- CRJU 4170 - Victim Studies **gtPATHWAYS:**
- CRJU 4180 - Comparative Study of Criminal Justice Systems **gtPATHWAYS:** (CJ 1001++)
- CRJU 4230 - Corrections and Treatment **gtPATHWAYS:**
- CRJU 4410 - Criminal Law and Constitutional Procedures **gtPATHWAYS:**
- CRJU 4430 - Law and Society **gtPATHWAYS:**
- CRJU 4440 - Courts and Social Policy **gtPATHWAYS:**
- CRJU 4520 - Gangs and Criminal Organizations **gtPATHWAYS:**
- CRJU 4530 - Families and Intergenerational Crime **gtPATHWAYS:**
- CRJU 4600 - Special Topics in Criminal Justice **gtPATHWAYS:** (CJ 1001, CJ 2041++)

Total: 9 hours

++Prerequisite

Other Department Electives**

- COMM 4265 - Gender and Communication **gtPATHWAYS:**
- ECON 3300 - Economics of Crime and Punishment **gtPATHWAYS:**
- PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
- PSCI 4124 - Denver Politics **gtPATHWAYS:**
- PSCI 4185 - Corruption in the U.S. and Abroad **gtPATHWAYS:**
- PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
- PSCI 4477 - Constitutional Law I **gtPATHWAYS:**
- PSCI 4487 - Constitutional Law II **gtPATHWAYS:**
- PSCI 4545 - Immigration Politics **gtPATHWAYS:**
- PSCI 4837 - Contemporary Issues in Civil Liberties **gtPATHWAYS:**
- PSYC 3135 - Organizational Psychology **gtPATHWAYS:**
- PSYC 3205 - Human Development I: Child Psychology **gtPATHWAYS:**
- PSYC 3215 - Human Development II: Adolescence and Adulthood **gtPATHWAYS:**
- PSYC 3265 - Drugs, Brain and Behavior **gtPATHWAYS:**
- PSYC 3305 - Abnormal Psychology **gtPATHWAYS:**
- PSYC 3612 - Domestic Abuse **gtPATHWAYS:**
- SOCY 2462 - Introduction to Social Psychology **gtPATHWAYS:** GT-SS3
- SOCY 3020 - Race and Ethnicity in the U.S. **gtPATHWAYS:**
- SOCY 3600 - Social Relations **gtPATHWAYS:**
- SOCY 3700 - Sociology of the Family **gtPATHWAYS:**
- SOCY 4340 - Juvenile Delinquency **gtPATHWAYS:**
- SOCY 4440 - Social Inequality **gtPATHWAYS:**
- SOCY 4460 - Hate Groups and Group Violence **gtPATHWAYS:**
- SOCY 4770 - Advanced Topics in Sociology **gtPATHWAYS:**

Total: 6 hours

**Students must comply with departmental prerequisites.

Examples for Areas of Concentration

Juvenile Justice

- CRJU 3520 - Juvenile Justice Administration **gtPATHWAYS:**
- CRJU 3540 - Crime and Delinquency Prevention **gtPATHWAYS:**

- CRJU 4520 - Gangs and Criminal Organizations **gtPATHWAYS:**
- SOCY 3700 - Sociology of the Family **gtPATHWAYS:**
- SOCY 4340 - Juvenile Delinquency **gtPATHWAYS:**

Total: 15 hours

Law and Society

- CRJU 3420 - Pleas, Trials and Sentences **gtPATHWAYS:**
- CRJU 4430 - Law and Society **gtPATHWAYS:**
- CRJU 4440 - Courts and Social Policy **gtPATHWAYS:**
- PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
- PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**

Total: 15 hours

Domestic Violence

- CRJU 4140 - Domestic Violence and Crime **gtPATHWAYS:**
- CRJU 4170 - Victim Studies **gtPATHWAYS:**
- CRJU 4530 - Families and Intergenerational Crime **gtPATHWAYS:**
- COMM 4265 - Gender and Communication **gtPATHWAYS:**
- PSYC 3612 - Domestic Abuse **gtPATHWAYS:**

Total: 15 hours

Bachelor of Arts/Master of Public Administration

Public Affairs BA/MPA

The College of Liberal Arts and Sciences and the School of Public Affairs, offer students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. The five year BA/MPA program decreases the time and number of semester hours required to earn both degrees by allowing students to count graduate level courses in the School of Public Affairs toward the bachelor's degree requirements. The program is designed to give students an opportunity to prepare for professional positions and advancement with

federal, state or local governments, nonprofits or private sector firms concerned or involved with public affairs.

Admissions Requirements and Recommendations

Interested students should contact their CLAS advisor as early as possible to ensure proper planning for the five year degree.

Interested students should contact the MPA Director as early as possible for advising (Dr. Mary Guy, 303-315-2007 or mary.guy@ucdenver.edu).

Students may apply to the program during the semester in which they will successfully complete 90 semster hours.

To apply, students must have a 3.5 or higher GPA in CLAS.

Students who wish to apply should have most of their general education and major requirements completed by the time they have earned 90 semester hours.

Students must complete all the required application materials for the School of Public Affairs:

- The CU Denver graduate application, parts 1 and 2
- A declaration of program form
- A resume highlighting work and volunteer experience, extra-curricular activities and any special skills, achievements and awards
- Scores from the GRE, GMAT or LSAT (GRE preferred)

Program Requirements

Students must fulfill all the requirements for graduation for CLAS:

- Total of 120 hours (includes hours in public affairs)
- 30 hours in the core curriculum
- 30-48 hours to satisfy major requirements
- Writing proficiency (1 – 7 hours)
- Mathematics proficiency (0 – 3 hours)
- Level III foreign language (0 – 13 hours)
- It is highly recommended that students complete a course in American government, statistics and economics before applying to the MPA program

Students must maintain a 3.5 GPA in CLAS course work.

Students may complete a maximum of 18 semester hours of SPA course work while classified as an undergraduate student.

Students must fulfill all the requirements for graduation from SPA:

- Total of 36–39 semester hours in public affairs
- Six core courses (PUAD 5001 – PUAD 5006)
- Five elective courses at the graduate level (5000 and 6000 level courses)
- Nine of the 15 elective semester hours must be PUAD courses
- An internship (3 hours) is required from those who do not have significant work experience in the field
- Successful completion of the advanced seminar (capstone) course taken in a semester AFTER all core courses are completed. A thesis option is available. Interested students should contact their SPA faculty advisor.

Students must maintain a 3.0 or higher GPA in public affairs course work.

Program Options

BA/MPA students may choose from any CLAS major.
BA/MPA students may choose to do a general MPA or select a MPA concentration in local government, nonprofit management, environmental policy, emergency management and homeland security or domestic violence.

Degree Confirmation

Students are eligible to receive a bachelor's degree once they have successfully completed 120 semester hours and all CLAS requirements. The BA/MPA will be conferred once the student has completed all requirements of the master of public administration degree, including at least 36 hours of graduate level course work.

Certificate

Domestic Violence Graduate Certificate

Certificate Requirements

Students take the four specified courses below and one elective.

- PUAD 5910 - Women and Violence: A Sociological Perspective **gtPATHWAYS:**
- PUAD 5920 - Psychology of Violence Against Women **gtPATHWAYS:**
- PUAD 5930 - Battered Women and the Legal System **gtPATHWAYS:**
- PUAD 5940 - Domestic Violence Social Change and Advocacy **gtPATHWAYS:**

Total: 15 Hours

Emergency Management and Homeland Security Graduate Certificate

Certificate Requirements

Students take two required courses as well as three elective courses approved by their advisor. The emergency eanagement and homeland security concentration/certificate allows students to choose electives organized in the following tracks: policy and management, spatial analysis and quantitative assessment, public safety, homeland security and justice or public and environmental health. Students may choose courses in one track to create a more focused concentration or pick from among the tracks to fulfill their elective course requirements.

- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- PUAD 5650 - Disaster and Emergency Management Policies **gtPATHWAYS:** Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

The emergency management and homeland security certificate requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

Environmental Policy, Management and Law Graduate Certificate

Certificate Requirements

Students take at least two of the three courses listed below:

- PUAD 5631 - Seminar in Environmental Politics and Policy **gtPATHWAYS:**
- PUAD 5632 - Seminar in Environmental Management **gtPATHWAYS:**

- PUAD 5633 - Seminar in Natural Resource and Environmental Health Law **gtPATHWAYS:**

Total: 15 Hours

Local Government Graduate Certificate

Certificate Requirements

Students take at least two of the three courses listed below:

- PUAD 5625 - Local Government Management **gtPATHWAYS:**
- PUAD 5626 - Local Government Politics and Policy **gtPATHWAYS:**
- PUAD 5628 - Urban Social Problems **gtPATHWAYS:**
  Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Nonprofit Management Graduate Certificate

Certificate Requirements

Students take two required courses as well as electives approved by advisor.

- PUAD 5110 - Seminar in Nonprofit Management **gtPATHWAYS:**
- PUAD 5140 - Nonprofit Financial Management **gtPATHWAYS:**
  Additional electives (3): **Semester Hours:** 9

Total: 15 Hours

Non Degree

Criminal Justice Minor

Program Requirements

A minor in criminal justice requires 18 semester hours of course work including the following:

- CRJU 1001 - Introduction to Criminal Justice **gtPATHWAYS:**
- CRJU 2041 - Crime Theory and Causes **gtPATHWAYS:**

Total: 6 Hours

At least one of the following

- CRJU 4042 - Corrections **gtPATHWAYS:**
- CRJU 4043 - Law Enforcement **gtPATHWAYS:**
- CRJU 4044 - Courts and Judicial Process **gtPATHWAYS:**

Total: 3-9 Hours

One to three additional elective courses in criminal justice or ancillary fields.

Master of Criminal Justice

Criminal Justice MCJ

► Graduate School Rules apply to this program

Program Director: Mary Dodge, PhD

Faculty

Professors:

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

Associate Professors:

Mary Dodge, PhD, University of California, Irvine
Angela Gover, PhD, University of Maryland
Callie Rennison, PhD University of Houston

Paul Stretesky, PhD Florida State University

Assistant Professor:

Deanna Perez, PhD, University of Maryland

Associate Research Professor:

Jerry Williams, DPA, University of Colorado Denver

The master of criminal justice (MCJ) program is designed for students interested in comprehensive professional graduate education in the field of criminal justice. It is intended to develop in the student an in-depth understanding of the fields within criminal justice and of background material from supporting disciplines, which enables the student to adapt to many operational specializations.

As an academic and professional field of study, this program is dedicated to preparing men and women not only to administer the system as it presently exists—but also to evaluate, to analyze and to change—to become pioneers in accelerating the shaping of a rational and responsive criminal justice system.

To deal with this system effectively, research design capability must be developed along with the skills required for the ordering and analysis of empirical data. This course of study prepares the student to be an innovator in crime control and prevention through course work dealing with strategies and skills for promoting individual, organizational and social change.

MPA AND MCJ—General Information

Admission Requirements

1. A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.
2. Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.
3. Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant*

professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.
4. A current resume highlighting professional accomplishments and community involvement.
5. International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

Semester	*Preferred Application Deadline*	*Final Deadline**
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: PUAD 5001 , 5003 or 5004 . They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval**

of an advisor. Nondegree student application forms are available in the Office of Admissions or online.

Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the CU Denver Office of Financial Aid and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado

Department of Public Health and Environment and the Denver Center for the Performing Arts.

Time Limit for Master's Degree

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

Degree Requirements

1. Graduate Study

The program leading to the MCJ degree requires a minimum of 36 semester hours of appropriate graduate study with an average of B or better. No grade below C will be accepted for graduate credit. No more than 6 semester hours of independent study can be applied toward the degree.

2. Core Courses

The completion of the following core courses is required with a grade of B- or better:

- CRJU 5000 - Law and Social Control **gtPATHWAYS:**
- CRJU 5100 - Administration of Criminal Justice **gtPATHWAYS:**
- CRJU 5120 - Nature and Causes of Crime **gtPATHWAYS:**
- CRJU 5321 - Research Methods **gtPATHWAYS:**

Total: 12 Hours

3. Course Work

Students must complete a minimum of 27 semester hours of course work in criminal justice.

4. Criminal Justice Experience

Students who have not had criminal justice experience are required to complete CRJU 6910 (field study). A minimum of 240 hours of supervised work is required to earn 3 hours of credit. All required core courses must be completed before taking CRJU 6910.

5. Advanced Seminar

All MCJ students, except those pursing the thesis option, must complete the advanced seminar during the last semester of their degree program. All core classes must be completed before taking the advanced seminar. Students admitted before spring 2009 may opt to take a written comprehensive exam in lieu of CRJU 5561.

- CRJU 5561 - Capstone Seminar **gtPATHWAYS:**

  Students must receive the approval of both a faculty advisor and the director of the criminal justice program to complete a thesis for 3–6 semester hours in lieu of the advanced seminar.

Elective Courses

The courses listed below may be taken as electives for the MCJ degree:

- CRJU 5200 - Wrongful Convictions **gtPATHWAYS:**
- CRJU 5210 - Prisoner Reentry **gtPATHWAYS:**
- CRJU 5220 - The American Jury System **gtPATHWAYS:**
- CRJU 5250 - Criminal Offenders **gtPATHWAYS:**
- CRJU 5260 - Crime and Literature **gtPATHWAYS:**
- CRJU 5325 - Qualitative Methods for Criminal Justice **gtPATHWAYS:** or
- CRJU 7325 - Qualitative Methods for Criminal Justice **gtPATHWAYS:**
- CRJU 5410 - Victimology **gtPATHWAYS:**
- CRJU 5430 - Drugs, Alcohol and Crime **gtPATHWAYS:**
- CRJU 5510 - Contemporary Issues in Law Enforcement **gtPATHWAYS:** or
- CRJU 7510 - Seminar: Contemporary Issues in Law Enforcement **gtPATHWAYS:**
- CRJU 5520 - Corrections **gtPATHWAYS:** or
- CRJU 7520 - Seminar: Corrections **gtPATHWAYS:**
- CRJU 5530 - Community Corrections **gtPATHWAYS:** or
- CRJU 7530 - Seminar: Community Corrections **gtPATHWAYS:**
- CRJU 5540 - Juvenile Justice Administration **gtPATHWAYS:** or
- CRJU 7540 - Seminar: Juvenile Justice Administration **gtPATHWAYS:**
- CRJU 5552 - Criminal Justice Ethics **gtPATHWAYS:** or
- CRJU 7552 - Seminar: Criminal Justice Ethics **gtPATHWAYS:**
- CRJU 5553 - Women and Crime **gtPATHWAYS:** or
- CRJU 7553 - Seminar: Women and Criminal Justice **gtPATHWAYS:**
- CRJU 5554 - Criminal Justice Reform **gtPATHWAYS:** or
- CRJU 7554 - Seminar: Criminal Justice Reform **gtPATHWAYS:**
- CRJU 5571 - The Social Organization of Crime **gtPATHWAYS:** or
- CRJU 7571 - Advanced Seminar: The Social Organization of Crime **gtPATHWAYS:**
- CRJU 5572 - Race, Crime and Justice **gtPATHWAYS:** or
- CRJU 7572 - Advanced Seminar: Race, Crime and Justice **gtPATHWAYS:**

- CRJU 5574 - White Collar Crime **gtPATHWAYS:** or
- CRJU 7574 - Advanced Seminar: White Collar Crime **gtPATHWAYS:**
- CRJU 5575 - The Mentally Disordered Offender **gtPATHWAYS:** or
- CRJU 7575 - Advanced Seminar: The Mentally Disordered Offender **gtPATHWAYS:**

MCJ Options

Concentration in Domestic Violence

A student may choose to complete a concentration in domestic violence as part of the MCJ degree. The concentration provides an interdisciplinary perspective on crime, the formulation of laws and codes, the criminal legal system and its intersection with women and violence. Students seeking a domestic violence concentration must complete 15 semester hours related to domestic violence, which are completed via intensive workshops that meet periodically throughout a two-year period.

- PUAD 5910 - Women and Violence: A Sociological Perspective **gtPATHWAYS:**
- PUAD 5920 - Psychology of Violence Against Women **gtPATHWAYS:**
- PUAD 5930 - Battered Women and the Legal System **gtPATHWAYS:**
- PUAD 5940 - Domestic Violence Social Change and Advocacy **gtPATHWAYS:** Elective (1) (3 semester hours)

Total: 15 Hours

Online Option

SPA launched an online option for the master of criminal justice degree in 2010.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others. For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom.

Master of Public Administration

Public Administration MPA

Program Director: Mary Guy, PhD

Faculty

Professors:

Kathleen Beatty, PhD, Washington State University
Lloyd Burton, PhD, University of California, Berkley
Peter deLeon, PhD, Pardee RAND Graduate School
Mary Guy, PhD, University of South Carolina
Richard Stillman, PhD, Syracuse University
Paul Teske, PhD, Princeton University

Associate Professors:

Angela Gover, PhD, University of Maryland
Tanya Heikkila, PhD University of Arizona
Jody Fitzpatrick, PhD, University of Texas, Austin
Christine Martell, PhD, Indiana University
Jessica Sowa, PhD, Syracuse University
Paul Stretesky, PhD, Florida State University
Allan Wallis, PhD, City University Graduate Center
Brian Gerber, PhD, Stony Brook University

Assistant Professors:
Todd Ely, PhD, New York University
Danielle Varda, PhD, University of Colorado Denver
Chris Weible, PhD, University of California-Davis
Benoy Jacob, PhD, University of Illinois at Chicago

MPA, Western Slope Director:
Fred Rainguet, PhD, University of Colorado

Wirth Chair:
Alice Madden, JD, University of Colorado

Research Professor:
Stephen Block, PhD, University of Colorado

Associate Research Professor:
Callie Rennison, PhD, University of Houston

Clinical Professor:
Malcolm Goggin, PhD, Stanford University

Research Associate:
Robert Reichardt, PhD, Pardee RAND Graduate School
Kelly Hupfeld, JD, Northwestern University

Professors Emeritus:
John Buechner, PhD, University of Michigan
Dale Neugarten, PhD, University of Southern California

The master of public administration (MPA) is designed to provide graduate professional education for students who wish to prepare themselves for careers in public management or policy, in nonprofit organizations or in private corporations that interface with the other sectors. The program also offers to those already in public service an opportunity to pursue additional education as a means of furthering their careers.

MPA AND MCJ—General Information

Admission Requirements

1. A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.
2. Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.
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Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the CU Denver Office of Financial Aid and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado

Department of Public Health and Environment and the Denver Center for the Performing Arts.

Time Limit for Master's Degree

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

Degree Requirements

The minimum requirements for the basic MPA degree are outlined below. Occasionally, changes are made; students may graduate under the requirements that were in effect when they were admitted.

1. Graduate Course Work

All students must complete a minimum of 36 semester hours of graduate course work, with an average of B or better. No more than 6 semester hours of independent study can be applied toward the degree. Students who have not had professional work experience in the public or nonprofit sectors must complete an internship through an additional 3-semester-hour course described in No. 6 below, bringing their total semester-hour requirements to 39.

2. Complete the Following Core Courses

All MPA students (with the exception of those in the executive MPA option) must complete the following core courses or approved equivalents:

- PUAD 5001 - Introduction to Public Administration and Public Service **gtPATHWAYS:**
- PUAD 5002 - Organizational Management and Behavior **gtPATHWAYS:**
- PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**
- PUAD 5004 - Economics and Public Finance **gtPATHWAYS:**
- PUAD 5005 - The Policy Process and Democracy **gtPATHWAYS:**
- PUAD 5006 - Leadership and Professional Ethics **gtPATHWAYS:**

Total: 18 Hours

Students must receive a grade of *B*- or better in each core course. Students who earn a lower grade may repeat the course once to attempt to earn a *B*- or better.

3. Electives

All MPA students must complete 15 hours of electives. Courses in which a student earns a grade of less than a *C* will not be counted toward a degree.

4. Capstone Class

All MPA students, except those pursuing the thesis option, must complete the capstone course during the last semester of their degree program. All core courses must be completed before beginning the capstone.

- PUAD 5361 - Capstone Seminar **gtPATHWAYS:**

5. Thesis Option

The thesis option is available in lieu of PUAD 5361 for MPA students who have an interest in pursuing a topic in-depth or who are planning to pursue a career in research or academia. Students must receive approval from their faculty advisor or the MPA director to pursue the thesis option. The thesis is a six credit course that normally spans two semesters.

6. Internships

Students who have limited experience (generally defined as less than one year of experience) in public, nonprofit or relevant private-sector service must enroll in PUAD 6910, Field Study in Public Administration. The decision to require PUAD 6910 for a particular student is made by the faculty admissions committee or the student's faculty advisor upon the student's acceptance to the MPA program. A minimum of 240 hours of supervised work and study is required to earn 3 semester hours of credit. This requirement raises the total semester hours needed to earn the MPA degree to 39.

MPA Options

Concentrations and Graduate Certificates

All SPA concentrations are a total of 15 semester hours and may either be taken as part of the MPA program or as a stand-alone graduate certificate.

A student *may* choose to select one of the concentrations described below or may complete the MPA without a specified concentration. Students completing a concentration take their electives in the area of their concentration, complete the

advanced seminar project in the area of their concentration and are advised by faculty from the concentration. The concentrations and their particular required courses are:

Environmental Policy, Management and Law Concentration

Students take at least two of the three courses listed below:

- PUAD 5631 - Seminar in Environmental Politics and Policy **gtPATHWAYS:**
- PUAD 5632 - Seminar in Environmental Management **gtPATHWAYS:**
- PUAD 5633 - Seminar in Natural Resource and Environmental Health Law **gtPATHWAYS:**
  Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Local Government Concentration

Students take at least two of the three courses listed below:

- PUAD 5625 - Local Government Management **gtPATHWAYS:**
- PUAD 5626 - Local Government Politics and Policy **gtPATHWAYS:**
- PUAD 5628 - Urban Social Problems **gtPATHWAYS:**
  Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Domestic Violence Concentration

Students take four specified courses and one elective.

- PUAD 5110 - Seminar in Nonprofit Management **gtPATHWAYS:**
- PUAD 5910 - Women and Violence: A Sociological Perspective **gtPATHWAYS:**
- PUAD 5920 - Psychology of Violence Against Women **gtPATHWAYS:**
- PUAD 5930 - Battered Women and the Legal System **gtPATHWAYS:**
  Elective approved by advisor (1) (3 semester hours)

Total: 15 Hours

Emergency Management and Homeland Security Concentration

Students take two required courses as well as electives approved by advisor.

- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
- PUAD 5650 - Disaster and Emergency Management Policies **gtPATHWAYS:**
  Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

The emergency management and homeland security concentration requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

Nonprofit Organizations Concentration

Students take two required courses as well as nonprofit electives approved by advisor.

- PUAD 5110 - Seminar in Nonprofit Management **gtPATHWAYS:**
- PUAD 5140 - Nonprofit Financial Management **gtPATHWAYS:**
  Other nonprofit courses (9 semester hours)

Total: 15 Hours

The Accelerated Cohort

The accelerated MPA is a fast-paced, full-time option that brings academically superior students together with a dedicated research and teaching faculty in the midst of the vibrant downtown Denver environment.

The accelerated option enables students to focus their energies in a concentrated program of study and earn a nationally accredited, 36-hour MPA in 12 months. (It is preferred that applicants have some knowledge of economics, statistics and political science.)

The cost for the accelerated option is the same for both in-state and out-of- state students, providing out-of-state students with substantial savings.

The students in the cohort enjoy a unique experience as they go through all classes in the MPA together, fostering a community of scholar-practitioners.

Students are admitted to the program in cohorts of approximately 20 participants. A new cohort starts each fall. The cohort format helps to increase the opportunity to become acquainted with other graduate students and increases the opportunities for interaction between program participants and faculty.

The Executive Option

The School of Public Affairs currently offers an executive MPA option for senior level professionals in the nonprofit and public sectors. Potential students may contact the program director, Dr. Kathleen Beatty, at 303.315.2485, for more information.

Online Option

SPA provides a unique opportunity for students who live at a distance from the university to obtain a MPA degree.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others. For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom. The nonprofit organization concentration is available online, as well as a variety of other electives leading to a general MPA degree. Students in the executive option may also choose to do all SPA course work online.

Domestic Violence Cohort

The first graduate program of its kind in the nation, the University of Colorado Denver's MPA concentration in domestic violence focuses on the management and policies surrounding domestic violence, as well as grass-roots social justice work and best practices in this emerging field. Each fall, 10 to 20 students are accepted into the cohort program, allowing the participants to build a strong community of advocates and learners.

The program invites students from around the world to participate in a unique cohort program, which combines online courses with five intensive campus seminars spaced throughout the two-year program. Students may choose to take all courses in the classroom if they wish.

The cost of the domestic violence concentration courses is the same for in-state and out-of-state students. Nonresident students pursuing the MPA with a concentration in domestic violence may also qualify for reduced tuition through the Western Regional Graduate Program which covers 14 western states.

Western Slope Cohort

Public and nonprofit sector professionals living in Colorado's Western Slope have the opportunity to earn a MPA without traveling to the Front Range. SPA offers one MPA course each semester in Grand Junction at Mesa State College and supplements these offerings with online courses. Courses are designed to integrate the academic and applied experiences necessary to be an effective modern manager. The courses are offered in an intensive weekend format and emphasize the needs of small and rural communities.

Master of Public Administration/Dual Degree

Public Administration MPA/JD

The School of Public Affairs and the University of Colorado at Boulder School of Law jointly sponsor a dual degree program leading to the simultaneous granting of the master of public administration (MPA) and juris doctor (JD) degrees. The program may be of particular interest to students who wish to practice law within the public sector, obtain a senior administrative post, represent public-sector clients, represent private-sector clients in transactions with government agencies and institutions and/or develop scholarly expertise in the relationship between law and public administration.

Interested persons must separately apply to and be admitted by both SPA and the School of Law. Upon admission, students may begin full-time study at either SPA or the School of Law; however, law study must be initiated no later than the beginning of the second year of enrollment in the program, and the first year of law study must be taken in its entirety and exclusive of nonlaw course work.

Through the choice of electives, students may develop a limited substantive specialization within the study of law and public administration. The dual degree program is structured to allow for 12 semester hours from the law school to be accepted as electives in the 36-semester-hour MPA program, and 12 semester hours from SPA to be accepted into the law school's 89-semester-hour JD program. Students are thus simultaneously awarded both degrees with a cumulative total of 101 semester hours; the program therefore allows students to complete all dual degree requirements in approximately four years of full-time study. Students without prior public-sector work experience will be required to complete an internship in an appropriate governmental institution or closely related nonprofit organization.

Public Administration/Economics MPA/MA

The fields of public administration and economics are inextricably linked. Economists provide much of the theory and analytic foundation that administrators use to evaluate and implement policy. Given that the capitol of Colorado is in Denver, there is great need for administrators that fully understand methods of program evaluation and have the theoretical background needed to forecast how individuals and institutions will respond to new proposals. Similarly, good theory and practice must take into account how the proposals will be implemented and results interpreted. Both administrators and economists need to be engaged in constructive dialogue for either to be fully effective.

Therefore the Department of Economics of the College of Liberal Arts and Sciences and the School of Public Affairs jointly sponsor a dual degree program. This program enables students to simultaneously earn an MA degree in economics with a master of public administration (MPA).

The dual degree program provides students to opportunity to take the core of both programs and choose electives that suit their career and personal goals best. Electives in one program are allowed to count as an elective in the other. The net result is that while both degrees separately require 66 hours, the dual degree program provides a more comprehensive and effective education in 48 hours or 73 percent of the dual degree total.

Degree Requirements

Admission into both programs

Students must apply separately to each program, meet the admission requirements of each program and be accepted by each program. If one program accepts a student for the dual degree but the other program does not, then the student will not be accepted for the dual degree. It is possible for students currently admitted to one program to learn about the dual degree and choose to apply after admission to either economics or SPA.

Other policies

Minimum Grade for Graduation

Students must maintain a GPA of 3.0 or higher across all courses that are applied to the dual degree. Students who fail to maintain a GPA of 3.00 will be placed on probation for a semester, after which they may be dropped from the dual degree program if the GPA is not increased to 3.0 or above. Additionally, any core course in which a student receives a final grade lower than B- cannot be counted toward the total credits required for the dual degree; in such a case, the student must retake the course.

Capstone Advising

All students are required to complete a capstone paper and obtain the signatures of three graduate faculty. Every dual degree student, regardless of the capstone course they choose (ECON 6073 or PUAD 5361) must select a committee composed of faculty from both programs.

Course Credit Transfers from Other Universities

No more than 6 hours may be transferred, and both SPA and economics program directors must approve any transfers.

Sample Plan of Study for the MPA/MA Economics

Total: 48 semester hours with 21 in economics and 27 in public administration

Core

(33 semester hours)

A grade of B- or better is required in all core courses, with a B average overall. No public administration course may be taken a third time.

- ECON 5073 - Microeconomic Theory **gtPATHWAYS:**
- ECON 5083 - Macroeconomic Theory **gtPATHWAYS:**
- ECON 5803 - Mathematical Economics **gtPATHWAYS:**
- ECON 5813 - Econometrics I **gtPATHWAYS:**
- ECON 5823 - Econometrics II **gtPATHWAYS:**
- PUAD 5001 - Introduction to Public Administration and Public Service **gtPATHWAYS:**
- PUAD 5002 - Organizational Management and Behavior **gtPATHWAYS:**
- PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**
  or
- PUAD 5004 - Economics and Public Finance **gtPATHWAYS:**
- PUAD 5005 - The Policy Process and Democracy **gtPATHWAYS:**
- PUAD 5006 - Leadership and Professional Ethics **gtPATHWAYS:**
- ECON 6073 - Research Seminar **gtPATHWAYS:**
  or
- PUAD 5361 - Capstone Seminar **gtPATHWAYS:**
  To be completed after all other core courses or with instructor and advisor consent.

Electives

(15 semester hours)

If the student takes PUAD 5361, then they are required to take 6 semester hours of economics electives and 9 semester hours of electives from SPA labeled 5000 or above.

If the student takes ECON 6073, then they are required to take 3 semester hours of economics electives and 12 semester hours of electives from SPA labeled 5000 or above.

Public Administration/Urban and Regional Planning MPA/MURP

Background and Purpose

Public administration and urban and regional planning have many aspects in common. To provide students with an excellent education through understanding of both professions, the School of Public Affairs and the College of Architecture and Planning have developed a dual degree program. Students can obtain both master of public administration (MPA) and master of urban and regional planning (MURP) degrees with a minimum of 63 semester hours, as compared to a total of 87 semester hours to complete both degrees independently.

To be eligible for the dual MPA/MURP degree program, students must be admitted to each of the two schools under their respective admission procedures and standards and indicate an intention to pursue the dual degree. Students will take all the core courses and the advanced seminar in public policy and management required for an MPA, plus the core and concentration requirements necessary for the MURP.

Students in each school must apply to the other school before completing 18 hours in their respective programs. Upon admission to both schools, students will be assigned an advisor in each school to work out a specific degree plan.

Core and Elective Requirements

Core Courses (42 semester hours)

MURP

- URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**
- URPL 5511 - Planning Methods II **gtPATHWAYS:**
- URPL 5520 - Urban Spatial Analysis **gtPATHWAYS:**
- URPL 5530 - Planning Law **gtPATHWAYS:**
- URPL 6630 - Planning Studio I **gtPATHWAYS:**
- URPL 6631 - Planning Studio II **gtPATHWAYS:**

Total: 18 Hours

MPA

- PUAD 5001 - Introduction to Public Administration and Public Service **gtPATHWAYS:**
- PUAD 5002 - Organizational Management and Behavior **gtPATHWAYS:**
- PUAD 5004 - Economics and Public Finance **gtPATHWAYS:**
- PUAD 5005 - The Policy Process and Democracy **gtPATHWAYS:**
- PUAD 5006 - Leadership and Professional Ethics **gtPATHWAYS:**

Total: 15 Hours

Take one of two

- PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**
- URPL 5510 - Planning Methods I **gtPATHWAYS:**

Total: 3 Hours

Additional Course Work (21 semester hours)

MURP

12 hours if URPL 5510 elected, or 15 hours if PUAD 5003 elected. Courses are to be selected with MURP advisor's approval.

- URPL 5510 - Planning Methods I **gtPATHWAYS:**
- PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**

Total: 12-15 Hours

MPA

6 hours if PUAD 5003 elected, or 9 hours if URPL 5510 elected.

- PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**
- URPL 5510 - Planning Methods I **gtPATHWAYS:**

Total: 6-9 Hours

Practicum

- PUAD 5361 - Capstone Seminar **gtPATHWAYS:** (3 hours required)

Total: 3 Hours (required)

Electives

Take one of the following or another option with MPA advisor's approval (3 hours):

- PUAD 5250 - Intergovernmental Management **gtPATHWAYS:**
- PUAD 5410 - Administrative Law **gtPATHWAYS:**
- PUAD 5440 - Negotiation and Conflict Resolution **gtPATHWAYS:**
- PUAD 5502 - Public Financial Management and Policy **gtPATHWAYS:**
- PUAD 5503 - Governmental Budgeting **gtPATHWAYS:**
- PUAD 5540 - Organization Development **gtPATHWAYS:**
- PUAD 5625 - Local Government Management **gtPATHWAYS:**
- PUAD 5626 - Local Government Politics and Policy **gtPATHWAYS:**
- PUAD 5631 - Seminar in Environmental Politics and Policy **gtPATHWAYS:**
- PUAD 5632 - Seminar in Environmental Management **gtPATHWAYS:**

Total: 3 Hours

Doctor of Philosophy

Public Affairs PhD

► Graduate School Rules apply to this program

Program Director: Peter deLeon, PhD

Faculty

Professors:

Kathleen Beatty, PhD, Washington State University
Lloyd Burton, PhD, University of California, Berkley
Peter deLeon, PhD, Pardee RAND Graduate School
Mary Guy, PhD, University of South Carolina
Richard Stillman, PhD, Syracuse University
Paul Teske, PhD, Princeton University

Associate Professors:

Brian Gerber, PhD, Stony Brook University
Angela Gover, PhD, University of Maryland
Jody Fitzpatrick, PhD, University of Texas, Austin

Allan Wallis, PhD, City University Graduate Center
Christine Martell, PhD, Indiana University
Jessica Sowa, PhD, Syracuse University
Paul Stetesky, PhD, Florida State University
Tanya Heikkila, PhD, University of Arizona

Danielle M. Varda, PhD, University of Colorado Denver

Christopher M. Weible, PhD, University of California-Davis

Benoy Jacob, PhD, University of Illinois at Chicago

Assistant Professors:

Todd Ely, New York University

Wirth Chair:

Alice Madden, JD, University of Colorado

Research Professor:

Stephen Block, PhD, University of Colorado

Clinical Professor

Malcolm Goggin, PhD, Stanford University

Research Associate:

Robert Reichardt, PhD, Pardee RAND Graduate School

Professors Emeritus:

John Buechner, PhD, University of Michigan

Dale Neugarten, PhD, University of Southern California

The School of Public Affairs offers a program of advanced graduate study leading to the doctor of philosophy in public affairs. The program, based on the Denver campus, permits elective work to be taken on any campus of the university if it is part of the approved program of study or degree plan.

The doctoral program was developed to meet the need for people with mastery in the scholarly theory, concepts and research skills of public administration, public policy and public management, and who are able to use such skills in careers of research, teaching and analysis of public-sector challenges. The PhD is designed to prepare students for leadership responsibilities in academia, research and public policy analysis. Accordingly, the PhD stresses the development of theoretical, conceptual and methodological knowledge in public administration, policy and management.

Participants

The doctoral program is primarily designed to serve (1) people who desire to further the field of public policy and public and nonprofit management through teaching and research; (2) scholar-practitioners working in government, private-sector organizations concerned with government and nonprofit organizations; and (3) policy analysts in government, private-sector organizations concerned with government and nonprofit organizations.

Time Required for PhD Degree

The PhD program requires an intense commitment. Most courses and seminars are offered during the late afternoon, in the evenings or on an intensive basis. (Some electives are offered online, but core courses are not.) Anyone starting the PhD program with a master's degree in public administration can expect to take at least three but no more than eight years to complete all of the requirements for the PhD.

Students are required to enroll for a minimum of 6 semester hours of course work each fall and spring semester. All requirements for the PhD degree should be completed within eight years of admittance. Any student entering the program with no prior graduate work in public administration, public policy or management should expect additional course requirements.

PhD Admission Requirements

Admission to the program is based on the personal and professional qualifications of the applicant. It is desirable that an applicant have a master's degree in public administration or a closely related field before undertaking doctoral work. Applicants should have a 3.5 GPA or above in master-level course work, as well as a combined score of 1,000 or better on the quantitative and verbal sections of the GRE. Successful applicants will also show the potential for productive careers of scholarship, research and analysis.

Meeting the minimum thresholds listed above does not assure admission. In unusual cases, students who fail to meet the thresholds may be admitted if high academic skills are demonstrated in other ways.

PhD Application Process

Applicants must submit the following items to the SPA office before they can be formally considered for admission. The application deadline is February 1; admitted students will begin in the fall semester.

- application forms
- official transcripts (two copies) from all degree granting institutions
- GRE scores (no more than three years old)
- a resume or vita
- three letters of recommendation from colleagues and previous professors, focusing on the potential for deriving benefit from the PhD program
- a 500–1,000 word statement of educational and career goals, focusing on research interests

In addition, students may also submit samples of research reports or publications. All application materials will be retained by SPA and will not be returned. A personal meeting with the PhD director or other faculty member is recommended.

Financial Assistance

For excellent candidates, SPA will fund a small number of doctoral research assistantships each year based on financial availability. Students selected will receive a full-tuition waiver as well as a stipend of $15,000 for the academic year. Our goal is to provide such funding for students for at least three years.

Degree Requirements

Course Work

A total of 36 semester hours of course work is required past a master's degree in public administration or a related degree. In some cases, additional prerequisite courses may be required to assure adequate preparation for doctoral studies. All PhD students are required to take a minimum of 6 semester hours of course work in both the fall and spring semesters, until their course work requirements are met, if they wish to maintain their full-time student status.

During their first year of study, all PhD students are required to take the following four doctoral seminars:

- PUAD 8010 - Historical and Comparative Foundations of Public Administration **gtPATHWAYS:**
- PUAD 8020 - Seminar in Public Management **gtPATHWAYS:**
- PUAD 8030 - Seminar in Public Policy **gtPATHWAYS:**

- PUAD 8040 - Seminar In Economic and Institutional Foundations of Public Affairs **gtPATHWAYS:**

Total: 12 Hours

During the next year, doctoral students are required to take

- PUAD 8070 - Quantitative Methods II **gtPATHWAYS:**
- PUAD 8060 - Seminar On The Conduct Of Empirical Inquiry **gtPATHWAYS:**

Total: 9 Hours

The Doctoral Program at SPA requires advanced proficiency in research methods or tools that will assist in completing dissertation research; six credit hours of advanced proficiency are required - PUAD 8050 & 8070. Before enrolling in PUAD 8070, students must successfully complete PUAD 8050, as well as PUAD 8010, 8020, 8030, 8040 and 8060. These prerequisites may be waived with the permission of the doctoral director. An approved qualitative course of the student's choosing is also required. This course might include qualitative methodology, administrative law, geographical information systems, or Social Network Analysis. In addition, all PhD students must complete four elective courses relevant to the student's dissertation plans.

Comprehensive Exam and Dissertation

In addition to course work, PhD students must pass a comprehensive exam no later than the beginning of their third year of study. Students are also required to complete and defend, before a faculty committee, a dissertation that makes a significant contribution to the literature and theory of public administration, management or policy.

Students are advanced to candidacy for the PhD once they have completed all required course work and examinations, have successfully presented their research colloquium and have been certified for candidacy by his/her doctoral committee. After students are formally advanced to candidacy, they must register for a total of 30 hours of dissertation research credit to complete the PhD. Each fall and spring semester, students are expected to register for 5 semester hours hours of dissertation research; if unable to register for at least 5 semester hours, students must request a leave of absence from the PhD program until able to complete the minimum dissertation requirement. Students may take up to two semesters' leave of absence before they are disenrolled from the program. Students then would need to reapply to the program.

Further details on the program can be found in the *Handbook for the Doctor of Philosophy in Public Affairs Program*, available from the SPA office on online at http://spa.ucdenver.edu.

Bachelor of Arts/Master of Criminal Justice

Criminal Justice BA/MCJ

The dual BA/MCJ program is designed to allow students to work concurrently toward the BA in criminal justice and the master in criminal justice (MCJ). Graduate credit hours earned while enrolled in the BA/MCJ program can be counted toward both the bachelor of arts and master of criminal justice. This program offers high-achieving students the opportunity to complete their undergraduate and graduate degrees in criminal justice in five years.

Admissions Requirements and Process

Interested students should contact their BA academic advisor as early as possible to ensure proper planning for the five year degree.

Eligibility Requirements

Both current UC Denver students and new transfer students are eligible to apply after meeting the following:

- Currently enrolled in the School of Public Affairs as a criminal justice major
- Completed the University of Colorado Denver's core curriculum
- Completed 60 semester credit hours
- Completed the following 12 semester credit hours in criminal justice: CRJU 1001 Introduction to Criminal Justice, CRJU 2041 Crime Theory and Causes, CRJU 3100 Criminal Justice Research Methods, and CRJU 3150 Statistics for Criminal Justice (transfer criminal justice courses must have been approved and accepted toward the major).
- Minimum 3.0 cumulative GPA
- Minimum 3.5 cumulative GPA in criminal justice courses
- Completed or Scheduled official GRE or LSAT exam

Application Process

Students can apply for the joint program anytime from their second year forward, but students will most likely apply during the second semester of their junior year. We require students submit all application materials by Oct. 15 for admission to the spring semester and by March 15 for admission to the fall semester for full consideration. The following steps should help in the application process:

1. Plan ahead when scheduling courses through the junior year. All four of the required criminal justice courses and all of the student's core education requirements must be completed by the end of the student's junior year.
2. At the beginning of the semester in which the student is applying to the program, the student should approach a criminal justice faculty member about writing a

letter of recommendation. The student should also begin working on a personal statement of purpose. The following guidelines should help with writing the statement.
    - Length 1 to 2 pages
    - The statement should describe:
        - Applicant's reasons for undertaking graduate study in criminal justice
        - Applicant's future career plans
        - Planned area of concentration within criminal justice
3. By Oct 15 of the fall semester or March 15 of the spring semester the student must submit the following items to the undergraduate coordinator:
    - Personal statement of purpose
    - One letter of recommendation from a faculty member
    - School of Public Affairs' BA/MCJ application form
    - Official GRE or LSAT scores

Admission Criteria

Admission to the BA/MCJ program is competitive. Applicants will be evaluated on the following:

1. Grade point average (overall and in criminal justice course work)
2. Grade trend (improving, consistent, or declining)
3. Total number of credit hours completed
4. Likelihood of success and persistence based from the Statement of Intent and Reference Letter
5. Official GRE or LSAT scores

Students who are not admitted to the BA/MCJ program are eligible to reapply after completing an additional 12 semester credit hours. *Students can apply and be considered for admission to the dual BACJ/MCJ program a maximum of two times.*

BA/MCJ Program Matriculation

Students must successfully complete (*B*, or better) a minimum of 6 semester credit hours of graduate criminal justice course work each academic year following admission to the BA/MCJ program. A maximum of 15 graduate semester credits can be completed as a BA/MCJ student, for dual credit.

Students must maintain a minimum 3.0 cumulative grade point average for all course work and a 3.0 grade point average for courses in criminal justice.

The School of Public Affairs reserves the right to rescind a BA/MCJ student's admittance to the dual program *if at any point the students' grade point average falls below the requirements lists above.*

Tuition and Fees

Students will be assessed tuition and fees at the undergraduate rate until the bachelor of arts in criminal justice degree is conferred.

Students will assess tuition and fees at the graduate level upon formal acceptance to the master of criminal justice program.

Program Requirements

General BA/MCJ Degree Program Requirements

- 144 total semester credit hours passed
- 34-36 semester credit hours in the general education core curriculum
- 46-48 semester credit hours in general electives
- 21 semester hours of undergraduate criminal justice course work
- 18 upper-level (3000 or higher) semester credit hours in criminal justice
- 45 total semester hours of upper-division course work (3000 and above)
- Minimum 3.0 CU cumulative grade point average in undergraduate criminal justice courses
- Full acceptance to the Graduate School and the master in criminal justice program
- Minimum 36 semester hours of graduate-level course work (5000 and above)
- Minimum of 30 hours of resident credit; 21 out of the last 30 hours in resident course work
- Minimum of a B (3.0) in each required core MCJ course
- Minimum of 3.0 CU cumulative grade point average in all graduate level courses
- Successful completion of master of criminal justice capstone/advanced seminar or thesis
- Fulfillment of all college and major requirements

Degree Confirmation

Students are eligible to receive the BA in criminal justice degree once they have successfully completed 120 semester hours and all CU Denver undergraduate degree requirements. The MCJ will be conferred once the student has completed all requirements of the master of criminal justice degree.

CU Online

At A Glance: CU Online

Frequently Asked Questions

Q. What is CU Online's Web site address?
A. www.cuonline.edu.

Q. I'm not a UC Denver student. Can I take a course through CU Online?
A. If you are not currently a student or attending a university other than UC Denver, you may enroll in an online course after applying and getting accepted as either a degree- or nondegree-seeking student. Visit the schools' and colleges' sections in this catalog for specific admission requirements for each school. If you are a student at another institution, contact your school to find out if the online course (and credit) will transfer as intended.

Q. What kind of credit will I receive for online courses?
A. The credits you earn through CU Online are identical to credits earned through traditional on-campus courses. UC Denver is a fully accredited institution, making credits easily transferable to other universities. And if you graduate solely by taking online courses—the degree is the same.

Q. Does CU Online offer any core curriculum courses?
A. Yes. Approximately half of the courses offered are core curriculum and can be applied toward an undergraduate degree program.

Q. Does my online course require textbooks?
A. Unless the instructor waives textbook requirements, all online courses are supplemented with textbooks. Further documentation may also be provided by the instructor, in a free downloadable format.

Q. What times does my online course meet?
A. Unless the instructor has designated a specific login time for a live chat session, you may login at any time, day or night.

Q. When does my hybrid course meet on campus?
A. Hybrid courses have varying campus meeting dates so it is integral that you attend the first campus meeting to receive the schedule. If you miss the first campus meeting, you should contact the instructor immediately either by phone or e-mail.

Q. How long do online courses last?
A. Online courses typically follow the duration of the respective semester in which it is offered. Some instructors may opt to provide a shortened intensive semester course, which would be indicated in your course schedule.

Q. How do I sign up for an online course?
A. If you've already applied to the university, you may register for online courses directly through the Web registration system, https://hydra.cusys.edu/pinnacle/cgi-bin/sisget.cgi/dn/awssgnsn/. If you are not a UC Denver student, you may apply as either a degree- or nondegree-seeking student through the university's main site, www.ucdenver.edu.

Q. What are the tuition differences for online courses?
A. The tuition is the same between on-campus courses and online courses. There is,

however, a standard course fee for online courses (per course, not per semester hour) that goes to pay for the online technology, support and 24-7 customer service.

- Online course fee for in-state students - $100; online course fee for out-of-state students - $125
- Hybrid course fee for in-state students - $50; hybrid course fee for out-of-state students - $75

Q. Are there tuition breaks for online courses?
A. Yes. If you are registered for only online courses, you are simply responsible for the information technology fee and the student information system fee. **All other traditional fees are waived**, along with the incidental fees associated with driving, mass transit, parking, etc. There is also a special tuition discount if you are an out-of-state student signed up for only online courses.

Q. I dropped my online courses, why do I still owe tuition?
A. If an online course is not dropped within the initial add/drop period, you will not be able to receive tuition reimbursement. Be sure to check the drop/add dates stated online at www.ucdenver.edu/registrar and in the printed schedule of courses.

Q. Will my degree say CU Online?
A. No. Degrees are awarded through the University of Colorado.

Q. What if I have questions about CU Online?
A. If you have further questions about courses, degrees, registration, tuition and fees or computer requirements, e-mail them to help@cuonline.edu or call Naomi Wahls, 303-315-3700.

Computer Requirements

In order to make the most of your online learning experience, there are several technical requirements you will need to fulfill. Refer to the guidelines below.

eCollege System Requirements	**Blackboard System Requirements**
Microsoft Windows	**Microsoft Windows**
* Windows 2000 or XP	* Windows 2000 XP, or Vista (Vista users, please see below.)
* 64 MB RAM	* 2 Gigabytes of RAM and 20 Gigabytes of free disk space on your primary hard drive (usually labeled the "C" drive)

* 28.8 kbps modem (56K Recommended)	* 28.8 kbps modem (56K recommended)
* SoundCard & Speakers	* SoundCard & Speakers
At least one of the recommended PC browsers with Java needs to be enabled, although we recommend having two browsers:	At least one of the recommended PC browsers with Java needs to be enabled, although we recommend having two browsers:
* Internet Explorer 7.0 (recommended)	* Internet Explorer 7.0 (supported)
* Internet Explorer 6.0 (supported)	* Internet Explorer 6.0 (supported)
	* Internet Explorer 5.5 (supported)
* Netscape Communicator 7.1 (supported)	* Netscape Communicator 7.1 (supported)
	* Firefox 3 (recommended)
* Firefox 3 (recommended)	* Firefox 2.0 (supported)
* Firefox 2.0 (supported)	* Firefox 1.x (supported)
Macintosh OS * MacOS 9.1 and OS X * 32 MB RAM (64 Recommended)	Vista users: Blackboard has tested Release 7 of the Blackboard Academic Suite with Microsoft Windows Vista using both the Microsoft Internet Explorer 7.0 Web browser and the Firefox 2.0 Web browser. The results of the testing show that Microsoft Windows Vista is compatible.

* 28.8 kbps modem (56K Recommended)
* Sound Card & Speakers

At least one of the recommended MAC browsers with Java needs to be enabled, although we recommend having two browsers:

* Netscape Communicator 7.1 (supported)
* Safari 3.0 (recommended for OS X)
* Safari 2.0 (supported for OS X)
* Firefox 3 (recommended)
* Firefox 2.0 (supported)

Compatible configurations are partially tested by Blackboard and should function as expected. In this instance, Blackboard has conducted several weeks of testing to determine compatibility. Users that have upgraded to Microsoft Windows Vista should feel comfortable using it with Microsoft Internet Explorer 7 or Firefox 2.0 to access the Blackboard Academic Suite, Release 7.

However, please be aware of the following issues uncovered during testing:

AS-102054: The Visual Text Box Editor controls do not function correctly in Internet Explorer 7 because they require a component not available in Windows Vista. Users using Internet Explorer 7 when interacting with UC Denver's Blackboard, should turn off the Visual Text Box Editor in their personal preferences or use Firefox version 2.0, or higher.

Macintosh OS

* MacOS 9.1 and OS X

* 2 Gigabytes of RAM and 20 Gigabytes of free disk space on your primary hard drive (usually labeled the "C" drive)

* 28.8 kbps modem (56K Recommended)

* Sound Card & Speakers

* Recommended Software

At least one of the recommended MAC browsers with Java needs to be enabled, although we recommend having two browsers:

* Netscape Communicator 7.1 (supported)

* Netscape Communicator 6.2 (supported)

* Safari 3.0 (supported for OS X)

* Safari 2.0 (recommended for OS X)

* Safari 1.2 (supported for OS X)

* Firefox 3 (supported)

* Firefox 2.0 (supported)

* Firefox 1.x (supported)

Internet Service Provider (ISP)

An ISP is a company that provides you with the software and access necessary for getting onto the Internet. You will need Internet access to take your courses.

E-mail Account

Your e-mail address is established when you sign up with an ISP. Check with your ISP if you do not know what your e-mail address is. Special characters can cause problems with some systems that make it difficult to reach the intended mailbox. We suggest that you do not use special characters, for example +, &, $, etc., in your e-mail address.

Java Capable Browser

We support Microsoft Internet Explorer 5.5 and 6.0 for Windows and Internet Explorer 5.1 through 5.2 for Macintosh. Netscape Communicator 6.2 and 7.1 for Windows and Netscape Communicator 7.1 and Safari 1.x for Macintosh, are also supported.

For additional information, go to www.cuonline.edu.

You have a life filled with family and friends. A life filled with work and responsibilities. A life—filled… which makes a rigid school schedule seem even more impractical and unrealistic.

Enter online courses.

Essentially, online courses allow you the opportunity to attend CU Denver on your time, at your convenience, while also providing the recognition and respect that only a brick and mortar university can offer.

But it's not only one or two electives or random courses; you can actually complete an entire CU Denver degree (or 17) all online, without stepping a foot on campus. So, you can enjoy the same stimulating courses, top-notch faculty and dedicated resources as the on-campus students…but with the freedom and convenience that online courses naturally provide.

Under Academic Technology and Extended Learning (ATEL), the CU Online department is responsible for managing the technology and support for faculty and students in online and hybrid/blended courses, as well as courses which use web-based course management software to supplement traditional on-campus instruction.

How It Works

Online courses run on a traditional semester schedule and, although courses are not self-paced ('asynchronous'), they are flexible. As a student, you're able to log into your courses on a regular basis, at your convenience. You will be assigned a home page to access courses, find lectures and assignments and participate in class discussions and real-time course chat rooms.

Each course is developed to offer everything you would expect from a traditional CU Denver course – without having to come to campus. So instructors deliver course content and lectures through cutting edge technology, such as streaming audio, video and multimedia slide shows.

Some professors offer weekly assignments to help ensure you are right on track with the materials being taught. Quizzes and tests can be timed to help affirm your mastery of the material. In addition, assignments may be uploaded to the site, which is like creating an attachment in e-mail.

Exams are taken and administered in a variety of ways. They can be administered online by using your course software with an Internet browser, as a take-home exam where you print out a hard copy and hand it in, or proctored by an outside party, an instructor or the teacher's assistant (TA).

As a bonus, if you are registered for only online courses, you are simply responsible for the information technology fee and the student information system fee. **All other traditional fees are waived**, along with the incidental fees associated with commuting to campus, parking, child care, etc. There is also a special tuition discount if you are an out-of-state student enrolled only in online courses.

Programs

CU Online offers courses in liberal arts and sciences, arts and media, business, education, engineering, nursing, public affairs and architecture and planning. Below are the complete degree programs and certificates that can be completed exclusively through online courses:

Degree Programs

- Bachelor of arts in English writing (BA)
- Bachelor of arts in sociology (BA)
- Bachelor of science in nursing, *RN to BS*
- Doctor of education, leadership for educational equity (EdD)
- Doctor of nursing practice (DNP)
- Doctor of philosophy (PhD) in nursing
- Master of arts in early childhood education (MA)
- Master of arts in information and learning technologies (MA), *eLearning design and implementation*
- Master of arts in information and learning technologies (MA), *school library*
- Master of business administration (MBA)
- Master of criminal justice (MCJ)
- Master of engineering (MEng), *geographic information systems*
- Master of public administration (MPA)
- Master of Science in Global Energy Management (hybrid program)
- Master of science in information systems (MS)
- Master of science in management and organization (MS), *managing for sustainability*
- *Master of science in nursing leadership and health care systems (MS)*
- Master of science in nursing (MS), *informatics option*

Certificates, Modules and Other Online Programs

- Adolescent literacy certificate
- Certificate in palliative care
- Designing eLearning environments (DeE) certificate
- Early childhood special education, specialist license
- Early literacy certificate
- Executive leadership in health information technology certificate

- Health care informatics certificate
- Health Education Certificate (hybrid program)
- Health information management & exchange specialist certificate
- Nonprofit management certificate
- School library endorsement
- Special education generalist endorsement
- Teaching English to speakers of other languages (TESOL) certificate

The semester hours you earn through online courses are **identical to those earned through traditional on-campus courses**. The University of Colorado Denver is a fully accredited institution, making semester hours easily transferable to other universities. And if you graduate solely by taking online courses, the degree is still simply awarded by CU Denver.

Business School

Master of Business Administration (MBA)

The professional MBA program at the CU Denver Business School is outstanding in its ability to integrate leading-edge research with practical business applications in an intellectually challenging environment. Business courses are accredited through the Association to Advance Collegiate Schools of Business International (AACSB).

The professional MBA program emphasizes active learning through case studies, computer simulations, real-world group projects, class discussions and involvement with Colorado businesses. A master's in business administration degree from UC Denver prepares you with the management and leadership skills required to achieve your personal career goals.

The professional MBA can be individualized and tailored to your specific interests and career goals. Below are the four MBA specializations that you can complete entirely online.

- Enterprise technology management (ETM)
- Finance (FNC)
- Information systems (IFS)
- Managing for sustainability (MNS)

The professional MBA program requires the completion of 48 semester hours, including 30 semester hours of required MBA core courses, 3 semester hours in international business and 15 semester hours of electives, which you'll choose from other graduate business courses.

The following are examples of Business School courses available online from spring 2008 through summer 2011 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Analysis, Modeling and Design
- Analyzing and Interpreting Accounting Information
- Applied Economics for Managers
- Business Forecasting
- Business Intelligence Systems
- Business Process Management
- Data Analysis for Managers
- Data Base Management Systems
- Emerging Technologies
- Enterprise Knowledge Management
- Entrepreneurial Financial Management
- Financial Decisions and Policies
- Financial Management
- Financial Modeling
- Global Enterprise Systems
- Information Systems Management and Strategies
- Information Systems Security and Privacy
- International Corporate Governance
- Internet Marketing
- Investment Management Analysis
- IT Infrastructure
- IT Project Management
- Legal and Ethical Environment of Business
- Macroeconomics and Financial Markets
- Management of Financial Institutions
- Management of Operations
- Managing Individuals and Teams
- Marketing Management
- Object-Oriented Business Programming
- Quantitative Methods for Finance
- Security Analysis and Firm Valuation
- Service Oriented Architecture
- Short-term Financial Management
- Strategic Management
- Web Site Development Practice and Technologies

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

Master of Science in Global Energy Management (Hybrid Program)

The Global Energy Management (GEM) Program at the University of Colorado Denver Business School is the premier hybrid-online master of science degree program exclusively designed to develop future leaders in the energy industry. The GEM Program is unique because students gain a business and leadership education focused solely on the energy industry.

The MS in Global Energy Management consists of eight core courses and four electives. Individual elective options are not available to GEM students because of the cohort structure of the program. Students select their electives during the first term. No courses may be waived, substituted, or transferred into the program.

The following are courses that comprise the GEM program. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- 21st Century Global Energy Issues and Realities
- Advanced Financial Management in the Energy Industry
- Energy Accounting in Global Markets
- Energy Asset and Production Management
- Energy Marketing
- Environmental, Regulatory, Legal & Political Environment in the Energy Industry
- Financial Management and Hedging in the Global Energy Markets
- Global Energy Economics and Geography
- Integrated Information Management for Energy Firms
- Land Management and Energy Contracts
- Leadership and Decision Making in the Global Energy Environment
- Organizational Behavior in the Energy Industry
- People Management in the Global Energy Environment
- Renewable and Alternative Energy: Opportunities and Challenges
- Renewable Energy Management
- Special Topics

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

Master of Science in Information Systems

The information systems (IS) program in the Business School has established CU Denver as a leader and innovator in the field. As part of that innovation, the online master of science (MS) program has been developed to help keep you one step ahead of your collegiate peers when pursuing your information based field of choice. You can now complete two distinct specializations completely online.

The MSIS program can be individualized and tailored to your specific interests and career goals. Below are the five MSIS specializations that you can complete entirely online.

- The Enterprise Technology Management (ETM)
- Business Intelligence (BI)
- Health Information Technology (HIT)
- Web & Mobile Computing (WMC)
- Geographic Information Systems (GIS) Option

The MSIS program requires the completion of 12 semester hours of MSIS core courses, and 24 credit hours from the above specializations, and two free electives. The following

are examples of Business School courses available online from spring 2008 through summer 2011 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Analysis, Modeling and Design
- Analyzing and Interpreting Accounting Information
- Business Intelligence Systems
- Business Process Management
- Data Analysis for Managers
- Data Base Management Systems
- Emerging Technologies
- Financial Management
- Global Enterprise Systems
- Information Systems Management and Strategies
- Information Systems Security and Privacy
- IT Infrastructure
- IT Project Management
- Legal and Ethical Environment of Business
- Management of Operations
- Managing Individuals and Teams
- Marketing Management
- Strategic Management

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

Master of Science in Management and Organization - *Managing for Sustainability*

The MS in management focuses on group and organizational effectiveness, organizational design and organizational change. The MS in management and organization program prepares you for upper-level managerial positions in the public and private sectors. Upon completion of this program you will:

- Create effective strategies for success in today's complex and constantly changing business environment
- Effectively design organizations
- Learn how to manage interpersonal dynamics
- Implement planned change and organizational transformations

The coursework for the MS in management degree consists of 10 courses (30 semester hours). The four required courses will provide you with a broad perspective and solid foundation in management.

The following are examples of Business School courses available online from spring 2008 through summer 2011 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Accounting and Finance for Sustainability

- Business and the Natural Environment
- Designing Effective Organizations
- Managing for Sustainability
- Managing Individuals and Teams
- Managing People for Competitive Advantage
- Organizational Development
- Social Marketing

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

College of Engineering and Applied Science

Engineering - *Geographic Information Systems*

The master of engineering degree—geographic information systems (MEng-GIS) option is directed to engineers and other environmental and urban infrastructure professionals seeking skills in using and managing these rapidly developing spatial data technologies.

The MEng-GIS degree at CU Denver is multidisciplinary involving civil engineering (environmental, geodesy and remote sensing, water resources, geotechnical and transportation), geography and environmental sciences (remote sensing, ecology, air quality, environmental impact assessment), urban and regional planning (spatial analysis, community development), information systems (data structures, database systems and software engineering), applied mathematics (probability and statistics, networks, simulation and optimization) and engineering management strategic planning, project management, policies).

The MEng-GIS degree program consists of 30 graduate semester hours - 9 courses, plus one course of an advanced applications project. The following are examples of GIS courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Advanced Remote Sensing
- Introduction to Geographic Information Systems
- GIS Laboratory (two or more versions may be available)
- GIS Spatial Database Development
- GIS Analyses—Theory and Practice
- GIS Management and Policies
- GIS Relational Database Systems
- Advanced Remote Sensing
- Master’s Report

Program contact: Lynn Johnson, MEngGIS@ucdenver.edu.

College of Liberal Arts and Sciences

Bachelor of Arts in English Writing (BA)

The Department of English writing major offers you the knowledge and skills necessary to write well in a number of contexts including nonprofit organizations, industry and academia. This is accomplished through a combination of traditional and new media courses and through the service learning and internship opportunities provided for you. The flexible and interdisciplinary nature of this degree is designed to prepare students wishing to enter graduate school or pursue jobs in education, law, editing, professional writing and other areas.

If you're majoring in writing, you must present a total of 39 hours for the major, of which 27 hours must be earned in upper division courses. The following are examples of English Writing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Argumentation and Logic
- Business Writing
- Grammar, Rhetoric and Style
- Introduction to Creative Writing
- Language Theory
- Senior Seminar in Writing
- Special Topics in Rhetoric and Writing
- Technical Writing

Program contact: Joanne Addison, Joanne.Addison@ucdenver.edu.

Bachelor of Arts in Sociology (BA)

Sociology is the study of group life: its characteristics, changes, causes and consequences. It combines scientific and humanistic perspectives in the study of urban and rural life, family patterns and relationships, social change, intergroup relationships, social class, environment, technology and communications, health seeking behavior and social movements.

A major in sociology is accomplished by completing a general core of 19 hours, plus a minimum of 15 electives in sociology, for a total of 34 hours with an average grade of C (2.0) in all courses. The following are examples of sociology courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Contemporary Sociological Theory
- History of Sociological Theory
- Introduction to Research Methods

- Introduction to Sociology
- Introduction to Statistics
- Urban Sociology

Program contact: Rachel Watson, Rachel.Watson@ucdenver.edu.

Teaching English to Speakers of Other Languages (TESOL) Certificate

If you're a nondegree-seeking student, this certificate program allows you the opportunity to receive a credentialed certificate in teaching English to speakers of other languages (TESOL). The certificate courses can also be applied to the graduate degree program in applied linguistics without increasing the minimum number of semester hours required to graduate.

This certificate is 12 semester hours and is geared toward either native English speakers who want to teach overseas or international students who want to teach English in their home country or other countries. The following are examples of TESOL courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Cross Cultural Communication
- Language Theory
- Principles and Practices of Second Language Acquisition
- Second Language Writing

Program contact: Ian Ying, hongguang.ying@ucdenver.edu.

College of Nursing (Anschutz Medical Campus)

Bachelor of Science in Nursing - *RN to BS*

The RN-bachelor of science degree program, based on the Colorado Nursing Articulation Model, is an educational pathway available for registered nurses who desire career mobility and professional development.

The following are examples of nursing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the Course Book page for up-to-date information about available courses.

- Health Assessment for RN’s (Available in summer)
- Nursing Care/Case Management (Available in spring)
- Nursing Research (Available in spring)
- Professional Nursing: Environmental Context for Practice: Bioethical and Legal Foundations (Available in wpring)

- Professional Nursing: Reflective Practice, Social Justice, Issues & Trends (Available in fall)
- Public Health Nursing (Available in fall Block II, spring Block I & II)
- Senior Integrated Practicum (Available in fall Block I, spring Block I & II)

Contact: nursing.admissions@ucdenver.edu.

Certificate in Palliative Care

Palliative care refers to the comprehensive management of the physical, psychological, social, spiritual, and existential needs of patients with progressive illness and their families. This program integrates palliative care principles into the practice of health care professionals for those working in acute and long-term care in both rural and urban settings in Colorado and beyond, and to provide theory review for the HPNA Palliative Care Nursing Credentialing Examination.

The following are examples of Nursing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the Course Book page for up-to-date information about available courses.

- Advanced Concepts in Palliative Care
- Complex Symptoms Management in Palliative Care

Contact: nursing.admissions@ucdenver.edu.

Doctor of Nursing Practice (DNP)

As a DNP graduate, you will be prepared to be a clinical leader who designs models of health care delivery, evaluates clinical outcomes, identifies and manages health care needs of populations, and uses technology and information to transform health care systems.

In fall 2005, the University of Colorado College of Nursing became the first school in the Rocky Mountain region to initiate the doctor of nursing practice (DNP) degree. The University of Colorado's DNP program has approval from the Board of Regents and the Colorado Commission on Higher Education (CCHE).

The following are examples of nursing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the Course Book page for up-to-date information about available courses.

- Applied Evidence-based Practice
- Context of Practice, Population and Patient Management
- Cultural Competence for Advanced Practice
- Designing Theory-guided Models of Care
- DNP Capstone Clinical Evaluation Project
- DNP Capstone Clinical Evaluation Proposal Development

- DNP Leadership Role Residency
- Emerging Therapies for Advanced Nursing Practice
- Epidemiology and Environmental Health
- Inferential Statistics
- Leadership, Management, Innovation and Entrepreneurship
- Management Information for Decision Support
- Practice Epistemology: Expanding Ways of Knowing for Reflective Practice

Contact: nursing.admissions@ucdenver.edu.

Doctor of Philosophy (PhD) in Nursing

As a nurse scholar, this PhD program prepares you to advance the art, science and practice of the discipline. PhD preparation in nursing promotes knowledge development for reflective, theory-based and research-guided nursing practice. The PhD program equips you to conduct knowledge development and scholarly inquiry and to be actively engaged in many roles including:

- Administrator
- Clinician-scholar
- Educator
- Health care policy analyst
- Researcher

The following are examples of nursing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the Course Book page for up-to-date information about available courses.

- Experimental Design and Analysis
- Methods of Disciplined Inquiry in Nursing
- Multivariant Design and Analysis
- Philosophy of Human Science
- Qualitative Empirical Research
- Quality and Cost Effective Outcomes: Macro-level
- Quality and Cost Effective Outcomes: Micro-level
- Quantitative Interpretive Research
- Research Practicum & Ethics of Inquiry
- Selected Topics in HEHIH
- Seminar in HEHIH
- The Discipline of Nursing
- Theory and Knowledge Development

Contact: nursing.admissions@ucdenver.edu.

Executive Leadership in Health Information Technology Certificate

The certificate program for executive leadership in health information technology is targeted to those health care and public health professionals with managerial experience that will lead the deployment and use of health IT to achieve transformational improvements in quality, safety and outcomes.

The executive leadership curriculum consists of five three-credit courses, for a total of 15 credit hours. The following are examples of nursing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the Course Book page for up-to-date information about available courses.

- Foundations/Introduction to Healthcare Informatics
- Business Intelligence/Decision Support
- Executive/ Visionary Leadership
- Information Systems of Life Cycle
- Standards and Regulatory Issues

Contact: nursing.admissions@ucdenver.edu.

Health Care Informatics Certificate

As a health care professional, this health care informatics program provides an opportunity for health care professionals to acquire knowledge and skills in the rapidly progressing field of informatics. With recent movements toward the adoption of the electronic health record and the need for IT infrastructure to increase patient safety and facilitate evidence-based practice, there is a growing need for more informatics specialists. This certificate provides opportunities for those new to the field and those who may be practicing in the field and need a professional update.

The certificate is a 9 semester hour program. The following are examples of nursing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the Course Book page for up-to-date information about available courses.

- Database Management Systems
- Decision Support
- e-Health
- Foundations of Healthcare Informatics
- HCI Design Principles
- IT Systems Life Cycle
- Knowledge Management
- Semantic Representation

Contact: nursing.admissions@ucdenver.edu.

Health Information Management & Exchange Specialist Certificate

The certificate program for health information management and exchange specialists will prepare health care professionals to support the collection, management, retrieval,

exchange and/or analysis of information in electronic form, in health care and public health organizations.

The HIM/HIE specialist curriculum consists of five three-credit courses, for a total of 15 credit hours. The following are examples of nursing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the Course Book page for up-to-date information about available courses.

- Foundations/Introduction to Healthcare Informatics
- Database Managemet Systems
- Information Systems Security and Privacy
- Information Systems of Life Cycle
- Semantic Representation

Contact: nursing.admissions@ucdenver.edu.

Master of Science (MS) in Nursing - Informatics Option

The College of Nursing's master of science program in nursing is designed to prepare you for advanced nurse practice roles. You're taught to formulate clinical, administrative or policy decisions to promote health with clients experiencing wellness, acute or chronic illness, and to develop, manage, and evaluate the care within communities and health care systems.

The program is structured to provide a foundation for career paths for future leaders in advanced nursing practice and to prepare lifelong learners who demonstrate knowledge, skill, critical thinking and flexibility. The master of science program also provides the foundation for doctoral study in nursing.

The following are examples of nursing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the Course Book page for up-to-date information about available courses.

- Advanced Practicum: Healthcare Informatics
- Database Management Systems
- Decision Support
- E-Health
- Foundations of Health Care Informatics
- Health Systems, Policy & Social Justice
- Human Computer Interaction Design
- Human Technology Interface
- Information Systems Life Cycle
- Knowledge Management
- Philosophic, Theoretic & Ethical Foundations of APN
- Research Methods for Advanced Practice
- Semantic Representation

Contact: nursing.admissions@ucdenver.edu.

Master of Science (MS) in Nursing Leadership and Healthcare Systems (iLEAD)

The master's in nursing leadership and administration program, referred to as i-LEAD (innovation in leadership and administration in nursing and health care systems) offered by the University of Colorado College of Nursing will prepare advanced practice nurses with the expertise to provide leadership for high quality health care in rural and medically underserved urban areas.

The following are examples of nursing courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the Course Book page for up-to-date information about available courses.

- Data Management for Nurse Executives
- Health Systems, Policy & Social Justice
- Human Technology Interface
- Inferential Statistics
- Nursing Leadership in Healthcare Systems: Administrative Internship
- Philosophical, Theoretical, & Ethical Foundations for Adv Nursing Practice
- Relational Communication
- Research Methods for Advanced Practice
- Systems Theory 1: Evidence Based Practice
- Systems Theory 11: Environment of Care
- Systems Theory and Leadership Theory

Contact: nursing.admissions@ucdenver.edu.

School of Education & Human Development

Adolescent Literacy Certificate

This adolescent literacy certificate is designed to help you reach your students (of varying learning styles and backgrounds), while providing you with valuable credentials that can be applied towards a master's degree in curriculum and instruction as well as the Colorado Reading Teacher Endorsement.

This fully online certificate is a series of three graduate level courses specifically geared to the development of middle and high school readers and writers – especially those who are struggling.

The following are examples of adolescent literacy courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Adolescent Literacy Part I
- Linking Assessment and Instruction in Language and Literacy I

- Adolescent Literacy Part II

Program contact: Continuing and Professional Education: cpe@ucdenver.edu.

Designing eLearning Environments Certificate

This is an exciting time if you're an instructional design and technology professional. There is a growing demand for your eLearning expertise, knowledge and skills, and you will find limited competition in this growing field. The designing eLearning environments (DeE) certificate program focuses specifically on the skills needed to design and facilitate online learning opportunities for learners in K–12, higher education and corporate settings. This program is perfect if you're not interested in a graduate degree.

The DeE certificate program is a sequence of three online courses. The following are examples of DeE courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Designing and Teaching in eLearning Environments
- Developing eLearning Instruction
- Integrating Media in eLearning Environments

Program contact: education@ucdenver.edu.

Doctor of Education, Leadership for Educational Equity

CU Denver's rigorous doctor of education, leadership for educational Equity (EdD) cohort program has been created to:

- Strengthen your knowledge as an educational leader
- Position you to work successfully in a variety of educational contexts including P-20 schools, community colleges, public/private universities and educational nonprofits.
- Prepare professionals with 5+ years of experience and leadership responsibilities to research, problem solve and take action on critical challenges.

This program reflects a cohort model. Students applying to the program must be prepared to join and follow their cohort in taking the prescribed coursework and experiences for three consecutive years. The courses are taught by experienced, nationally recognized professors who will prepare you for the next step in your education career.

Your course work will encompass 69 credit hours. This will include three courses in equity and diversity, four courses in leadership and learning, three courses in research methods, and three courses in your concentration area. Culminating experiences will include a six-credit internship and 24 credits in dissertation courses and independent study. It is imperative to understand the cohort nature of this program.

Successful applicants will form a cohort and move through the 3-year program plan of study as a group. Once accepted in a cohort group, students must remain in that group. If for any reason a student must drop out of her or his cohort, we will attempt to integrate that individual into a subsequent cohort group but cannot guarantee a spot.

Program contact: education@ucdenver.edu.

Early Childhood Special Education, Specialist License

As a graduate earning the early childhood special education specialist license you'll have the theoretical background and skills in assessment, teaching and collaboration necessary to work with young children with disabilities. As a graduate with this license you can assume professional roles like lead teacher, early interventionist, service coordinator, Child Find team member, special education consultant and behavior specialist.

The ECSE specialist course sequence consists of 40 semester hours. A total 800 hours of fieldwork/practica is required for the license. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. The following are examples of ECSE courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Administrative Seminar
- Advanced Child Growth and Development
- Approaches to Young Children's Learning
- Basic Statistics
- Curriculum and Program Development in ECE
- Early Childhood Profession
- Early Intervention Strategies
- Infant/Toddler Practicum (170 clock hours—online option not possible)
- Language and Literacy in Young Children
- Literacy and Mathematics K–12
- Measurement and Evaluation in ECE
- Medical/Physiological Aspects of Developmental Disabilities
- Preschool Practicum (170 clock hours—online option not possible)
- Primary Practicum (170 clock hours—online option not possible)
- Screening and Assessment in Young Children
- Seminar: Research and Current Issues in ECE
- Social and Cognitive Development and Disorders
- Working with Parents and Families

Program contact: education@ucdenver.edu.

Early Literacy Certificate

This certificate program allows you to take courses in the specialty area of early literacy and apply these courses directly toward the full master's degree. The MA programs (K–6 and 7–12) in the School of Education & Human Development provide you with a means for completing a master's degree in curriculum and instruction with an emphasis in reading/writing while simultaneously fulfilling the requirements toward a Colorado reading teacher endorsement. In light of federal NCLB and state CBLA initiatives, this supplementary certificate offers primary grade teachers, preschool teachers and para-educators greater background in the development, assessment and instruction of literacy for young children.

The certificate program allows teachers to take 9 semester hours in the specialty area of early literacy and apply them directly toward the full master's degree. The following are examples of early literacy courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Early Literacy Instruction
- Early Literacy Routines and Assessment
- Literacy Development PreK–3rd Grade

Program contact: Continuing and Professional Education: cpe@ucdenver.edu.

Health Education Certificate (Hybrid Program)

This hybrid certificate will provide you with skills grounded in foundational research and theories in health education. Core components of the certificate courses will focus on:

- Comprehensive Health Education
- Coordinated School Health
- National Health Education Standards
- Characteristics of effective health education curricula

This nine credit graduate level certificate will assist educators in identifying, designing, and implementing effective school-based health education.

The following are examples of Health Education courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Foundations of School Health Education
- Curriculum and Materials in Health Education
- Health Education Teaching Practices

Program contact: Continuing and Professional Education: cpe@ucdenver.edu.

Master of Arts in Early Childhood Education

The mission of the early childhood education online program is to provide substantive support if you're preparing to become a leader in professional practice as an early childhood accomplished teacher, with the master's degree in ECE. This degree prepares you to work in settings which include public schools, child care programs, private preschools and kindergartens, early intervention programs including Head Start and Early Head Start, family support and home-based programs.

The ECE program is composed of 40 semester hours. A total of 425 hours of fieldwork/practica is required. The following are examples of ECE courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Administrative Seminar
- Advanced Child Growth and Development
- Approaches to Young Children's Learning
- Basic Statistics
- Curriculum and Program Development in ECE
- Early Childhood Profession
- Early Intervention Strategies
- Language and Literacy in Young Children
- Literacy and Mathematics K-2
- Measurement and Evaluation in ECE
- Medical/Physiological Aspects of Dev. Disabilities
- Screening and Assessment in Young Children
- Seminar: Research and Current Issues in ECE
- Social and Cognitive Development and Disorders
- Working with Parents and Families

Program contact: education@ucdenver.edu.

Master of Arts in Information and Learning Technologies - *eLearning Design and Implementation*

The eLearning design and implementation (eDI) program offers an ILT MA degree that is specifically designed to meet your needs as a practicing professional educator as you confront the increasingly important role electronic and online technologies play within post-secondary, K–12 and corporate education. The eDI MA program is for K–12 teachers, higher education instructors, trainers, content experts and corporate instructional developers.

The eLearning program is composed of 36 semester hours. The following are examples of eLearning courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Developing Educational Web Sites

- Instructional Message Design
- Learning Processes in Instructional Technology
- Managing Instructional Development
- Media for Web-based Learning Environments
- Policies and Planning for eLearning Programs
- Research in Information and Learning Technologies
- Strategies for Online Learning

Program contact: education@ucdenver.edu.

Master of Arts in Information and Learning Technologies — *School Library*

This MA prepares you with the knowledge-management skills and information access points for school library resources. Courses will integrate information and learning technology strategies, along with courses on school library management, instructional design and instructional leadership.

All topics covered will be close to your heart as a school librarian as you collaborate with teachers on instructional units and create user-friendly school library programs that support the love for reading and information literacy. Finally, for this nationally recognized NCATE-AASL-approved school library media education program, you will complete field experience in both elementary and secondary schools for the K–12 school library endorsement.

The program is comprised of 36 semester hours and can be completed in 14 months on an intensive track (summer term to the next summer term) or a standard two-year schedule taking one course each semester. The following are examples of school library courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Adolescent Literature
- Children’s Literature Through the Ages
- Collection Development
- Field Experience-Elementary
- Field Experience-Secondary
- Foundations of School Librarianship
- Information Literacy and Reference
- Information Storage and Utilization
- Instructional Development and Production
- Leadership and Practice in ILT
- Management in ILT
- Research in Information and Learning Technology

Program contact: education@ucdenver.edu.

School Library Endorsement

Your courses will integrate Information and Learning Technology strategies through coursework in school library management, collection development, collaborative planning, instructional design, and instructional leadership. As a nationally recognized NCATE - AASL* approved school library education program, students complete field experience in both elementary and secondary schools for the K-12 school library endorsement.

You'll complete 11 graduate-level classes online for a total of 29 credit hours. You may mix and match on campus and online courses, or you may complete the endorsement totally online. The following are examples of school Library Endorsement courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Adolescent Literature
- Children's Literature through the Ages
- Collection Development
- Field Experience-Elementary
- Field Experience-Secondary
- Foundations of School Librarianship
- Information Literacy and Reference
- Information Storage and Utilization
- Managing School Libraries
- Research for Teachers

Program contact: education@ucdenver.edu.

Special Education Generalist K–12 Endorsement

This program is designed for teachers already licensed in elementary or secondary general education. Specifically, this program is geared toward teachers without the formal credentials required to serve students with disabilities, as well as teachers who want to improve their ability to meet the needs of all learners.

A 10-course (26 semester hours) sequence represents the program plan of study. The following are examples of SPED courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Advanced Assessment in Special Education
- Collaboration and Consultation
- Instructional Strategies for Students with Special Needs
- Literacy Intervention for Students with Special Needs
- Positive Behavior Supports

- Special Education for the School Professional
- Special Education Generalist Internship and Site (Online option not possible)
- Special Education Generalist Internship and Site Seminar (Online option not possible)
- The Use of Technology in Special Education
- Transition/Secondary Planning

Program contacts: Meredith Lopez, Meredith.Lopez@ucdenver.edu.

School of Public Affairs

Master of Criminal Justice

The master's degree in criminal justice helps you develop your critical thinking skills and provides an interdisciplinary perspective on crime and the criminal justice system. Specifically, the program focuses on law enforcement, correctional systems, juvenile justice and the formulation of laws and codes. Besides the classic criminal justice curriculum, you will learn about the most pressing current issues through special interest seminars. Past topics have included gang behavior, white-collar crime and hate crimes. Research projects provide another channel for you to become familiar with the issues.

You must complete 36 graduate semester hours, which include a core sequence of four core courses providing a firm foundation in theory, practice and research methods associated with U.S. criminal law and justice. A wide variety of electives gives you the chance to develop special expertise in your unique area of interest (e.g., corrections, mental illness and crime, federal law enforcement, victim assistance and criminal justice administration).

If you do not have previous criminal justice experience, you will be required to complete an internship with a local, state or federal criminal justice or juvenile justice agency. The Internship/Field Study will count as 3 of the 21 elective semester hours. The program culminates with either a traditional 3-6-semster-hour thesis, or a 3-semester-hour field-based final capstone project. The following are examples of MCJ courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Law and Social Control
- Administration of Criminal Justice
- Nature and Causes of Crime
- Research Methods in Criminal Justice
- Advanced Seminar/Capstone

Program contact: Brendan Hardy, Brendan.Hardy@ucdenver.edu

Public Administration (MPA)

This master of public administration (MPA) degree will help you manage government and nonprofit organizations as well as nourish the related skills needed to thrive in this growing field. The curriculum is built upon core courses that develop essential problem-solving and decision-making skills. The required curriculum will help hone skills in management and analysis, but you may gain specific insights into an area of interest by pursuing one of three concentrations available. Each is designed to equip you with the management and analysis skills demanded of managers in challenging public affairs positions.

You must complete a minimum of 36 semester hours of graduate course work, excluding preparatory workshops, with a grade point average of 3.0 or better. The following are examples of MPA courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

- Advanced Seminar in Public Policy and Management
- Economics and Public Finance
- Introduction to Public Administration and Public Service
- Leadership and Professional Ethics
- Organizational Management and Change
- Research and Analytic Methods
- The Policy Process and Democracy

Program contact: Annie Davies, Annie.Davies@ucdenver.edu.

Nonprofit Management Certificate

The nonprofit management certificate prepares you to become an innovative and critical thinker in the areas of nonprofit organizational management and public policy. The nonprofit certificate's unique design bridges theoretical knowledge with real-world experience. As you prepare to start your career (or advance in your current position), you'll gain insight into the interdependence between the nonprofit, public and for-profit sectors.

You must complete 15 semester hours from courses offered and approved by the faculty in the nonprofit program. The following are examples of Nonprofit courses available online from spring 2008 through spring 2010 along with proposed courses. Visit the ISIS Search For Classes page for up-to-date information about available courses.

All courses are 3 semester hours.

- Collaboration Across Sectors
- Nonprofit Boards and Executive Leadership
- Nonprofit Financial Management
- Nonprofits and Public Policy
- Seminar in Nonprofit Management
- Social Entrepreneurship

- Strategic Management for Nonprofit and Public Managers
- Understanding and Achieving Funding Diversity

Program contact: Annie Davies, Annie.Davies@ucdenver.edu

Hybrid Courses

A hybrid course is just like it sounds. It is half on-campus and half online. The best of both worlds. So if you're taking online courses and enjoy the scheduling flexibility but feel that you're missing out on some of the intangibles of being in a classroom, then the hybrid courses are for you. Hybrid courses meet approximately 50 percent of the normal classroom hours on campus, and the remainder of the course work is completed online.

Supplemental Courses

An online technology supplemented campus course uses technology delivered instruction and materials (e.g. web, CD ROM, etc.) to supplement classroom or laboratory instruction. CU Online also supports faculty using web-based courseware to augment their traditional classes. Many faculty use instructional technology to post their syllabi, lecture notes, hold online quizzes and practice exams, and to coordinate web resources and library media. But these materials do not substitute for or reduce the amount of traditional on-campus instructional contact time.

Contact CU Online at 303-315-3700, visit the Web site at www.cuonline.edu or send an e-mail to cuonlinehelp@ucdenver.edu.

Faculty

The professors and faculty of traditional classes are the same ones teaching online courses. That might not immediately evoke your applause and admiration, but it should. Four out of five full-time faculty hold doctoral degrees with many years of teaching experience, and many are actively engaged in their fields outside the classroom. Not only do they have real-world experience, but many of our faculty are consultants, advisors and partners to the leading organizations that frequently hire CU Denver graduates.

Programs

Undergraduate Areas of Study

Accounting Emphasis BS in Business Administration

Program Director: Michael Roberts
Telephone: 303-556-5884
E-mail: Michael.Roberts@ucdenver.edu

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

Auditing
Financial Accounting
Financial Management
Management Control Systems
Managerial Accounting
Tax Accounting
Teaching and Research

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable. A grade of *C* must be earned in all accounting courses to qualify for graduation.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

Required Courses

ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**
ACCT 3230 - Intermediate Financial Accounting II **gtPATHWAYS:**
ACCT 3320 - Intermediate Cost Accounting **gtPATHWAYS:**
ACCT 4410 - Income Tax Accounting **gtPATHWAYS:**
ACCT 4620 - Auditing **gtPATHWAYS:**

ACCT free elective (4000 level) (3 semester hours) choose one course from the following:

ACCT 4240 - Advanced Financial Accounting **gtPATHWAYS:**
ACCT 4070 - Management Accounting **gtPATHWAYS:**
ACCT 4330 - Managerial Accounting Problems and Cases **gtPATHWAYS:**
ACCT 4370 - International Accounting **gtPATHWAYS:**
ACCT 4520 - Oil and Gas Accounting **gtPATHWAYS:**
ACCT 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**
ACCT 4800 - Accounting for Government and Nonprofit Organizations **gtPATHWAYS:**

ACCT 4840 - Independent Study **gtPATHWAYS:**
ACCT 4915 - Accounting for the Public Interest **gtPATHWAYS:**
ACCT 4950 - Special Topics **gtPATHWAYS:**

Total: 21 Hours

Students planning to pursue accounting as a career may take more than the above required hours. Many students complete a total of 30 hours of accounting, often taking two accounting courses each semester in their junior and senior years. Students should work closely with the accounting faculty and business advisors in planning their accounting programs.

The accounting program offers several 4000/6000-level courses. Students with credit for a 4000-level course cannot receive credit for the corresponding 6000-level course. Graduate students should take 6000-level courses.

Accounting students often specialize in a particular topical area of accounting.

Financial Accounting

Recommended Electives

ACCT 4240 - Advanced Financial Accounting **gtPATHWAYS:**
ACCT 4800 - Accounting for Government and Nonprofit Organizations **gtPATHWAYS:**

Managerial Accounting

Recommended Electives

ACCT 4330 - Managerial Accounting Problems and Cases **gtPATHWAYS:**
ACCT 4800 - Accounting for Government and Nonprofit Organizations **gtPATHWAYS:**

Accounting and Information Systems (ACIS)

Within the accounting curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Courses

ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**

ACCT 3230 - Intermediate Financial Accounting II **gtPATHWAYS:**
ACCT 3320 - Intermediate Cost Accounting **gtPATHWAYS:**
ACCT 4410 - Income Tax Accounting **gtPATHWAYS:**
ACCT 4620 - Auditing **gtPATHWAYS:**
ACCT 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:** or
ISMG 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**

ISMG Electives

Choose two:

ISMG 4500 - Database Management and Applications **gtPATHWAYS:**
ISMG 4600 - Systems Analysis and Design **gtPATHWAYS:**
ISMG 4900 - Project Management and Practice **gtPATHWAYS:**

Total: 27 Hours

To further specialize, consider a graduate accounting program. Graduate study in accounting is receiving increasing emphasis by professional organizations and employers. Students meeting admission requirements should consider continuing their education at the graduate level. Qualified undergraduates may petition for permission to take one or two graduate accounting courses as electives (e.g. ACCT 6800, Special Topics).

Anthropology BA

Students majoring in anthropology for the BA degree must declare such by the time they have completed 60 semester hours. Majors must complete a minimum of 40 semester hours in anthropology with a grade of *C* (2.0) or better in each course. At least 24 hours must be at the upper-division level and a minimum of 21 semester hours must be taken from CU Denver faculty. (Note that most upper-division courses have lower-division prerequisites.)

Program Requirements

Required Anthropology Courses

ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3
ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1
ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3

ANTH 3101 - Foundations of Cultural Anthropology **gtPATHWAYS:**
ANTH 3301 - World Prehistory **gtPATHWAYS:**
ANTH 3512 - Human Evolution **gtPATHWAYS:**

Total: 20 Hours

Anthropology Electives

Recommended courses:

ANTH 4050 - Quantitative Methods in Anthropology **gtPATHWAYS:**
ANTH 4810 - Integrating Anthropology **gtPATHWAYS:**

Total (minimum): 20 Hours

Major Total: 40 Hours

Audition Track - Music BS

Undergraduate Degree Requirements

The BS in music has a competitive application process. Please refer to the CAM website for additional guidelines and information. To be eligible for an audition track BS in music, students must complete 54 semester hours of general music major requirements as well as requirements from one of the three emphasis areas: recording arts, music business or performance. Each student pass a music audition as part of the application process and pass varying levels of performance proficiency as part of the curricula. Students must complete each major course with a C (2.0) or better.

General Major Requirements for all Audition Track Music Students

MUSC 2540 - Audio Production I **gtPATHWAYS:**
MUSC 2560 - Audio Production II **gtPATHWAYS:**
MUSC 2700 - Introduction to Music Business **gtPATHWAYS:**

MUSC 3210 - Music and Entertainment Marketing **gtPATHWAYS:**
or
MUSC 3220 - Artist Management **gtPATHWAYS:**

PMUS 1023 - Piano Class **gtPATHWAYS:** Level I
PMUS 1024 - Piano Class II **gtPATHWAYS:**
PMUS 1025 - Piano Class III **gtPATHWAYS:**
PMUS 1026 - Piano Class IV **gtPATHWAYS:**
PMUS 1100 - Music Theory I **gtPATHWAYS:**
PMUS 1110 - Ear Training and Sight Singing I **gtPATHWAYS:**
PMUS 1200 - Music Theory II **gtPATHWAYS:**
PMUS 1210 - Ear Training and Sight Singing II **gtPATHWAYS:**
PMUS 1500 - General Recital **gtPATHWAYS:**
PMUS 1500 - General Recital
PMUS 1500 - General Recital
PMUS 1500 - General Recital
2 semesters of 1000-level lessons (4 semester hours)
2 semesters of 2000-level lessons (4 semester hours)
6 semesters of ensembles (6 semester hours)
PMUS 2100 - Music Theory III **gtPATHWAYS:**
PMUS 2110 - Ear Training and Sight Singing III **gtPATHWAYS:**
PMUS 2200 - Jazz Theory **gtPATHWAYS:**
PMUS 3830 - History and Literature of Music I **gtPATHWAYS:**
PMUS 3831 - History and Literature of Music II **gtPATHWAYS:**
PMUS ____ - UD Music History Elective* (3 semester hours)

Total: 54 Hours

* UD = upper division (3000- or 4000- level course)

Performance Emphasis Courses

Each student must successfully pass a Sophomore Proficiency on his or her primary instrument or voice in order to be accepted into the performance emphasis. Each student is also required to successfully complete a Junior Recital in addition to the 2-credit PMUS 4200 Senior Recital. Contact the CAM Office for more information at 303-556-2279.

PMUS 1500 - General Recital **gtPATHWAYS:**
PMUS 1500 - General Recital
PMUS 1500 - General Recital
PMUS 1500 - General Recital
2 semesters of 3000-level lessons (6 semester hours)
2 semesters of 4000-level lessons (6 semester hours)
PMUS 3300 - Advanced Jazz Improvisation **gtPATHWAYS:**

Students must take 8 total semesters of ensembles (8 semester hours overall; 6 of these hours already listed above under General Major Requirements)

PMUS 4200 - Senior Recital **gtPATHWAYS:**

PMUS 4060 - Music Theory Analysis **gtPATHWAYS:**

Music Electives (8 semester hours, specifically required elective courses depend upon student's primary instrument. Consult CAM Advising for more details.)

Total: 29 Hours

Music Business Emphasis Courses

MUSC 3210 - Music and Entertainment Marketing **gtPATHWAYS:**

or

MUSC 3220 - Artist Management **gtPATHWAYS:**

MUSC 3690 - Concert Promotion, Tour, and Venue Management **gtPATHWAYS:**

MUSC 3700 - Music and Entertainment Business in the Digital Age **gtPATHWAYS:**

MUSC 3710 - CAM Records **gtPATHWAYS:**

MUSC 3720 - Law and the Music Industry **gtPATHWAYS:**

MUSC 4740 - Music Business Analysis **gtPATHWAYS:**

MUSC 4890 - Music Business Senior Seminar **gtPATHWAYS:**

Music Business Elective (3 semester hours)

Total: 24 Hours

Recording Arts Emphasis Courses

Students must be accepted into the recording arts emphasis before being able to take any of the upper-division courses in this area (with the exception of PHYS 3620 which should be completed prior to admission into the emphasis). Please consult a CAM advisor for details.

PHYS 3620 - Sound and Music **gtPATHWAYS:**

MUSC 3550 - Critical Listening for Recording Arts **gtPATHWAYS:**

MUSC 4505 - Audio Post Production I **gtPATHWAYS:**

MUSC 4550 - Audio Production III **gtPATHWAYS:**

MUSC 4560 - Mastering & Advanced Digital Audio **gtPATHWAYS:**

MUSC 4580 - Audio Production Seminar I **gtPATHWAYS:**

MUSC 4581 - Audio Production Seminar II **gtPATHWAYS:**

Recording Arts Electives (7 semester hours)

Total: 28 Hours

Biology BS

Biology students must declare their major by the time they have taken 60 semester hours. A minimum of 36 hours of biology must be completed, of which 18 hours are at the upper-division level and taken in residence with UC Denver Downtown Campus biology faculty. Included in the 36 hours are 22 semester hours of biology core courses, required of all majors. At least 14 hours of upper-division biology elective courses beyond the core are required to fulfill the remaining hours, including one 4000-level lecture course. A maximum of 6 semester hours of independent study (BIOL 3840/4840) **or** a combined maximum total of 6 hours of independent study (3 hours) and internship/cooperative education (BIOL 3939) (3 hours) can be counted toward the 14 hours of upper-division electives in biology. The minimum grade in each CU Denver biology course is *C*- (1.7). However, a GPA of 2.5 in biology courses taken at CU Denver is required to graduate.

To ensure a proper background for the study of biology, majors are required to pass 31-33 hours of course work in ancillary disciplines, including two semesters of general chemistry laboratory, for which the minimum grade is *C*- (1.7). MATH 1110 (with one of BIOL 3763, BIOL 4764 or MATH 4830) may substitute for Calculus I (MATH 1401). All biology courses applied to the undergraduate biology major must be completed within 10 years of graduation. The following biology and ancillary courses are required and must be completed with a letter grade of *C*- (1.7) or higher:

Requirements for the Major

Biology Core Courses

BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
BIOL 3411 - Principles of Ecology **gtPATHWAYS:**
-OR- BIOL 3412 - Fundamentals of Applied Ecology **gtPATHWAYS:**
BIOL 3611 - General Cell Biology **gtPATHWAYS:**
BIOL 3832 - General Genetics **gtPATHWAYS:**

One of the following structure/function courses:

BIOL 3225 - Human Physiology **gtPATHWAYS:**
BIOL 3244 - Human Anatomy **gtPATHWAYS:**
BIOL 3654 - General Microbiology **gtPATHWAYS:**
BIOL 4335 - Plant Science **gtPATHWAYS:**

Total Biology Core: 22 Hours

Biology Electives

*Biology elective courses (3000 or 4000 level) **

Total Electives: 14 Hours

Biology (core and electives) Total: 36 Hours

* Biochemistry as a Biology Elective

Students who have taken both semesters of organic chemistry (CHEM 3411 and CHEM 3421) may use either biochemistry (CHEM 3810) or 4 hours of the general biochemistry series (CHEM 4810 and 4820 combined) as one of their required upper-division biology electives.

Ancillary Core Courses

CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**
CHEM 3421 - Organic Chemistry II **gtPATHWAYS:**
-OR- CHEM 3810 - Biochemistry **gtPATHWAYS:**
PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1
PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1
MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
-OR- MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1
Plus one of the following:
BIOL 4764 - Biostatistics **gtPATHWAYS:**
MATH 4830 - Applied Statistics **gtPATHWAYS:**

Total Ancillary Core: 31-33 Hours

The following courses will **not** count toward the BS in biology:

BIOL 1136 - Human Biology **gtPATHWAYS:**
BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1

BIOL 1560 - Basic Biology: From Cells to Organisms **gtPATHWAYS:** GT-SC1

Degree Total: 36 Hours Biology + 31-33 Hours Ancillary

Business Administration Core Requirements BS

Undergraduate Core Requirements For BS In Business Administration

Intellectual Competencies

English

ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01
ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02

Total: 6 Hours

Math

Choose one:

MATH 1070 - Algebra for Social Sciences and Business **gtPATHWAYS:** GT-MA1
MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1

Total: 3 Hours

Knowledge Areas

Biological and Physical Sciences

Choose two; one course with a laboratory is required:

ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1
BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1
BIOL 1560 - Basic Biology: From Cells to Organisms **gtPATHWAYS:** GT-SC1
BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1 and
BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1

BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1 and
BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
CHEM 1474 - Core Chemistry: Chemistry For the Consumer **gtPATHWAYS:** GT-SC1
CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1 and
CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1 and
CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1
GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1
GEOL 1082 - Physical Geology: Internal Processes **gtPATHWAYS:** GT-SC1
PHYS 1052 - General Astronomy I **gtPATHWAYS:** GT-SC1
PHYS 1100 - Foundations of Physics **gtPATHWAYS:** GT-SC2
PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1 and
PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1 and
PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1
PSYC 2220 - Biological Basis of Behavior **gtPATHWAYS:** GT-SC2

Total: 7-8 Hours

Humanities

Choose one:

CHIN 1000 - China and the Chinese **gtPATHWAYS:** GT-AH1
ENGL 1601 - Telling Tales: Narrative Art in Literature and Film **gtPATHWAYS:** GT-AH2
ENGL 2600 - Great Works in British and American Literature **gtPATHWAYS:** GT-AH2
ETST 2155 - African American History **gtPATHWAYS:** GT-HI1
FREN 1000 - Introduction to Cultures of the French- Speaking World **gtPATHWAYS:** GT-AH1
GRMN 1000 - Germany and the Germans **gtPATHWAYS:** GT-AH1
HIST 1361 - U.S. History to 1876 **gtPATHWAYS:** GT-HI1
HIST 1362 - U.S. History Since 1876 **gtPATHWAYS:** GT-HI1
HIST 1381 - Paths to the Present I **gtPATHWAYS:** GT-HI1
HIST 1382 - Getting Here: Paths to the Present II **gtPATHWAYS:** GT-HI1
PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World **gtPATHWAYS:** GT-AH3
PHIL 1020 - Introduction to Ethics and Society: The Person and the Community **gtPATHWAYS:** GT-AH3
PHIL 2441 - Logic and Language **gtPATHWAYS:** GT-AH3

RLST 1610 - Introduction to Religious Studies **gtPATHWAYS:** GT-AH3
RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3
SPAN 1000 - Introduction to Cultures of the Spanish Speaking World **gtPATHWAYS:** GT-AH4

Total: 3 Hours

Arts

Choose one:

FINE 1001 - Introduction to Art **gtPATHWAYS:** GT-AH1
PMUS 1001 - Music Appreciation **gtPATHWAYS:** GT-AH1
THTR 1001 - Introduction to Theatre **gtPATHWAYS:** GT-AH1

Total: 3 Hours

Behavioral Sciences

Choose one:

ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3
ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
COMM 1011 - Fundamentals of Communication **gtPATHWAYS:** GT-SS3
COMM 1021 - Fundamentals of Mass Communication **gtPATHWAYS:** GT-SS3
PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3
PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3

Total: 3 Hours

Social Sciences

ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1

Total: 3 Hours

Cultural Diversity

Choose one:

ANTH 3142 - Cultural Diversity in the Modern World **gtPATHWAYS:**
COMM 3271 - Communication and Diversity **gtPATHWAYS:**
ECON 3100 - Economics of Race and Gender **gtPATHWAYS:**
ENGR 3400 - Technology and Culture **gtPATHWAYS:**

ETST 3704 - Culture, Racism and Alienation **gtPATHWAYS:**
ETST 3794 - Ethnic Diversity in American Literature **gtPATHWAYS:**
HIST 3345 - Immigration and Ethnicity in American History **gtPATHWAYS:**
MGMT 4100 - Managing Cultural Diversity **gtPATHWAYS:**
PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
PSCI 3035 - Political Movements: Race and Gender **gtPATHWAYS:**
PSYC 4485 - Psychology of Cultural Diversity **gtPATHWAYS:**
SOCY 3020 - Race and Ethnicity in the U.S. **gtPATHWAYS:**
RLST 4000 - Religion and Cultural Diversity **gtPATHWAYS:**
THTR 3611 - Drama of Diversity **gtPATHWAYS:**

Total: 3 Hours

International Perspectives

Choose one:

ENGR 3600 - International Dimensions of Technology and Culture **gtPATHWAYS:**
PSCI 3022 - Introduction to Comparative Politics **gtPATHWAYS:**
PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**

Total: 3 Hours

Core Total: 34-35 Hours

Business School Specific Graduation Requirements

COMM 2050 - Business and Professional Speaking **gtPATHWAYS:**
ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
ENGL 3170 - Business Writing **gtPATHWAYS:** [1]
MATH 1080 - Polynomial Calculus **gtPATHWAYS:** GT-MA1 [2,3]
A grade of 'C' or better must be earned to fulfill this requirement.
Experiential Learning - Can be satisfied by: Internship, Project based course, Study Abroad

Notes:

Students are strongly encouraged to take ENGL 2030 from the university core requirements before completing ENGL 3170.
The required sequence of MATH 1070 or MATH 1110 from the university core requirements and MATH 1080 may be satisfied by a 6-semester-hour calculus

sequence instead. A grade of *C-* or better in any of these courses is required to fulfill this requirement.

MATH 1080 grade must be a *C* or better to fulfill this requirement.

Business Core

Students should complete the business core in the order listed below:

DSCI 2010 - Business Statistics **gtPATHWAYS:**
ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
ACCT 2220 - Managerial Accounting and Professional Issues **gtPATHWAYS:**
ISMG 2050 - Introduction to Business Problem Solving **gtPATHWAYS:**
BLAW 3000 - Legal and Ethical Environments of Business I **gtPATHWAYS:**
MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**
MKTG 3000 - Principles of Marketing **gtPATHWAYS:**
FNCE 3000 - Principles of Finance **gtPATHWAYS:**
ISMG 3000 - Principles of Information Systems **gtPATHWAYS:**
DSCI 3000 - Operations Management **gtPATHWAYS:**
MGMT 4500 - Business Policy and Strategic Management **gtPATHWAYS:**

Total: 33 Hours

A grade C or better must be earned in each of the business core courses in order to (a) enroll in a course for which it is a prerequisite and (b) graduate.

International Studies

International Business

Choose one:

FNCE 4370 - International Financial Management **gtPATHWAYS:**
MGMT 4400 - Environments of International Business **gtPATHWAYS:**
MKTG 4200 - International Marketing **gtPATHWAYS:**
MKTG 4220 - Asian Business Development and Marketing **gtPATHWAYS:**
MKTG 4580 - International Transportation **gtPATHWAYS:**

Total: 3 Hours

Other courses in international business may be offered periodically that satisfy the international studies requirement.

Area Of Emphasis

Business majors must complete the prescribed courses in an area of emphasis comprising a minimum of 15 semester hours taken at UC Denver. Business students are advised to select an area of emphasis prior to completing the business core, and are required to declare a major area of emphasis by the time they have accumulated 60 to 75 semester hours. The courses in the area of emphasis are completed in the junior and senior years after completing the business core. A minimum GPA of 2.0 is required for courses in the area of emphasis.

The areas of emphasis include accounting, financial management, human resources management, information systems, international business, management or marketing. The specific requirements for these areas of emphasis are described in subsequent sections.

Experiential Learning

Business students must earn 3 semester hours of credit in an approved experiential learning course. Experiences that may qualify for experiential credit include internships, project-based courses, business courses taken at a foreign university, study abroad programs, service learning that serves the community and student projects for which the student petitions for approval.

Experiential learning is a graduation requirement for students beginning their bachelor degree program at any institution in summer 2007 or later. Students beginning their bachelor degree program prior to summer 2007 are not required to meet the experiential learning requirement. Students may petition to waive the experiential learning requirement based on hardship or substantial work experience.

Other Courses

Students may choose other courses freely, subject to the following general rules:

- only nonremedial (college-level, as determined by the Business School) courses will count toward the BS degree
- all students receiving the BS degree in business must take at least 48 upper-division semester hours, of which 42 semester hours must be upper-division business credit (excluding the economics core courses)
- at most, 60 semester hours in business (excluding the economics core courses) may be counted toward the 120 semester hours required for the BS degree in business
- students must complete 30 hours of actual business course work, including the area of emphasis, after acceptance to the Business School

- at least 50 percent of the business credits applied to the degree must be taken at the Downtown Campus

Guidelines for Elective Credits. Elective credits should be selected carefully because not all classes are acceptable. Generally, to be acceptable, electives must be taught by regular University of Colorado faculty, must have a form of assessment, such as a term paper and/or examinations, and must be regular classroom-type classes. Course coverage must be college level, not repetitious of other work applied toward the degree, must be academic as opposed to vocational or technical and must be part of the regular university offerings.

Specifically, the school *will* accept:

- a maximum of 6 semester hours of the theory of physical education, theory of recreation and/or theory of dance
- a maximum of 6 semester hours of approved independent study, internships, experimental studies, choir, band and/or music lessons, art lessons
- a maximum of 12 semester hours of advanced ROTC, providing the student is enrolled in the program and completes the total program

The school will *not* accept: activity physical education classes, recreation, workshops, orientations, dance, teaching methods, practicums and courses reviewing basic skills in computers, English composition, mathematics and chemistry.

Chemistry BS

Requirements for Major

Students must declare their major by the time they have completed 60 semester hours. The chemistry major requires 45 semester hours in chemistry. Transfer students must take at least 14 upper-division chemistry hours, including CHEM 4128, 4518 or 4538, in residency at CU Denver. A student who has declared a chemistry major at CU Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. Normally, no more than 3 additional hours of transfer credits will be allowed. The minimum grade in chemistry courses is *C*- (1.7) and a minimum chemistry GPA of 2.0 is required in chemistry and ancillary required courses. All majors must successfully complete the following core:

TRADITIONAL CHEMISTRY MAJOR

Required Chemistry Courses

CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1

CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
CHEM 3011 - Inorganic Chemistry **gtPATHWAYS:**
CHEM 3111 - Analytical Chemistry **gtPATHWAYS:**
CHEM 3118 - Analytical Chemistry Laboratory **gtPATHWAYS:**
CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**
CHEM 3418 - Organic Chemistry Laboratory I **gtPATHWAYS:**
CHEM 3491 - Honors Organic Chemistry II **gtPATHWAYS:**
CHEM 3498 - Honors Organic Chemistry Laboratory II **gtPATHWAYS:**
CHEM 4121 - Instrumental Analysis **gtPATHWAYS:**
CHEM 4128 - Instrumental Analysis Laboratory **gtPATHWAYS:**
CHEM 4511 - Physical Chemistry I **gtPATHWAYS:**
CHEM 4518 - Physical Chemistry Laboratory I **gtPATHWAYS:**
CHEM 4521 - Physical Chemistry II **gtPATHWAYS:**
CHEM 4538 - Physical Chemistry II Laboratory **gtPATHWAYS:**

And one of the following two courses:

CHEM 3018 - Inorganic Chemistry Laboratory **gtPATHWAYS:**
CHEM 4828 - Biochemistry Lab **gtPATHWAYS:**

Total Required Courses: 45 Hours

Required Ancillary Courses

MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
MATH 3511 - Mathematics of Chemistry **gtPATHWAYS:**
PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
PHYS 2341 - General Physics Lab II **gtPATHWAYS:**

Total Required Ancillary Courses : 22 Hours

Recommended Electives

CHEM 3018 - Inorganic Chemistry Laboratory **gtPATHWAYS:**
CHEM 3810 - Biochemistry **gtPATHWAYS:**
-OR-
CHEM 4810 - General Biochemistry I **gtPATHWAYS:**
CHEM 4700 - Environmental Chemistry **gtPATHWAYS:**

CHEM 4820 - General Biochemistry II **gtPATHWAYS:**
Any CHEM 5000-level lecture class (3-4 semester hours)

Total Electives: 14-16 Hours

Chemistry Major Total: 81-83 Hours

Students interested in the chemistry major should consult regularly with a chemistry advisor. A complete description of the chemistry major's program may be obtained in the Department of Chemistry office or department website.

Qualified majors are strongly urged to participate in independent study or departmental honors programs.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society for the professional training of chemists. For ACS certification, students are required to take inorganic laboratory and at least one semester of biochemistry. No course with a grade of less than *C* (2.0) can be applied toward ACS certification. Students should check with a chemistry advisor for details. CU Denver maintains an ACS chapter of student affiliates.

Civil Engineering BS

Program Objectives

The objectives of the bachelor of science in civil engineering program are to produce graduates who:

- are able to perform the technical analyses and design tasks of entry-level civil engineers
- can successfully work toward professional engineering licensure
- communicate effectively, both orally and in writing
- understand the importance of leadership skills, team building and ethical practice
- value lifelong learning and improvement through graduate degrees or professional study
- appreciate the importance of community involvement and social contribution civil engineers are dedicated to improving our living environment

Civil engineering offers an interesting and challenging career in the design, construction, and maintenance of buildings and urban infrastructure; in transportation systems, including highways, airports, rapid transit lines, railroads, and harbor facilities; in the development of water resources, including reservoirs for storage, canals for irrigation, dams for power generation, stormwater management for drainage, groundwater recharge for contamination prevention, wastewater treatment for environmental

protection, and water purification for drinking purposes; in the construction industry; including foundations, bridges, concrete and steel structures, in problems concerned with environmental preservation; and in the sustainable development of cities. In preparing for work in such a broad field, the civil engineering student studies mathematics, basic science, communication, social science and humanities, engineering science and civil engineering design. CU Denver's civil engineering graduates usually find their first professional employment with consulting engineering firms, government agencies and various industries.

Typical Curriculum for BS (Civil Engineering)

Freshman Year

First Semester

CHEM 1130 - Engineering General Chemistry **gtPATHWAYS:** *(see note 1*)
ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01
MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 15 Hours

Second Semester

CVEN 1025 - Civil Engineering Graphics and Computer Aided Design **gtPATHWAYS:**
CVEN 2212 - Plane Surveying **gtPATHWAYS:**
ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02
MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
PHYS 2321 - General Physics Lab I **gtPATHWAYS:**

Total: 18 Hours

Sophomore Year

First Semester

CVEN 2121 - Analytical Mechanics I **gtPATHWAYS:**
CVEN 2200 - Computing Methods in Civil Engineering **gtPATHWAYS:**
MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 17 Hours

Second Semester

CVEN 3121 - Mechanics of Materials **gtPATHWAYS:**
CVEN 3141 - Introduction to Structural Materials **gtPATHWAYS:**
CVEN 3401 - Introduction to Environmental Engineering **gtPATHWAYS:**
CVEN 4780 - Engineering Geology **gtPATHWAYS:** or
GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1 or
MATH 3800 - Probability and Statistics for Engineers **gtPATHWAYS:**
MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**

Total: 15 Hours

Junior Year

First Semester

CVEN 3111 - Analytical Mechanics II **gtPATHWAYS:**
CVEN 3313 - Theoretical Fluid Mechanics **gtPATHWAYS:**
CVEN 3505 - Structural Analysis **gtPATHWAYS:**
CVEN 3602 - Transportation Engineering **gtPATHWAYS:**
Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 15 Hours

Second Semester

CVEN 3323 - Applied Fluid Mechanics **gtPATHWAYS:**
CVEN 3414 - Design of Water and Wastewater Systems **gtPATHWAYS:**
CVEN 3708 - Introduction to Geotechnical Engineering **gtPATHWAYS:**
CVEN 4718 - Intermediate Soils Engineering **gtPATHWAYS:**
MECH 3012 - Thermodynamics **gtPATHWAYS:**
Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 17 Hours

Senior Year

First Semester

CVEN 4000 - Senior Seminar **gtPATHWAYS:**
ELEC 3030 - Electric Circuits and Systems **gtPATHWAYS:**

Civil Engineering Design Electives (*see note 3*) (6 semester hours)
Upper-level Science, Math or Engineering Electives (*see note 4*) (6 semester hours)
Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 18 Hours

Second Semester

Civil Engineering Design Electives (*see note 3*) (6 semester hours)
CVEN 4067 - Senior Design Projects **gtPATHWAYS:**
Core Curriculum Elective (*see note 2*) (3 semester hours)
Science, Math or Engineering Electives (*see note 4*) (3 semester hours)

Total: 15 Hours

Program Total: 130 Hours

Or CHEM 2031 and CHEM 2038, which are required for students wishing to take CHEM 2061 and CHEM 2068 as general electives.
The communication, humanities and social science electives selected by the student and approved by his/her advisor must satisfy the college core curriculum.
Students must satisfactorily complete four of the six civil engineering design courses listed below:

CVEN 4427 Storm Water System Design

CVEN 4565 Timber Structure Design

CVEN 4575 Structural Steel Design

CVEN 4585 Reinforced Concrete Design

CVEN 4602 Highway Engineering

CVEN 4738 Intermediate Foundation Engineering

Science, math or engineering electives. The purpose of the electives is to extend the student's knowledge beyond the basic civil engineering requirements. Electives chosen should come from the areas of engineering, mathematics, chemistry, biology, physics or geology. In the case of mathematics, chemistry, physics or geology, the elective must be of higher level than courses in this field required by the civil engineering program. Suggested courses are CVEN 4077, CVEN 4087, CVEN design courses or any 5000-level CVEN course.

Communication BA

Requirements for Admission

Undergraduates must declare their intention to major in communication by the time they have completed 60 semester hours; they must apply to the communication department to be accepted as majors.

Program Requirements

The communication major requires that students take a total of 39 hours of course work in communication, 18 of which must be taken in residence at CU Denver. At least 21 of the 39 hours must be upper division. Students must achieve a grade of *C* (2.0) or higher to receive credit for a course in the major and must maintain a minimum GPA of *C*+ (2.75) in their communication courses.

Students must complete 12 credits (4 courses) from the menu of core classes; they must complete at least 24 credits (8 classes) from the menu of electives; they must also complete at least 3 credits (1 class) from the menu of "exit" classes.

Core Courses

COMM 1011 - Fundamentals of Communication **gtPATHWAYS:** GT-SS3
COMM 1021 - Fundamentals of Mass Communication **gtPATHWAYS:** GT-SS3
COMM 2020 - Communication, Citizenship, and Social Justice **gtPATHWAYS:**
COMM 2050 - Business and Professional Speaking **gtPATHWAYS:**
-OR- COMM 2101 - Presentational Speaking **gtPATHWAYS:**

Total: 12 Hours

Electives

Skill Area Electives

In addition to the four communication core courses, students are required to complete at least 24 credits (8 classes) from among the department's nine pathways, which include community service and public affairs, legal communication, health communication, mass media, human resources and organizational communication, mediation and conflict resolution, political communication and government, technical communication and public relations and advertising. Students may use the pathways to help craft a program of study, but *they are not required to do so*; the pathways are simply suggestions for ways to organize courses that will prepare students for careers.

Total: 24 Hours

Upper Division Elective

“Exit” Course—majors are required to complete at least one “exit” class that concludes their course of study with a special experience focused on high-level research, community engagement, international travel or workplace experience. Students may choose from the following courses:

COMM 3939 - Internship **gtPATHWAYS:**
COMM 4040 - Communication, Prisons, and Social Justice **gtPATHWAYS:**
COMM 4282 - Environmental Communication **gtPATHWAYS:**
COMM 4500 - Health Communication **gtPATHWAYS:**
COMM 4510 - Usability Testing **gtPATHWAYS:**
COMM 4620 - Health Risk Communication **gtPATHWAYS:**
COMM 4688 - Senior Seminar: Transitioning from College to Career **gtPATHWAYS:**
COMM 4995 - Travel Study **gtPATHWAYS:**

Total: 3 Hours

Major Total: 39 Hours

For more information, see the faculty advisor and the department's website.

Computer Science and Engineering BS

Program Objectives

The objectives of the bachelor of science degree in the computer science and engineering program are to:

Produce graduates who are successful professionals in computer science and engineering
Prepare students for graduate or professional study
Develop team building
Involve students in software design and projects
Support and enhance leadership skills
Produce students who can communicate effectively

Measurable Outcomes

To attain the educational objectives of the BS CSE program, the CSE department intends to produce the following measurable outcomes at the time of graduation. Graduates of the BS CSE program will have the following skills:

- an ability to apply knowledge of mathematics, science and engineering
- an ability to analyze a problem and identify and define the computing requirements appropriate to its solution
- an ability to design and conduct software and/or hardware experiments, as well as to analyze and interpret data
- an ability to design software and/or hardware to meet desired needs
- an ability to function on multidisciplinary teams
- an ability to identify, formulate and solve computer science and engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering and computer science solutions in a global and societal context
- a recognition of the need for, and an ability to engage in, lifelong learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills and modern tools necessary for computer science and engineering practice
- an ability to display leadership

Typical Curriculum for BS in Computer Science and Engineering

For up-to-date information, please refer to the current undergraduate handbook from CSE department website under degree programs at http://engineering.ucdenver.edu/cse

Freshman Year

First Semester

CSCI 1410 - Fundamentals of Computing **gtPATHWAYS:**
CSCI 1411 - Fundamentals of Computing Laboratory **gtPATHWAYS:**
CSCI 1510 - Logic Design **gtPATHWAYS:**
ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01 (see note 1)
MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
Core Curriculum Elective. Semester Hours: 3 (see note 1)

Total: 17 Hours

Second Semester

CSCI 2312 - Intermediate Programming **gtPATHWAYS:**
MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02

Total: 15 Hours

Sophomore Year

First Semester

CSCI 2421 - Data Structures and Program Design **gtPATHWAYS:**
CSCI 2511 - Discrete Structures **gtPATHWAYS:**
CSCI 2525 - Assembly Language and Computer Organization **gtPATHWAYS:**
PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
PHYS 2341 - General Physics Lab II **gtPATHWAYS:**
Core Curriculum Elective Semester Hours: 3 (see note1)

Total: 17 Hours

Second Semester

CSCI 2132 - Circuits and Electronics **gtPATHWAYS:**
CSCI 3320 - Advanced Programming **gtPATHWAYS:**
CSCI 3412 - Algorithms **gtPATHWAYS:**
Core Curriculum Elective Semester Hours: 3 (see note 1)
CSCI 3287 - Database System Concepts **gtPATHWAYS:**

Total: 15 Hours

Junior Year

First Semester

CSCI 3415 - Principles of Programming Languages **gtPATHWAYS:**
CSCI 3453 - Operating System Concepts **gtPATHWAYS:**
CSCI 3511 - Hardware-Software Interface **gtPATHWAYS:**
CSCI 3560 - Probability and Computing **gtPATHWAYS:**
CSE Tech Elective. Semester Hours: 3
Core Curriculum Elective Semester Hours: 3 (see note 1)

Total: 18 Hours

Second Semester

CSCI 3508 - Introduction to Software Engineering **gtPATHWAYS:**
MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**
CSE Tech Elective. Semester Hours: 3
CSE Tech Elective. Semester Hours: 3
Core Curriculum Elective. Semester Hours: 3 (see note 1)

Total: 16 Hours

Senior Year

First Semester

CSCI 3287 - Database System Concepts **gtPATHWAYS:**
CSCI 4034 - Theoretical Foundations of Computer Science **gtPATHWAYS:**
CSCI 4650 - Numerical Analysis I **gtPATHWAYS:**
CSCI 4738 - Senior Design I **gtPATHWAYS:**
CSE Tech Elective. Semester Hours: 3

Total: 15 Hours

Second Semester

CSCI 4739 - Senior Design II **gtPATHWAYS:**
CSCI 4591 - Computer Architecture **gtPATHWAYS:**
CSCI 4761 - Introduction to Computer Networks **gtPATHWAYS:**
CSE Tech Elective. Semester Hours: 3
Core Curriculum Elective Semester Hours: 3 (see note 1)

Total: 15 Hours

Program Total: 128 Hours

In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior-level courses.

CU Denver core curriculum: core requirements of the College of Engineering and Applied Science are outlined in the section titled “Undergraduate Core Curriculum in Engineering”. In the communication area, students must pass

ENGL 1020-3, Core Composition I, with a C- or better prior to taking either CSCI 2421 or CSCI 4739.

Computer science and engineering technical electives: The student must take five courses (15 semester hours) chosen from any CSCI 3000 or 4000-level courses that are not part of the required bachelor of science in computer science and engineering curriculum. The 2000-level CSCI "Practical Systems Administration" course will be counted as one CSCI elective. ELEC 4000-level computer engineering courses may be taken to satisfy a CSE tech elective with prior approval of a CSE academic advisor.

Criminal Justice BA

Program Director: Mary Dodge, PhD
Prospective Students: 303-315-2227
Current Students and Advising: 303-315-2227

Faculty

Professors:

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

Associate Professors:

Mary Dodge, PhD, University of California, Irvine
Angela Gover, PhD, University of Maryland
Callie Rennison, PhD, University of Houston
Paul Stretesky, PhD Florida State University

Assistant Professor:

Deanna Perez, PhD, University of Maryland

Associate Research Professor:

Jerry Williams, DPA, University of Colorado

The School of Public Affairs is excited to offer a new bachelor of arts program in criminal justice. It is an interdisciplinary program that combines specific course work in criminal

justice with a liberal arts focus. The criminal justice degree offers training for specific occupations within criminal justice agencies and provides students with the critical thinking, writing and presentation skills necessary for career advancement and graduate study. The course work explores the complex nature of crime causation, criminal justice organizations and the implications of public policies that allow graduates to adapt to the evolving nature of the field.

As with all undergraduate degrees, students are required to complete the requirements of the CU Denver core curriculum, providing an education that draws heavily on social and natural sciences as well as liberal arts. The program will not only provide a direct line to employment in the growing field of criminal justice, but will also facilitate the movement of outstanding students into SPA's MCJ and PhD graduate programs. Junior and senior criminal justice students may be permitted to enroll in a graduate level MCJ course by advisement. Students will be well prepared to pursue additional advanced degrees in fields where critical thinking and analytical skills are required.

Admissions Requirements

Entering freshmen, current CU Denver students and transfer students are eligible for admission to the program. All students must meet the admission requirements described in the Information for Undergraduate Students chapter of this catalog.

Transfer Students

Students who have attended another college or university are expected to meet general requirements for admission of transfer students as described in the Information for Undergraduate Students chapter. A maximum of 15 semester credits of criminal justice course work can be accepted and applied to th criminal justice major. The BACJ program director has the final discretionary authority to accept or reject criminal justic transfer credits. Transfer students with at least 30 semester hours of transferable credit who have been denied admission to the college by the Denver campus Office of Admissions, and who have special circumstances not covered by the regular admission policies,may petition the SPA Academic Standards for provisional admission. The Academic Standards Committee requires evidence of academic performance before provisional admission is granted. Policies and procedures for the SPA Academic Standards Committee are available through the SPA Advising Office.

Advising and Student Services

Upon matriculation into the criminal justice program, students will receive advising from the undergraduate academic advisor. The academic advisor will assist students with registration, clarify university and department policy and facilitate the graduation checkout. Advising will ensure that students take appropriate courses in the core curriculum to provide a foundation for their course work in the program. Students will

also be assigned a faculty advisor who will assist them with questions about their majors, concentrations and career directions.

Grading and Policies

Dean's List Criteria

CU Denver will use a fixed criterion across all colleges for determining eligibility for the Dean's List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete 9 hours in the semester upon which to determine grade point. These courses can be both within and outside of the School of Public Affairs. MSCD Pooled courses will not be included in the calculation nor will they count towards the 9 hours required for consideration. The GPA set for inclusion in the Dean's List is 3.75. In the summer semesters, students must complete 6 hours as a basis for inclusion in the Dean's List. Course inclusion will be the same as in fall and spring semesters. The GPA for Dean's List in summer will also be 3.75 Colleges will collect data each semester on the number of students making the Dean's List and report the number and percentage of total students in the college. Students who make the Dean's List for both fall and spring semesters may be eligible of a Dean's List scholarship award. Dean's List Scholarship awards vary in amount each semester depending on funding and the number of BACJ students who achieve Dean's List status. The Registrar's Office will calculate the semester GPAs for all students two weeks prior to the due date for semester grades. Those GPAs will be the basis for determining the Dean's List. Incompletes will not be considered in the calculation of minimum number of hours. The Dean's List will not be recalculated to include completed incompletes.

Academic Probation and Suspension

Students at the university are expected to maintain progress in their degree program, as defined by being in "good academic standing." Good academic standing requires minimally a cumulative grade point average (GPA) of 2.0 on all University of Colorado course work.

Academic Probation

- Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.
- Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via University-assigned email and postal letter) of their academic probation status.

- Students on Academic Probation will be required to complete the Academic Success Plan during their first semester on Academic Probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed Academic Success Plan before they will be allowed to register for the subsequent term.
- Students on Academic Probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on Academic Probation before they will be allowed to register.
- Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing. Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on Academic Suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from Academic Probation and notified via University-assigned email that s/he is in Academic Good Standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students are informed in writing (via University-assigned email and postal letter) of Restricted Academic Probation status.
- Students on Restricted Academic Probation will be allowed to enroll for a maximum of 6 credits/2 classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on Restricted Academic Probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.
- Students on Restricted Academic Probation will not be able to register online; they will need to register for courses using a Schedule Adjustment Form, which must be submitted to the Service Center (North Classroom #1003) for processing.
- Restricted Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Students must achieve a minimum 2.0 cumulative CU GPA to return to good academic standing and to meet graduation requirements.
- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours on Academic Probation and Restricted Academic Probation will be placed on Academic Suspension.

Academic Suspension

- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students are informed in writing via certified/registered letter of their Academic Suspension status.
- The minimum duration of Academic Suspension is for a period of one year (three semesters, including summer term). Students placed on Academic Suspension will be unable to take courses from any CU campus during this time.
- Should a student be placed on Academic Suspension while registered for the next semester, s/he will be administratively dropped from their courses by the University.
- A student's Academic Suspension status is permanently indicated on his/her official University of Colorado transcript. During the one-year Academic Suspension period, students who wish to return to the University should consider one (or both) of the following actions:
    - Attend another regionally-accredited college/university.
        - Students who choose to attend another institution while on Academic Suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work. Students should consult their academic advisor to discuss appropriate course work.
    - Use the time off to directly address and resolve the factors that contributed to the academic difficulty.
- After the one-year suspension period has elapsed, students must petition the appellate committee (of the school or college they wish to enter) for readmission and meet and document at least one of the following criteria:
    - Attendance at another regionally accredited college/university where they earned a minimum cumulative GPA of 2.75 in transferable credit.
    - Explanation of their previous academic difficulty, demonstration of what has changed, and how this will allow them to now achieve and maintain Good Academic Standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0).
- Students who choose to petition the School of Public Affairs appellate committee for readmission must submit their petitions by the following deadlines:
    - For fall admission: June 1
    - For spring admission: December 1
    - For Maymester/summer admission: April 1
- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be readmitted on Restricted Academic Probation. These students must meet the condition of Restricted Academic Probation every semester until their cumulative CU GPA is at least a 2.0.

Second Suspension

- Students who are readmitted after their first Academic Suspension and fail to meet the conditions of Restricted Academic Probation for a second time are placed on a second suspension for an indefinite period of time.

Students on a second suspension may be readmitted to the University only by petition to the college's appellate committee.

Students will not be considered for readmission unless they have demonstrated significant improvement in academic performance at the college/university level, and/or considerable and positive change in personal circumstances.

Grade Policy

The University of Colorado Grading System is based on a 4.0 absolute scale.

Incomplete Grades

An incomplete grade of "I" can be issued at faculty discretion when there are special circumstances that preclude course completion. Incomplete grades are only issued when a small portion of the course remains. At minimum, 75% of the work in the course must be completed. Students are allowed up to 12 months to complete the unfinished portion of the course. After 12 months an "I" grade that has not been completed will become an "F."

Pass/Fail Grades

Core knowledge area and general electives are the only courses that can be completed pass/fail. Grades of "D-" of better is translated by the Records Office to a P (pass) grade. P grades do no affect students' GPA. F grades do affects students; GPA. Students interested in completing a course as pass/fail must submit a Schedule Adjustment Form during the add/drop during the respective semester to the BACJ Academic Advisor. Students need to consult the academic calendar posted on the Office of the Registrar's webpage for add/drop dates. Up to 16 credits may be completed as pass/fail and credited toward the bachelor degree. Students can complete a maximum of 6 credits as pass/fail in any one semester.

The Internship Program

Undergraduate students without experience in the field will be expected to complete an internship for credit under the direction of a faculty sponsor. Internships are helpful for career exploration early in a student's academic career or for job experience after developing academic content in the major. Students must have a minimum 2.0 cumulative GPA and a minimum of 15 semester hours completed at UC Denver before registering for the internship. A maximum of 3 semester hours of internship per semester and 6 semester hours total may be counted toward the 120 semester hours necessary for graduation.

Undergraduate students should contact the Experiential Learning Center for details on internship placements, paperwork and requirements.

Program Requirements

Students completing a BA in criminal justice at CU Denver will complete a minimum of 120 semester hours including:

- 34–36 general education core curriculum semester hours
- 21 undergraduate criminal justice semester hours, including 18 upper-division semester hours
- 15 elective semester hours in criminal justice and ancillary fields for the selected area of concentration (including an internship)
- 46–48 elective semester hours, an optional CLAS or language minor (15-21 hours), optional electives or internship
- students without experience in the field of criminal justice must complete a 3-semester-hour internship

Students must receive a minimum of a C (2.0) in each undergraduate course applied to satisfy major or minor degree requirements.

Required Criminal Justice Courses

CRJU 1001 - Introduction to Criminal Justice **gtPATHWAYS:**
CRJU 2041 - Crime Theory and Causes **gtPATHWAYS:**
CRJU 3100 - Criminal Justice Research Methods **gtPATHWAYS:**
CRJU 3150 - Statistics for Criminal Justice **gtPATHWAYS:**
CRJU 4042 - Corrections **gtPATHWAYS:**
CRJU 4043 - Law Enforcement **gtPATHWAYS:**
CRJU 4044 - Courts and Judicial Process **gtPATHWAYS:**

Total: 21

Criminal Justice Electives

Criminal Justice Electives—15 semester hours, with 9 hours from the Department of Criminal Justice and 6 from other departments

CRJU 3510 - Drugs, Alcohol and Crime **gtPATHWAYS:**
CRJU 3410 - Probation and Parole **gtPATHWAYS:**
CRJU 3320 - Police-Community Relations **gtPATHWAYS:**
CRJU 3520 - Juvenile Justice Administration **gtPATHWAYS:**
CRJU 3160 - White-Collar Crime **gtPATHWAYS:**
CRJU 3220 - Community-Based Corrections **gtPATHWAYS:**
CRJU 3250 - Violence in Society **gtPATHWAYS:**
CRJU 3252 - Violent Offenders **gtPATHWAYS:**
CRJU 3310 - Police in Contemporary Society **gtPATHWAYS:**

CRJU 3420 - Pleas, Trials and Sentences **gtPATHWAYS:**
CRJU 3540 - Crime and Delinquency Prevention **gtPATHWAYS:**
CRJU 4120 - Race, Class and Crime **gtPATHWAYS:**
CRJU 4130 - Poverty and Crime **gtPATHWAYS:**
CRJU 4140 - Domestic Violence and Crime **gtPATHWAYS:**
CRJU 4170 - Victim Studies **gtPATHWAYS:**
CRJU 4180 - Comparative Study of Criminal Justice Systems **gtPATHWAYS:** (CJ 1001++)
CRJU 4230 - Corrections and Treatment **gtPATHWAYS:**
CRJU 4410 - Criminal Law and Constitutional Procedures **gtPATHWAYS:**
CRJU 4430 - Law and Society **gtPATHWAYS:**
CRJU 4440 - Courts and Social Policy **gtPATHWAYS:**
CRJU 4520 - Gangs and Criminal Organizations **gtPATHWAYS:**
CRJU 4530 - Families and Intergenerational Crime **gtPATHWAYS:**
CRJU 4600 - Special Topics in Criminal Justice **gtPATHWAYS:** (CJ 1001, CJ 2041++)

Total: 9 hours

++*Prerequisite*

Other Department Electives**

COMM 4265 - Gender and Communication **gtPATHWAYS:**
ECON 3300 - Economics of Crime and Punishment **gtPATHWAYS:**
PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
PSCI 4124 - Denver Politics **gtPATHWAYS:**
PSCI 4185 - Corruption in the U.S. and Abroad **gtPATHWAYS:**
PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
PSCI 4477 - Constitutional Law I **gtPATHWAYS:**
PSCI 4487 - Constitutional Law II **gtPATHWAYS:**
PSCI 4545 - Immigration Politics **gtPATHWAYS:**
PSCI 4837 - Contemporary Issues in Civil Liberties **gtPATHWAYS:**
PSYC 3135 - Organizational Psychology **gtPATHWAYS:**
PSYC 3205 - Human Development I: Child Psychology **gtPATHWAYS:**
PSYC 3215 - Human Development II: Adolescence and Adulthood **gtPATHWAYS:**
PSYC 3265 - Drugs, Brain and Behavior **gtPATHWAYS:**
PSYC 3305 - Abnormal Psychology **gtPATHWAYS:**
PSYC 3612 - Domestic Abuse **gtPATHWAYS:**
SOCY 2462 - Introduction to Social Psychology **gtPATHWAYS:** GT-SS3
SOCY 3020 - Race and Ethnicity in the U.S. **gtPATHWAYS:**
SOCY 3600 - Social Relations **gtPATHWAYS:**
SOCY 3700 - Sociology of the Family **gtPATHWAYS:**

SOCY 4340 - Juvenile Delinquency **gtPATHWAYS:**
SOCY 4440 - Social Inequality **gtPATHWAYS:**
SOCY 4460 - Hate Groups and Group Violence **gtPATHWAYS:**
SOCY 4770 - Advanced Topics in Sociology **gtPATHWAYS:**

Total: 6 hours

**Students must comply with departmental prerequisites.

Examples for Areas of Concentration

Juvenile Justice

CRJU 3520 - Juvenile Justice Administration **gtPATHWAYS:**
CRJU 3540 - Crime and Delinquency Prevention **gtPATHWAYS:**
CRJU 4520 - Gangs and Criminal Organizations **gtPATHWAYS:**
SOCY 3700 - Sociology of the Family **gtPATHWAYS:**
SOCY 4340 - Juvenile Delinquency **gtPATHWAYS:**

Total: 15 hours

Law and Society

CRJU 3420 - Pleas, Trials and Sentences **gtPATHWAYS:**
CRJU 4430 - Law and Society **gtPATHWAYS:**
CRJU 4440 - Courts and Social Policy **gtPATHWAYS:**
PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**

Total: 15 hours

Domestic Violence

CRJU 4140 - Domestic Violence and Crime **gtPATHWAYS:**
CRJU 4170 - Victim Studies **gtPATHWAYS:**
CRJU 4530 - Families and Intergenerational Crime **gtPATHWAYS:**
COMM 4265 - Gender and Communication **gtPATHWAYS:**
PSYC 3612 - Domestic Abuse **gtPATHWAYS:**

Total: 15 hours

Economics BA

Requirements for Major

Students majoring in economics for the BA degree must declare such by the time they have completed 60 semester hours and complete a minimum of 40 semester hours in economics. The minimum grade in each CU Denver economics course is a *C*- (1.7), except that one *D*- in one economics elective is allowed. A GPA of 2.5 in economics courses taken at CU Denver is required to graduate. No pass/fail grades may count toward the major.

Program Requirements

Required Economics Courses

ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
ECON 3801 - Introduction to Mathematical Economics **gtPATHWAYS:**
ECON 3811 - Statistics with Computer Applications **gtPATHWAYS:**
ECON 4071 - Intermediate Microeconomic Theory **gtPATHWAYS:**
ECON 4081 - Intermediate Macroeconomic Theory **gtPATHWAYS:**
ECON 4091 - History of Economic Thought **gtPATHWAYS:**
ECON 4811 - Introduction to Econometrics **gtPATHWAYS:**

Total: 25 Hours

Electives

Economics Courses

Any five 3-semester-hour courses taken in economics may satisfy this requirement, other than internships and independent studies which require the approval of the department chair.

Political Science Course

One political science course. Suggested courses include but are not limited to PSCI 1101, American Political System, and PSCI 3022, Introduction to Comparative Politics.

Electives Total: 18 Hours

Major Total: 43 Hours

Graduating seniors must submit the three best papers that the student wrote in any three separate courses taken in the Department of Economics for the outcomes assessment of the economics program. The three papers should be handed in at one time in a folder to the economics office, before the first day of the month in which the student plans to graduate.

At least six of the major courses (18 semester hours), including at least three courses out of ECON 3801, 4071, 4081, 4091 and 4811, must be taken from economics faculty at CU Denver.

Once a student has enrolled at CU Denver, no courses in the major may be taken outside the economics department without permission from the undergraduate advisor. No math is formally required, except for the college algebra prerequisite for ECON 3801. Students desiring a recommendation to a graduate school in economics, however, should consult with economics faculty regarding additional mathematics courses.

Electrical Engineering BS

Undergraduate Program Objectives

Objectives of the bachelor of science in electrical engineering are to develop graduates:

- who are immediately productive engineers and can advance their careers on different professional tracks in the engineering industry
- who can pursue graduate education in engineering or other fields such as business, medicine and law

These objectives are consistent with the mission of the University of Colorado Denver, congruent with the goals of the College of Engineering and Applied Science and reflective of the mission of the Department of Electrical Engineering.

Typical Curriculum for BS (Electrical Engineering)

Freshman Year

First Semester

CHEM 1130 - Engineering General Chemistry **gtPATHWAYS:**
ELEC 1201 - Introduction to Electrical Engineering **gtPATHWAYS:**
ELEC 1510 - Logic Design **gtPATHWAYS:**
ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01 (*see note 1*)

MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1

Total: 16 Hours

Second Semester

ELEC 1520 - Embedded Systems Engineering I **gtPATHWAYS:**
ELEC 2531 - Logic Laboratory **gtPATHWAYS:**
MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
Core Curriculum Elective (*see note 1*) (3 semester hours)

Total: 16 Hours

Sophomore Year

First Semester

ELEC 2132 - Circuit Analysis I **gtPATHWAYS:**
ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02
MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**
PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**

Total: 18 Hours

Second Semester

ELEC 2142 - Circuit Analysis II **gtPATHWAYS:**
ELEC 2552 - Sophomore Circuits Laboratory **gtPATHWAYS:**
ELEC 2520 - Embedded Systems Engineering 2 **gtPATHWAYS:**

Total: 13 Hours

Junior Year

First Semester

ELEC 3133 - Electromagnetic Fields **gtPATHWAYS:**
ELEC 3215 - Electronics I **gtPATHWAYS:**
ELEC 3316 - Linear Systems Theory **gtPATHWAYS:**
ELEC 3651 - Digital Hardware Design **gtPATHWAYS:**

ELEC 3715 - Electronics Laboratory **gtPATHWAYS:**
Core Curriculum Elective (*see note 1*) (3 semester hours)

Total: 16 Hours

Second Semester

ELEC 3164 - Energy Conversion **gtPATHWAYS:**
ELEC 3225 - Electronics II **gtPATHWAYS:**
ELEC 3724 - Energy Conversion Laboratory **gtPATHWAYS:**
ELEC 3735 - Junior Laboratory **gtPATHWAYS:**
ELEC 3817 - Engineering Probability and Statistics **gtPATHWAYS:**
Core Curriculum Elective (*see note 1*) (3 semester hours)

Total: 17 Hours

Senior Year

First Semester

ELEC 4309 - Senior Design Project I **gtPATHWAYS:**
Engineering Science Elective (*see note 4*) (3 semester hours)
ELEC Specialty and Laboratory (*see note 5*) (4 semester hours)
ELEC Specialty Course (3 semester hours)

Total: 16 Hours

Second Semester

ELEC 4319 - Senior Design Project II **gtPATHWAYS:** *(see note 3)*
Professional Elective (*see note 3*) (3 semester hours)
ELEC Specialty and Laboratory (*see note 6*) (4 semester hours)
ELEC Specialty *(see note 6*) (3 semester hours)
Core Curriculum Elective (*see note 1*) (3 semester hours)

Total: 16 Hours

Program Total: 128 Hours

The particular curriculum to be satisfied by each student is the one published in the catalog current at the time of his/her 30-hour senior checkout. A graduation agreement should be requested by each student after completing registration for his/her last

semester. Additional information is contained in the “E E Advisement Guide.” Students should also refer to the section in this catalog on “Academic Policies of theCollege of Engineering and Applied Science.”

- Common core requirements of the College of Engineering and Applied Science are outlined in the section titled “Undergraduate Core Curriculum in Engineering” in this catalog or in the “E E Advisement Guide.”
- All electrical engineering students must satisfactorily complete ELEC 4309, Senior Design Project I, and ELEC 4319, Senior Design Project II, in consecutive semesters.
- Professional electives may be selected from an approved list of upper-division or graduate-level courses or cooperative education. The electrical engineering advisor must be consulted prior to the selection of these electives.
- The engineering science elective may be satisfied by taking ENGR 3012, Thermodynamics.
- Seventeen semester hours of electrical engineering elective and specialty courses in association with the laboratories are required.

Laboratory Requirements

Students are required to take at least two laboratories out of the following six groups.Theory components are either prerequisites or corequisites to the laboratory components.The theory component may be taken as a specialty course.

ELEC 4136 - Control Systems Analysis **gtPATHWAYS:**
ELEC 4276 - Digital Control Systems **gtPATHWAYS:**
ELEC 4406 - Control Systems Laboratory **gtPATHWAYS:**

ELEC 4225 - Advanced Electronics **gtPATHWAYS:**
ELEC 4435 - Advanced Electronics Laboratory **gtPATHWAYS:**

ELEC 4247 - Communication Theory **gtPATHWAYS:**
ELEC 4248 - Digital Communication Systems **gtPATHWAYS:**
ELEC 4467 - Communications Laboratory **gtPATHWAYS:**

ELEC 4133 - Advanced Electromagnetic Fields **gtPATHWAYS:**
ELEC 4423 - Microwave Laboratory **gtPATHWAYS:**

ELEC 4501 - Microprocessor Based Design **gtPATHWAYS:**
ELEC 4521 - Microprocessor Laboratory **gtPATHWAYS:**

ELEC 4511 - Hardware-Software Interface **gtPATHWAYS:**
ELEC 4561 - Hardware-Software Lab **gtPATHWAYS:**

Other courses available (without any laboratory component) as electrical engineering specialty courses include the following:

ELEC 4174 - Power Electronic Systems **gtPATHWAYS:**
ELEC 4184 - Power Systems Analysis **gtPATHWAYS:**
ELEC 4025 - Device Electronics **gtPATHWAYS:**
ELEC 4555 - VLSI Circuit Simulation **gtPATHWAYS:**

Computer Engineering Option

Students can add a computer engineering emphasis to their electrical engineering degree program by making the following changes in the curriculum described above:

Junior Year

First Semester

Substitute ELEC 3651 Digital Hardware Design for ELEC 3817 Engineering Probability and Statistics.

Second Semester

Substitute ELEC 3817, Engineering Probability and Statistics for ELEC 3651 Digital Hardware Design, ELEC 3724 Power Laboratory, and a humanities and social sciences course.

Senior Year

First Semester

Choose ELEC 4501, Microprocessor-based Design, and ELEC 4521, Microprocessor Laboratory, as one electrical engineering specialty and laboratory selection.

Second Semester

Choose ELEC 4511, Hardware-Software Interface Design, ELEC 4561, Hardware-Software Laboratory, and a humanities and social sciences elective as professional elective and electrical engineering specialty and laboratory selections.

English BA

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing. Careful study of the use of the English language also should help a student to resist the misuse and corruption of language in politics, the media and elsewhere. Students who complete the program in English are expected to have mastered the ability to express their ideas in clear and succinct prose.

Requirements for the English Major

Students majoring in English must present a total of 39 hours in the literature, film studies and/or creative writing options (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of *C* (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in English must be taken from English faculty at CU Denver. Students planning to major in English must consult with an advisor as soon as possible. Students may choose only one of the three options in the English major.

LITERATURE OPTION

REQUIRED COURSES

ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
ENGL 3001 - Critical Writing **gtPATHWAYS:**
ENGL 4999 - Literary Studies Senior Seminar **gtPATHWAYS:**

Total: 9 Hours

AREA REQUIREMENTS

Choose one course from each area below. No course is repeatable.

Historical Survey

ENGL 4080 - History of English **gtPATHWAYS:**
ENGL 4166 - History of American Poetry **gtPATHWAYS:**
ENGL 4200 - History of the English Novel I **gtPATHWAYS:**
ENGL 4210 - History of the English Novel II **gtPATHWAYS:**

ENGL 4230 - The American Novel **gtPATHWAYS:**
ENGL 4236 - The American Short Story **gtPATHWAYS:**
ENGL 4300 - History of British Drama **gtPATHWAYS:**
ENGL 4320 - History of Poetry in English **gtPATHWAYS:**
ENGL 4350 - History of American Drama **gtPATHWAYS:**

Old English, Medieval Language and Literature

ENGL 4400 - Old English I **gtPATHWAYS:**
ENGL 4500 - Medieval Literature **gtPATHWAYS:**
ENGL 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
ENGL 4730 - Chaucer **gtPATHWAYS:**

Renaissance, Restoration and 18th Century British Literature

ENGL 3661 - Shakespeare **gtPATHWAYS:**
ENGL 4520 - English Renaissance **gtPATHWAYS:**
ENGL 4530 - Milton **gtPATHWAYS:**
ENGL 4540 - Restoration and the 18th Century **gtPATHWAYS:**

Eighteenth- and Nineteenth-Century British Literature

ENGL 4200 - History of the English Novel I **gtPATHWAYS:**
ENGL 4210 - History of the English Novel II **gtPATHWAYS:**
ENGL 4560 - English Romanticism **gtPATHWAYS:**
ENGL 4580 - The Victorian Age **gtPATHWAYS:**

American Literature

ENGL 3700 - American Literature to the Civil War **gtPATHWAYS:**
ENGL 3750 - American Literature after the Civil War **gtPATHWAYS:**
ENGL 4166 - History of American Poetry **gtPATHWAYS:**
ENGL 4230 - The American Novel **gtPATHWAYS:**
ENGL 4236 - The American Short Story **gtPATHWAYS:**
ENGL 4350 - History of American Drama **gtPATHWAYS:**

Modern and Contemporary Literature

ENGL 3450 - Twentieth Century Women Writers **gtPATHWAYS:**
ENGL 3480 - Modern Drama **gtPATHWAYS:**
ENGL 4250 - Twentieth Century Fiction **gtPATHWAYS:**
ENGL 4460 - Contemporary World Literature **gtPATHWAYS:**
ENGL 4600 - Modernism **gtPATHWAYS:**

Total: 18 Hours

REQUIRED ELECTIVES

Choose any four English courses: two at the 3000 or 4000 level, and two at any level.

Total: 12 Hours

Literature Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

CREATIVE WRITING OPTION

REQUIRED COURSES

ENGL 2154 - Introduction to Creative Writing **gtPATHWAYS:**
ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies **gtPATHWAYS:**
-OR- ENGL 3939 - Internship **gtPATHWAYS:**

Total: 9 Hours

AREA REQUIREMENTS

Complete all courses in **either** poetry or fiction.

Poetry

ENGL 3020 - Poetry Workshop **gtPATHWAYS:**
ENGL 3050 - Fiction Workshop **gtPATHWAYS:**
ENGL 4025 - Advanced Poetry Workshop **gtPATHWAYS:**
ENGL 4160 - Poetics **gtPATHWAYS:**
-OR- ENGL 4800 - Special Topics in Creative Writing **gtPATHWAYS:** (poetry form)
Choose one course from the following:
ENGL 4080 - History of English **gtPATHWAYS:**
ENGL 4166 - History of American Poetry **gtPATHWAYS:**
ENGL 4320 - History of Poetry in English **gtPATHWAYS:**

Fiction

ENGL 3020 - Poetry Workshop **gtPATHWAYS:**
ENGL 3050 - Fiction Workshop **gtPATHWAYS:**
ENGL 4055 - Advanced Fiction Workshop **gtPATHWAYS:**
ENGL 4800 - Special Topics in Creative Writing **gtPATHWAYS:** (fiction form)

Choose one course from the following:

ENGL 4200 - History of the English Novel I **gtPATHWAYS:**
ENGL 4210 - History of the English Novel II **gtPATHWAYS:**
ENGL 4230 - The American Novel **gtPATHWAYS:**
ENGL 4236 - The American Short Story **gtPATHWAYS:**

Area Requirements Total: 15 Hours

REQUIRED ELECTIVES

Choose any five 3000 or 4000 level English courses.

Recommended:

ENGL 3001 - Critical Writing **gtPATHWAYS:**
ENGL 3416 - Magazine Writing **gtPATHWAYS:**

Electives Total: 15 Hours

Creative Writing Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

FILM STUDIES OPTION

The film studies option within the English major is designed to prepare students for a range of professional careers in areas such as screenwriting, film criticism, video production and the teaching of film, as well as those students who plan to pursue graduate programs in film studies. Required courses give students a strong grounding in film history, verbal and visual narrative, and the critical terms and techniques used in both film and literary analysis. Electives give students the option of emphasizing either the creative approach or the critical approach to moving-image media, or a combination of the two. The film studies option also affords students the opportunity to create video productions using state-of-the-art digital video and editing equipment and the possibility of airing their productions on cable TV. Offered in cooperation with the College of Arts & Media (CAM), the film studies option can be completed entirely on the Auraria Campus.

REQUIRED COURSES

ENGL 2250 - Introduction to Film **gtPATHWAYS:**
ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
ENGL 3070 - Film History I **gtPATHWAYS:**
ENGL 3080 - Film History II **gtPATHWAYS:**
ENGL 4420 - Film Theory and Criticism **gtPATHWAYS:**

Total: 15 Hours

AREA REQUIREMENTS

Choose eight courses. Students may take courses in all areas. Eighteen of the 24-hour minimum must be at the 3000/4000 level. Production courses must be taken through the College of Arts & Media (CAM). Equivalent screenwriting courses may also be taken through CAM. [Courses marked by an asterisk are repeatable if taken as a different genre/director/topic.]

A. Critical Studies

ENGL 1601 - Telling Tales: Narrative Art in Literature and Film **gtPATHWAYS:** GT-AH2
ENGL 3001 - Critical Writing **gtPATHWAYS:**
* ENGL 3075 - Film Genres **gtPATHWAYS:**
* ENGL 3085 - Film Directors **gtPATHWAYS:**
ENGL 3200 - From Literature to Film **gtPATHWAYS:**
* ENGL 3300 - Topics in Film **gtPATHWAYS:**
* ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:** (film and media-focused only; e.g., Film and Rhetoric)
* ENGL 4770 - Topics in English: Film and Literature **gtPATHWAYS:** (film and media-focused only)
ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies **gtPATHWAYS:**
Any 3000- or 4000-level literature course with ENGL prefix

B. Screenwriting

ENGL 2390 - Writing the Short Script **gtPATHWAYS:**
ENGL 2415 - Introduction to Movie Writing **gtPATHWAYS:**
ENGL 3415 - Screenwriting Workshop **gtPATHWAYS:** (repeatable once)
ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies **gtPATHWAYS:**

C. Production

TFVP 1050 - Video Production/Post-Production I **gtPATHWAYS:**

FILM 2050 - Film/Video Prod/Post II **gtPATHWAYS:**

Total: 24 Hours

Film Studies Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

College Core Courses for English Majors

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the CLAS Core Curriculum/Graduation Requirements chart. Check the online schedule for specific course offerings.

Electives

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Six hours earned in the internship/cooperative education program may be counted toward the major.

English Writing BA

Especially designed for future writers, the writing major offers a wide range of intensive writing experiences combining such areas as rhetoric, professional, general and creative writing.

Requirements for the English Writing Major

Students majoring in writing must present a total of 39 hours for the major (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of *C* (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in writing must be taken from English faculty at CU Denver. Students planning to major in writing should consult with an advisor as soon as possible. This major is also available online. [Courses marked by an asterisk are repeatable when title/content differ.]

Required Courses

ENGL 2070 - Grammar, Rhetoric and Style **gtPATHWAYS:**
ENGL 2154 - Introduction to Creative Writing **gtPATHWAYS:**
-OR- ENGL 2250 - Introduction to Film **gtPATHWAYS:**
ENGL 3084 - Multimedia Composition **gtPATHWAYS:**
ENGL 3154 - Technical Writing **gtPATHWAYS:**
-OR- ENGL 3170 - Business Writing **gtPATHWAYS:**
ENGL 3160 - Language Theory **gtPATHWAYS:**
-OR- ENGL 4080 - History of English **gtPATHWAYS:**
ENGL 4180 - Argumentation and Logic **gtPATHWAYS:**
* ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:**
ENGL 4991 - Senior Seminar in Writing **gtPATHWAYS:** (Seniors only)

Total: 24 Hours

Area Requirements

Students may concentrate their studies in one of three areas: professional writing, teaching English as a second language, or interdisciplinary language studies.

PROFESSIONAL WRITING

Choose three (9 hours):

ENGL 3154 - Technical Writing **gtPATHWAYS:**
-OR- ENGL 3170 - Business Writing **gtPATHWAYS:**
ENGL 3416 - Magazine Writing **gtPATHWAYS:**
ENGL 3939 - Internship **gtPATHWAYS:**
ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:**
(professional writing topic)
ENGL 4280 - Proposal and Grant Writing **gtPATHWAYS:**
ENGL 4995 - Senior Writing Project **gtPATHWAYS:**

Electives (6 hours)

Choose any two English 3000-4000 level courses (writing, literature, film, creative writing).

Total Professional Writing Area: 15 Hours

TEACHING ENGLISH AS A SECOND LANGUAGE

Choose three (9 hours):

ENGL 3160 - Language Theory **gtPATHWAYS:**
ENGL 3939 - Internship **gtPATHWAYS:**
ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:** (TESOL topic)
ENGL 4601 - Principles and Practices of Second Language Acquisition **gtPATHWAYS:**
ENGL 4995 - Senior Writing Project **gtPATHWAYS:**

Electives (6 hours)

Choose any two English 3000-4000 level courses (writing, literature, film, creative writing).

Total Teaching English as a Second Language Area: 15 Hours

INTERDISCIPLINARY LANGUAGE STUDIES

Students pursuing interdisciplinary language studies may choose any five writing or workshop courses offered by the Department of English. In addition, students may also choose writing-intensive courses offered by other departments with prior approval of an English advisor.

Total Interdisciplinary Language Studies Area: 15 Hours

Major Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

College Core Courses for English Writing Majors

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the UC Denver Core Curriculum and CLAS Graduation Requirements chart. Check the online schedule for specific course offerings.

Electives

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Up to 6 hours earned in the cooperative education program may be counted toward the major.

Finance Emphasis - BS in Business Administration

The principal areas of study in finance are financial management in small and large businesses, investments, financial institutions, and international finance. The study of finance is intended to provide an understanding of fundamental theory and practice pertaining to finance, to make sound financial decisions. Students are taught to think logically about financial problems, so that they can formulate and implement value maximizing decisions and policies for the business. For this purpose, it is necessary to understand the importance of finance in the economy and the functions and purposes of monetary systems, credit, prices, money markets and financial institutions. Emphasis is placed on financial policy, management, control, analysis, and decision making.

The finance emphasis provides the students with the skills to succeed in all areas of finance. Numerous job opportunities exist in the field of business finance and with financial institutions, mutual funds, securities firms, personal wealth management firms, and financial planning firms including positions involving an understanding and sale of securities.

For this area of emphasis, students are required to take the following complement of courses, in addition to the undergraduate business core:

FNCE 3500 - Management of Business Capital
FNCE 3600 - Financial Markets and Institutions
FNCE 3700 - Investment and Portfolio Management
FNCE 4370 - International Financial Management*
FNCE 4500 - Corporate Financial Decisions
Upper division business electives (12 semester hours)

Total: 27 semester hours

Risk Management and Insurance Concentration

The risk management and insurance (RMI) concentration in the finance area of emphasis provides students with the fundamental knowledge needed to accurately measure and manage risk.

Recent crisis situations suggest that understanding risk and how to manage it, and ultimately, how risk management can be used to increase firm value, is essential in the current business environment. The RMI specialty will provide an overall perspective on risk, with a specific focus on insurance products and their use in mitigating risk in business and personal situations. The insurance industry recognizes many high-level certifications as a sign of expertise, and the RMI course work will provide the knowledge

base so that students can proceed to acquire certification in their specific choice of insurance specialty.

Potential job opportunities include positions in the insurance industry and those that require a thorough understanding of risk, such as corporate risk officer or risk manager. In addition, students who choose to work in the insurance industry can make a seamless transition into underwriting, ratemaking, and policy approval. The program will be supported by unique internship and special project opportunities in the insurance industry, and is the first program of its kind in the region.

The following course work will be required, in addition to the undergraduate business core:

FNCE 3500 - Management of Business Capital
FNCE 3700 - Investment and Portfolio Management
FNCE 3809 - Introduction to Risk Management
FNCE 3949 - Experiential Learning with Risk Management Industry
FNCE 4129 - Legal and Ethical Implications of Risk
FNCE 4500 - Corporate Financial Decisions
FNCE 4809 - Insurance Principles and Applications
FNCE 4909 - Corporate Risk Management
International elective (3 semester hours)

Total: 27 semester hours

NOTES:

FNCE 3949 will be a specialized offering in lieu of FNCE 3939. The internship or individualized study will be with specific providers of risk management services (including insurance companies), and will be monitored for content and performance.

Students should note that all FNCE courses are not offered every semester. Students should take ACCT 2200, ACCT 2220 and FNCE 3000 courses as early as possible to avoid future problems in their schedules.

For 2010-11, the RMI concentration, comprising of five new courses will be offered with a fixed tuition of $900 per course (in-state) and $2,400 per course (nonresident). The courses will not be eligible for COF.

Financial Management and Information Systems Emphasis—BS in Business Administration

The financial management and information systems emphasis provides students with skills that they need to succeed in careers that bridge the fields of finance and information systems.

The financial management and information systems specialty incorporates knowledge of financial management and markets, accounting and information systems and technology. This specialization provides the manager with knowledge of financial information systems, databases, risk management and accounting systems.

Job opportunities include positions that require knowledge of both financial management and business information systems and databases. The specialization provides a solid accounting/finance and information systems background for other finance specialist and business analyst positions as well.

Required Courses

Finance

FNCE 3500 - Management of Business Capital **gtPATHWAYS:**
FNCE 3700 - Investment and Portfolio Management **gtPATHWAYS:**
FNCE 3600 - Financial Markets and Institutions **gtPATHWAYS:**
FNCE 4500 - Corporate Financial Decisions **gtPATHWAYS:**

FNCE

Accounting

ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**
ACCT 3320 - Intermediate Cost Accounting **gtPATHWAYS:**
ACCT 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:** or
ISMG 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**

ISMG

ISMG 4500 - Database Management and Applications **gtPATHWAYS:**
ISMG 4600 - Systems Analysis and Design **gtPATHWAYS:**
ISMG 4900 - Project Management and Practice **gtPATHWAYS:**

Total: 33 Hours

In addition, students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

Financial Management Emphasis—BS in Business Administration

The financial management emphasis provides students with the skills needed to succeed in careers in financial management. The business community has affirmed that students need skills in both the accounting and finance areas. The financial management specialty incorporates knowledge of corporate financial management, financial institutions and markets, investments, financial accounting and managerial accounting, accounting information systems and information technology. Career opportunities include corporate financial management, finance/accounting positions with financial institutions and accounting positions that are not CPA-track. The specialization provides a solid finance and accounting background for other business positions as well.

Required Courses

FNCE 3500 - Management of Business Capital **gtPATHWAYS:**
FNCE 3600 - Financial Markets and Institutions **gtPATHWAYS:**
FNCE 3700 - Investment and Portfolio Management **gtPATHWAYS:**
FNCE 3809 - Introduction to Risk Management **gtPATHWAYS:**
FNCE 4500 - Corporate Financial Decisions **gtPATHWAYS:**
ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**
ACCT 3320 - Intermediate Cost Accounting **gtPATHWAYS:**

Total: 24 Hours

In addition, financial management students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

* Students should note that all finance and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as

possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

Fine Arts BA - Studio Art

All students pursuing the BA in studio fine arts must complete 18 semester hours of visual arts foundation courses as well as 18 semester hours in additional lower-division studio courses. They must also complete 33 semester hours in upper-division studio courses and 6 semester hours of upper-division art history. Interested students should consult a College of Arts & Media advisor.

General Requirements

All major courses in the major must be completed with a C (2.0) or better.
All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by visual arts faculty.
21 semester hours of visual arts credits (at any level) must be taken at CU Denver.
18 semester hours of total visual arts courses must be upper-division.

Students must also follow the College of Arts and Media's general degree requirements.

Required Visual Arts Foundation Courses

FINE 1100 - Drawing I **gtPATHWAYS:**
FINE 1400 - Two Dimensional Design **gtPATHWAYS:**
FINE 1500 - Three-Dimensional Design **gtPATHWAYS:**
FINE 2015 - Intermedia Foundations **gtPATHWAYS:**
FINE 2600 - Art History Survey I **gtPATHWAYS:**
FINE 2610 - Art History Survey II **gtPATHWAYS:**

Total: 18 Hours

Lower-Division Studio Courses

FINE 1150 - Introduction to Photography **gtPATHWAYS:**
FINE 1600 - Painting Methods and Materials **gtPATHWAYS:**
FINE 2100 - The Media of Drawing **gtPATHWAYS:**
FINE 2155 - Introduction to Digital Photography **gtPATHWAYS:**
FINE 2500 - Bronze Casting and Metal Sculpture **gtPATHWAYS:**
FINE 2510 - Wood and Metal Sculpture **gtPATHWAYS:**

Total: 18 Hours

Upper-Division Studio Courses

FINE 3020 - Life Drawing **gtPATHWAYS:**
FINE 3100 - Drawing II: Spatial Thinking and Visualization **gtPATHWAYS:**
FINE 3161 - The Silver Fine Print **gtPATHWAYS:**
FINE 3162 - The Digital Fine Print **gtPATHWAYS:**
FINE 3172 - Digital Bookmaking **gtPATHWAYS:**
FINE 3240 - Abstract Painting **gtPATHWAYS:**
FINE 3300 - Painting and the Printed Image **gtPATHWAYS:**
FINE 3500 - Modeling and Casting the Figure **gtPATHWAYS:**
FINE 3510 - Installation Art **gtPATHWAYS:**
FINE 3015 - Interdisciplinary Practices **gtPATHWAYS:**
FINE 3400 - Introduction to Web Design and Digital Imaging **gtPATHWAYS:**

Total: 33 Hours

Upper-Division Art History Courses

FINE 3600 - Art History Survey III: Non-Western Art **gtPATHWAYS:**
FINE 4990 - Contemporary Art - 1945 To the Present **gtPATHWAYS:**

Total: 6 Hours

Fine Arts BA — Art History

All students pursuing a BA in fine arts with an emphasis in art history must complete 12 semester hours of visual arts foundation courses, 18 semester hours of required art history emphasis courses and 15 semester hours of upper-division art history electives.

General Requirements

All major courses within the major must be completed with a C (2.0) or better.
All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by visual arts faculty.
21 semester hours of all visual arts credits (at any level) must be taken at CU Denver.

18 semester hours of total visual arts courses must be upper-division.
Students must also follow the College of Arts & Media's general degree requirements.

Visual Arts Foundation Courses

FINE 1100 - Drawing I **gtPATHWAYS:**
FINE 1150 - Introduction to Photography **gtPATHWAYS:**
FINE 1400 - Two Dimensional Design **gtPATHWAYS:**

FINE 2015 - Intermedia Foundations **gtPATHWAYS:**
or
FINE 2155 - Introduction to Digital Photography **gtPATHWAYS:**

Total: 12 Hours

Art History Required Emphasis Courses

FINE 2600 - Art History Survey I **gtPATHWAYS:**
FINE 2610 - Art History Survey II **gtPATHWAYS:**
FINE 3600 - Art History Survey III: Non-Western Art **gtPATHWAYS:**
FINE 4790 - Methods in Art History **gtPATHWAYS:**
FINE 4951 - Bachelor of Art Thesis **gtPATHWAYS:**
Non-western Cultural Experience **(select one of the six options listed below*)**

Total: 18 Hours

***Nonwestern Cultural Experience Options:**

Study abroad course that focuses on the art history or the language of host culture (consult art history faculty).
Any upper-division art history course in African, Latin American, Asian or African-American art. This cannot be used to fulfill any other degree requirement.
Third-semester study of a foreign language (consult the Department of Modern Languages if placement is needed).
Visual arts internship for credit in the College of Arts and Media. Project must focus on cultures outside of mainstream United States; e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.
FINE 4840 - Independent Study: FINE. Project/research must focus on cultures outside of mainstream United States; e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.

Cultural course: CHIN 1000 - China and the Chinese or FREN 1000 - Introduction to Cultures of the French- Speaking World or GRMN 1000 - Germany and the Germans or SPAN 1000 - Introduction to Cultures of the Spanish Speaking World

Upper-Division Art History Electives

Students must complete five upper-division (3000/4000 level) art history courses. (Contact an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for a complete list.)

Total: 15 Hours

Fine Arts BFA — 3D Graphics and Animation, Digital Design, Drawing, Painting, Photography, Scientific Media Design, Sculpture, Transmedia

All students pursuing the BFA in fine arts must complete 28 semester hours of visual arts courses and also select an emphasis area, consisting of 54 additional semester hours (62 for scientific media design). Students interested in pursuing a double emphasis (e.g., emphases in drawing and painting) are encouraged to consult a College of Arts & Media advisor to discuss required courses.

General Requirements

All major courses in the major must be completed with a *C* (2.0) or better.
All upper-division visual arts courses must be taken at CU Denver unless otherwise approved by visual arts faculty.
27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
25 semester hours of total visual arts courses must be upper-division.

Students must also follow the College of Arts & Media's general degree requirements.

Required Visual Arts Courses

To be completed by all BFA-seeking students:

FINE 1100 - Drawing I **gtPATHWAYS:**
FINE 1400 - Two Dimensional Design **gtPATHWAYS:**
FINE 1500 - Three-Dimensional Design **gtPATHWAYS:**
FINE 2015 - Intermedia Foundations **gtPATHWAYS:**
FINE 2600 - Art History Survey I **gtPATHWAYS:**
FINE 2610 - Art History Survey II **gtPATHWAYS:**
FINE 3015 - Interdisciplinary Practices **gtPATHWAYS:**
FINE 3600 - Art History Survey III: Non-Western Art **gtPATHWAYS:**
FINE 4990 - Contemporary Art - 1945 To the Present **gtPATHWAYS:**
FINE 4950 - BFA Thesis **gtPATHWAYS:** (pass/fail)

Total: 28 Hours

3-D Graphics and Animation Emphasis Courses

The digital animation center (DAC) program at the University of Colorado Denver is a competitive and rigorous four-year curriculum focused on preparing students to work in a wide variety of fields that use animated digital computer graphics (CG), including entertainment, film and television, gaming, medicine, and science. Tuition rates in the 13 DAC classes are set higher than most undergraduate CU Denver courses due to the advanced technology used in the program, computing and software requirements of the program and the smaller class sizes (14-16:1). At the time of this publication, tuition for FINE 1810 and FINE 1820 is $1533 per course. Tuition for the other eleven courses is $4050 per course. Students should refer to the course information listed on the University of Colorado Denver website for any changes in the current tuition rate for all DAC courses.

In order to maintain the highest standards of excellence for the CU Denver DAC, acceptance into the DAC cohort comes at the end of the first year and is competitive by portfolio review. To be considered, students are required to take the first two courses in the DAC curriculum, FINE 1810 and FINE 1820. These two courses are open to all College of Arts & Media and CU Denver students with permission of the DAC. Students wishing to enroll in the DAC's entry level courses must contact DAC faculty member Howard Cook at howard.cook@ucdenver.edu or the College of Arts & Media Advising office at CAMadvising@ucdenver.edu before registering.

Selection for entrance into the BFA with an emphasis in digital animation occurs at the end of the first year of the program and is a competitive process (by faculty review) that includes:

Submission by the candidate of a "Portfolio Demo Reel". The reel must include original works from either FINE 1810 or FINE 1820 (preferably both), as well as representative works created in other Visual Arts courses completed during the

first year of the program. The Portfolio Demo Reel must be turned in as a .mov (Quicktime, H.264, 720x404 minimum frame size, 16:9 aspect ratio). Still work should be a component of the reel and should be on screen for at least 3 seconds but no more than 10 seconds. Name and contact information should appear at the beginning and end of the reel. The reel should not be greater in length than 3.5 minutes. Sound, if it is included, should use a 28k, 16bit compression.

- A "breakdown sheet": the run time at which the work occurs and which describes what work is included on the submission reel, and, if collaborative in nature, what aspect of the work shown was created by the applicant.
- A one page double-spaced written statement regarding the applicant's aspirations as a member of the DAC cohort and the CG community as a whole.
- A 2.8 GPA in courses taken in the DAC.

The student's submission package must be turned into DAC Area Head Howard Cook or placed on the DACps2> Cook Drop Box> 2010PortfolioSubmissions no later than the first Friday after the spring semester has ended. Notification is by e-mail and letter and occurs on or before the first Monday of June of the application year. Upon acceptance, students will be able to enroll in advanced DAC classes.

Students should show only their best work and show the very best work first. Students should be selective since reels may only be 3.5 minutes long. Music is not recommended for professional reels, but if music is used, students should choose wisely.

Please see http://www.cu3d.org or http://cam.ucdenver.edu/va/3danimation.htm for the program and portfolio information, or contact the Digital Animation Center area head Howard Cook at howard.cook@ucdenver.edu.

DAC Entry Courses (open enrollment):

FINE 1810 - Digital Animation Foundations: Producing Animation **gtPATHWAYS:**
FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D **gtPATHWAYS:**

DAC Core Cadre Course Work (acceptance into the DAC Core Cadre is competitive through portfolio review):

FINE 2810 - Digital Animation Techniques: Surface Modeling **gtPATHWAYS:**
FINE 2820 - Digital Animation Techniques: Surface Properties **gtPATHWAYS:**
FINE 2830 - Digital Animation Techniques: Lighting **gtPATHWAYS:**
FINE 2850 - Digital Animation Techniques: 3D Character Creation **gtPATHWAYS:**
FINE 3810 - Digital Animation Studio: Set/Environment Design **gtPATHWAYS:**
FINE 3820 - Digital Animation Techniques: Rigging and Animation **gtPATHWAYS:**

FINE 3830 - Digital Animation Technique: Character Animation **gtPATHWAYS:**
FINE 3845 - Digital Animation Discovery and Preproduction Seminar **gtPATHWAYS:**
FINE 3850 - Digital Animation Techniques: Dynamic Simulation **gtPATHWAYS:**
FINE 4810 - Digital Animation Studio: Animation Production I **gtPATHWAYS:**
FINE 4820 - Digital Animation Studio: Animation Production II **gtPATHWAYS:**

The following courses are required for 3-D animation majors, but are offered at the standard CU Denver tuition rates:

ENGL 2250 - Introduction to Film **gtPATHWAYS:**
FINE 4632 - Media History and Aesthetics **gtPATHWAYS:**
____ - Visual Arts Electives (9 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Digital Design Emphasis Courses

The digital design emphasis integrates aesthetic, creative and critical thought with expertise in advanced electronic media. Configured as an interdisciplinary arts and design laboratory, digital design offers a hands-on education combining new art technologies and design concepts in a concentrated theoretical framework that promotes an understanding of the cultural impact and uses of digital technologies. Through this interdisciplinary approach combining arts and communication, digital design strives to produce artists and designers who will use technology in innovative ways in both commercial and artistic spheres.

Students who are applying for entrance into the digital design emphasis are required to submit a written statement, a designed portfolio and unofficial transcript(s) from CU Denver and all previous post-secondary educational institutions. The digital design course sequence starts in fall semester. Students who meet the following requirements can apply. Upon acceptance students will be able to register for upper-division digital design courses.

ELIGIBILITY

University of Colorado Denver Students

The student has completed or is in the process of completing the following Foundation Studio classes: FINE 1100 - Drawing I, FINE 1400 - Two Dimensional Design, FINE 2015 - Intermedia Foundations, FINE 2405 -

Introduction to Digital Design and FINE 2415 - Typography Studio (FINE 2405 and FINE 2415 offered only in fall semester).

A cumulative fine arts/art history GPA of 2.70.

Transfer Students

The student has completed and is transferring a minimum of 24 credit hours from a previous institution.

Student has completed or is in the process of completing the equivalents of the following foundation studio classes: FINE 1100 - Drawing I, FINE 1400 - Two Dimensional Design, FINE 2405 - Introduction to Digital Design and FINE 2415 - Typography Studio.

A cumulative fine arts/art history GPA of 2.70.

APPLICATION PORTFOLIO REQUIREMENTS

Properly prepared application packets must be uploaded to http://designucd.com by 5 p.m. on November 1 or on the following business day if the deadline falls on a weekend or holiday. Students should register and create a page one week prior to uploading so that they understand how to format and prepare work.

Applications are only accepted online and must be formatted to the specifications listed on http://designucd.com/portfolio. The portfolio samples should consist of images (jpgs) and embedded video. Written work may be in .PDF format or integrated into the submission. **It is VERY important for students to visit the submission page early and begin uploads one week before the due date.** Late submissions due to technical difficulties on the part of the applicant will NOT be accepted.

The Evaluation Process

A committee of digital design faculty members reviews the application packet. The decision for admission into the digital design program is based on the portfolio, written statement and grades/GPA. For acceptance, the committee looks for a high level of skill and sophistication in studio, written and presentation skills.

If not admitted into the digital design program, a student has the choice of attempting the review process again the following year or selecting another program. Students not admitted into the digital design program are encouraged to schedule a meeting with a digital design faculty member to learn of ways to improve portfolios for future admissions.

Portfolios are evaluated based on organization, craft, quality, creativity of ideas, compositional skills, concepts and consistency. Additional evaluation is based on the applicant's statement and overall fine arts performance to date.

The application is evaluated on the following criteria:

Presentation - Is the portfolio well crafted and well organized in content and presentation? Are all of the required components included?

- **Visual Literacy** - Does the portfolio reflect sensitivity to design concepts and visual logic, and does it demonstrate fundamental compositional understanding? Does the work communicate effectively?
- **Technical Skill** - Does the portfolio reflect a strong knowledge of tools and materials and a strong aptitude for digital design skills?
- **Conceptual Skills** - Do the portfolio and written statement demonstrate analytical thinking as it applies to visual art and design? Is there a developing conceptual exploration of the digital medium?
- **Written Statement** - Does the statement reflect an understanding of digital design and explain your goals as a student in the digital design program? Are potential strengths and weaknesses addressed clearly?
- **Academic Performance** - Do your grades reflect a commitment to learning and growth?

Portfolio

- The portfolio must include 10-12 electronic examples of your creative work. At least four portfolio works must be taken from Intro to Digital Design or Typography. Additional works may comprise design, drawing, sculpture, photography, installation, painting, video, etc.
- All artwork must include a corresponding brief explanation of the concept and creative process behind each piece.

Written

The written statement should address all of the following in a clear, detailed and accurate essay no more than two pages in length. The content of the answers has significant impact on the committee's decision whether to offer admission to the digital design program.

- The applicant describes why he or she would like to be a designer in the digital design program and what goals and expectations the applicant has regarding design as a career. Include any special considerations that would be useful for the committee in making a decision, such as a high GPA, art-related extracurricular activities or relevent professional experience.
- The applicant reflects on the artists and designers who have influenced his or her artistic interests. Use at least two examples of their work, discussing both form and content.
- The applicant identifies their creative strengths and areas that need further development. How will the applicant best utilize strengths? How does the applicant plan to resolve any deficiencies in work and performance?

Course Transcripts

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions.

Questions

Please contact CAMadvising@ucdenver.edu for program and portfolio information, or contact the digital design area head, Brian DeLevie, at brian.delevie@ucdenver.edu.

Digital Design Electives

FINE 3438 - Text, Image and Electronic Art

FINE 4434 - Virtual Landscapes

Emphasis Course Requirements:

FINE 2405 - Introduction to Digital Design **gtPATHWAYS:**
FINE 2415 - Typography Studio **gtPATHWAYS:**
FINE 3414 - Motion Design I **gtPATHWAYS:**
FINE 3415 - Design Studio I **gtPATHWAYS:**
FINE 3424 - Interactive Media **gtPATHWAYS:**
FINE 3434 - 3D Motion Design **gtPATHWAYS:**
FINE 3444 - Interactive Media II **gtPATHWAYS:**
FINE 3454 - Motion Design II **gtPATHWAYS:**
FINE 3464 - Design Studio II **gtPATHWAYS:**
FINE 3474 - Narrative and Experience **gtPATHWAYS:**
FINE 4400 - Design Studio III **gtPATHWAYS:**
FINE 4480 - The Practice of Design **gtPATHWAYS:**
FINE 4495 - Design Studio IV **gtPATHWAYS:** (It is highly suggested that ALL art history courses be completed prior to enrolling in FINE 4495)
FINE 4632 - Media History and Aesthetics **gtPATHWAYS:**
____ - Studio Arts/Visual Arts Electives (12 semester hours) *Consult advisor about course selection*

Total: 54 Hours

Drawing Emphasis Courses

FINE 1600 - Painting Methods and Materials **gtPATHWAYS:**
FINE 2100 - The Media of Drawing **gtPATHWAYS:**
FINE 3020 - Life Drawing **gtPATHWAYS:**
FINE 3100 - Drawing II: Spatial Thinking and Visualization **gtPATHWAYS:**
FINE 3220 - Intermediate Drawing **gtPATHWAYS:**
FINE 3230 - Abstract Drawing **gtPATHWAYS:**
FINE 3310 - Drawing and the Printed Image **gtPATHWAYS:**
FINE 4000 - Advanced Drawing I **gtPATHWAYS:**
FINE 4010 - Advanced Drawing II **gtPATHWAYS:**
FINE 4020 - Anatomy for the Artist **gtPATHWAYS:**
FINE 4100 - Painting & Drawing Theory & Practice **gtPATHWAYS:**
FINE 4800 - Senior Art Seminar **gtPATHWAYS:**
____ - Upper-division Art History Elective (3 semester hours)

____ - Studio Arts Electives (9 semester hours)
____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Painting Emphasis Courses

FINE 1600 - Painting Methods and Materials **gtPATHWAYS:**
FINE 2200 - Painting I **gtPATHWAYS:**
FINE 3020 - Life Drawing **gtPATHWAYS:**
FINE 3050 - Painting II: Figure Painting **gtPATHWAYS:**
FINE 3200 - Intermediate Painting I **gtPATHWAYS:**
FINE 3210 - Intermediate Painting II **gtPATHWAYS:**
FINE 3240 - Abstract Painting **gtPATHWAYS:**
FINE 3300 - Painting and the Printed Image **gtPATHWAYS:**
FINE 4100 - Painting & Drawing Theory & Practice **gtPATHWAYS:**
FINE 4200 - Advanced Painting I **gtPATHWAYS:**
FINE 4210 - Advanced Painting II **gtPATHWAYS:**
FINE 4800 - Senior Art Seminar **gtPATHWAYS:**
____ - Upper-division Art History Elective (3 semester hours)
____ - Studio Arts Electives (9 semester hours)
____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Photography Emphasis Courses

Students must complete the first six courses listed in the “Required Visual Arts Courses” section and

FINE 1150 and FINE 2155 before registering for upper-division photography courses.

FINE 3160, FINE 3161 and FINE 3162 may be completed in any order after having completed FINE 2155.

FINE 3161 must be completed before FINE 3171.

FINE 3162 must be completed before FINE 3172.

FINE 3630 and all 3000-level studio courses must be completed prior to beginning the advanced photography sequence (FINE 4195 and FINE 4196).

FINE 1150 - Introduction to Photography **gtPATHWAYS:**
FINE 2155 - Introduction to Digital Photography **gtPATHWAYS:**
FINE 3160 - Color and Studio Lighting **gtPATHWAYS:**
FINE 3161 - The Silver Fine Print **gtPATHWAYS:**
Note: must be completed before 3171
FINE 3162 - The Digital Fine Print **gtPATHWAYS:**
Note: must be completed before 3172
FINE 3171 - Concepts and Processes in Photography **gtPATHWAYS:**
FINE 3172 - Digital Bookmaking **gtPATHWAYS:**
FINE 3630 - History of Photography **gtPATHWAYS:**
FINE 3631 - Photography: Theory and Criticism **gtPATHWAYS:**
FINE 3635 - Photography Now **gtPATHWAYS:**
FINE 4195 - Advanced Photography I **gtPATHWAYS:**
FINE 4196 - Advanced Photography II **gtPATHWAYS:**
FINE 4800 - Senior Art Seminar **gtPATHWAYS:**
____ - Studio Arts Electives (9 semester hours)
____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Scientific Media Design Emphasis Courses

Admission into the BFA scientific media design program is by portfolio review. This review process occurs November 1 (or on the following business day if the deadline falls on a weekend or a holiday) during a student's sophomore year after the student has met the following eligibility criteria.

University of Colorado Denver Students

The student has completed, or is in the process of completing the following foundation studio classes:

FINE 1100 - Drawing I
FINE 1400 - Two Dimensional Design
FINE 2015 - Intermedia Foundations
FINE 2428 - Scientific Media Design I
FINE 2405 - Introduction to Digital Design
Cumulative fine arts/art history GPA of 2.7

BIOL 2051 - General Biology I and BIOL 2071 - General Biology Laboratory I
BIOL 2061 - General Biology II and BIOL 2081 - General Biology Laboratory II

Grade of C (2.0) or better required

Transfer Students

The student has completed and is transferring a minimum of 24 semester hours from a previous institution. The student has also completed or is in the process of completing the equivalents of the following foundation studio classes:

FINE 1100 - Drawing I
FINE 1400 - Two Dimensional Design
FINE 2405 - Introduction to Digital Design
Cumulative fine arts/art history GPA of 2.7

BIOL 2051 - General Biology I and BIOL 2071 - General Biology Laboratory I
BIOL 2061 - General Biology II and BIOL 2081 - General Biology Laboratory II
Grade of C (2.0) or better required

Students who are applying for entrance into the scientific media design program are required to submit a portfolio that consists of (1) a written statement, (2) a digital portfolio and (3) unofficial transcript(s) from all previous post-secondary education institutions. Scientific media design courses start in the fall semester. Upon acceptance into the scientific media design program, students may register for upper-division classes in the scientific media design curriculum.

APPLICATION PORTFOLIO REQUIREMENTS

Properly prepared application packets must be uploaded to http://designucd.com by 5 p.m. on November 1 or on the following business day if the deadline falls on a weekend or holiday. Students should register and create a page one week prior to uploading so that they understand how to format and prepare work.

Applications are only accepted online and must be formatted to the specifications listed on http://designucd.com/portfolio. The portfolio samples should consist of images (jpgs) and embedded video. Written work may be in .PDF format or integrated into the submission. It is VERY important for students to visit the submission page early and begin uploads one week before the due date. Late submissions due to technical difficulties on the part of the applicant will NOT be accepted.

The Evaluation Process

A committee of digital design and scientific media design faculty members reviews the application packet. The decision for admission into the scientific media design program is based on the portfolio, written statement and grades/GPA. For acceptance, the committee looks for a high level of skill and sophistication in studio, written and presentation skills.

If not admitted into the scientific media design program, a student has the choice of attempting the review process again the following year or selecting another program. Students not admitted into the scientific media design program are encouraged to schedule a meeting with a scientific media design faculty member to learn of ways to improve portfolios for future admissions.

Portfolios are evaluated based on organization, craft, quality, creativity of ideas, compositional skills, concepts and consistency. Additional evaluation is based on the applicant's statement and overall fine arts performance to date.

The application is evaluated on the following criteria:

Presentation - Is the portfolio well crafted and well organized in content and presentation? Are all of the required components included?

Visual Literacy - Does the portfolio reflect sensitivity to design concepts and visual logic, and does it demonstrate fundamental compositional understanding? Does the work communicate effectively?

Technical Skill - Does the portfolio reflect a strong knowledge of tools and materials and a strong aptitude for digital design skills?

Conceptual Skills - Do the portfolio and written statement demonstrate analytical thinking as it applies to visual art and design? Is there a developing conceptual exploration of the digital medium?

Written Statement - Does the statement reflect an understanding of scientific media design and explain your goals as a student in the scientific media design program? Are potential strengths and weaknesses addressed clearly?

Academic Performance - Do your grades reflect a commitment to learning and growth?

Portfolio

The portfolio must include 10-12 electronic examples of your creative work. At least four portfolio works must be taken from Scientific Media Design I or Typography. Additional works may comprise design, drawing, sculpture, photography, installation, painting, video, etc.

All artwork must include a corresponding brief explanation of the concept and creative process behind each piece.

Written

The written statement should address all of the following in a clear, detailed and accurate essay no more than two pages in length. The content of the answers has significant impact on the committee's decision whether to offer admission to the scientific media design program.

The applicant describes why he or she would like to be a designer in the scientific design program and what goals and expectations the applicant has regarding design as a career. Include any special considerations that would be useful for the committee in making a decision, such as a high GPA, art-related extracurricular activities or relevent professional experience.

The applicant reflects on the artists and designers who have influenced his or her artistic interests. Use at least two examples of their work, discussing both form and content.

The applicant identifies their creative strengths and areas that need further development. How will the applicant best utilize strengths? How does the applicant plan to resolve any deficiencies in work and performance?

Course Transcripts

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions.

Questions

Please contact CAMadvising@ucdenver.edu for program and portfolio information, or contact the scientific media design area head, Travis Vermilye, at travis.vermilye@ucdenver.edu.

Emphasis Course Requirements in Sciences:

BIOL 2051 - General Biology I (also applies toward Core Biological/Physical Sciences requirement)
BIOL 2071 - General Biology Laboratory I (also applies toward Core Biological/Physical Sciences requirement)
BIOL 2061 - General Biology II (also applies toward Core Biological/Physical Sciences requirement)
BIOL 2081 - General Biology Laboratory II (also applies toward Core Biological/Physical Sciences requirement)
CHEM 2031 - General Chemistry I
CHEM 2038 - General Chemistry Laboratory I
CHEM 2061 - General Chemistry II
CHEM 2068 - General Chemistry Laboratory II

Emphasis Course Requirements in Fine Arts:

FINE 2405 - Introduction to Digital Design
FINE 2428 - Scientific Media Design I
FINE 3020 - Life Drawing
FINE 3414 - Motion Design I
FINE 3415 - Design Studio I
FINE 3424 - Interactive Media
FINE 3434 - 3D Motion Design
FINE 3444 - Interactive Media II
FINE 3448 - Scientific Media Design II
FINE 4020 - Anatomy for the Artist
FINE 3454 - Motion Design II
FINE 4448 - Scientific Media Design III
FINE 4495 - Design Studio IV

_____ - Studio Arts/Visual Arts Electives (6 semester hours) *consult advisor about course selection*

Total: 62 Hours

Sculpture Emphasis Courses

FINE 2500 - Bronze Casting and Metal Sculpture **gtPATHWAYS:**
FINE 2510 - Wood and Metal Sculpture **gtPATHWAYS:**
FINE 3500 - Modeling and Casting the Figure **gtPATHWAYS:**
FINE 3510 - Installation Art **gtPATHWAYS:**
FINE 3515 - Public Art **gtPATHWAYS:**
FINE 3525 - Environmental Sculpture **gtPATHWAYS:**
FINE 3530 - Iron Casting **gtPATHWAYS:**
FINE 3535 - Sculpture Rendering **gtPATHWAYS:**
FINE 4500 - Kinetic Sculpture **gtPATHWAYS:**
FINE 4505 - Performance Art **gtPATHWAYS:**
FINE 4510 - Advanced Sculpture **gtPATHWAYS:**
FINE 4800 - Senior Art Seminar **gtPATHWAYS:**
____ - Upper-division Art History Elective (3 semester hours)
____ - Studio Arts Electives (9 semester hours)
____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Transmedia Emphasis Courses

FINE 2405 - Introduction to Digital Design **gtPATHWAYS:**
FINE 2510 - Wood and Metal Sculpture **gtPATHWAYS:**
FINE 3400 - Introduction to Web Design and Digital Imaging **gtPATHWAYS:**
FINE 3405 - Digital Video for Non-Majors **gtPATHWAYS:**
FINE 3434 - 3D Motion Design **gtPATHWAYS:**
FINE 3438 - Text, Image and Electronic Art **gtPATHWAYS:**
FINE 3474 - Narrative and Experience **gtPATHWAYS:**
FINE 3510 - Installation Art **gtPATHWAYS:**
FINE 3535 - Sculpture Rendering **gtPATHWAYS:**
FINE 4434 - Virtual Landscapes **gtPATHWAYS:**
FINE 4500 - Kinetic Sculpture **gtPATHWAYS:**
FINE 4510 - Advanced Sculpture **gtPATHWAYS:**
FINE 4800 - Senior Art Seminar **gtPATHWAYS:**
_____ - Upper-division Art History Elective (3 semester hours)
_____ - Studio Arts Electives (9 semester hours)

_____ - Visual Arts Electives (3 semester hours)

Total: 54 Hours

French BA

The French program offers courses in advanced language, linguistics, literature, civilization, culture and business, all taught exclusively in French. A minor is also offered. All French majors are strongly encouraged to participate in a study abroad program. Please see your French department advisor for information about opportunities to include study abroad as part of your major.

Admission and Grade Requirements

To be admitted to major status in French, students must have an overall GPA of *C*+ (2.3). The minimum grade acceptable in any French course applied to a French major is *C* (2.0). The grade point average in all courses applied to a French major at CU Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a French major. Upon declaring a major in French, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that students have their transcripts reviewed by their advisor before enrolling in their final 30 credit hours at CU Denver. Failure to do so may result in delay of graduation. Students presenting four years of high school French (Level IV) for admission to CU Denver must see a French advisor before enrolling in courses for the major. Students with advanced placement credits from high school must see a French advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.

Honors in French

Qualified majors will automatically graduate with regular honors in French. Faculty occasionally nominate students for extra course work leading to higher levels of honors in French. For information, consult the French advisor in the Department of Modern Languages.

Outcomes Assessment

During their final semester in the language, French major students participate in an oral proficiency interview and take a written outcomes assessment exam to measure their level of proficiency and mastery of key concepts.

Residency Requirement

All students majoring in French must complete 30 semester hours of upper-division French courses (courses numbered 3000 and above). A minimum of 18 of those semester hours must be taken from the faculty in French at CU Denver. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses. Students studying French for the professions must also take courses in other areas. Requirements for both tracks are outlined below.

Course Requirements for the Major

Track A: Language, Literature and Culture

Students wishing to improve their linguistic skills as well as their knowledge of Francophone literature and culture may choose this track.

Required Courses

FREN 3010 - French Phonetics and Pronunciation **gtPATHWAYS:**
FREN 3020 - Oral Practice **gtPATHWAYS:**
FREN 3050 - Advanced Grammar and Composition **gtPATHWAYS:**
FREN 3060 - Advanced French Language Skills **gtPATHWAYS:**

Total: 12 Hours

Electives

Three courses at the 4000 level: **9 semester hours**

Three electives at 3000 or 4000 level: **9 semester hours**

Note: students must take at least one literature course and at least one culture or civilization course.

Total: 18 Hours

Track A Major Total: 30 Hours

Track B: International Language and Culture for the Professions

This option in the French major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and

social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. Students interested in this track should contact the French advisor in the Department of Modern Languages as early as possible in their academic career, but not later than the second semester of the sophomore year.

Prerequisites

(these courses do not count toward the major total of 48 hours)

ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
MATH 1070 - Algebra for Social Sciences and Business **gtPATHWAYS:** GT-MA1
-OR- MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1
(or higher level math course)

Required French Courses

FREN 1000 - Introduction to Cultures of the French- Speaking World **gtPATHWAYS:** GT-AH1
FREN 3020 - Oral Practice **gtPATHWAYS:**
FREN 3050 - Advanced Grammar and Composition **gtPATHWAYS:**
FREN 3060 - Advanced French Language Skills **gtPATHWAYS:**
FREN 3112 - Survey of French Literature I **gtPATHWAYS:**
-OR- FREN 3122 - Survey of French Literature II **gtPATHWAYS:**
FREN 3130 - Current Topics of the French-Speaking World **gtPATHWAYS:**
-OR- FREN 3140 - Contemporary Francophone Cultures **gtPATHWAYS:**
FREN 4050 - Advanced French for Business **gtPATHWAYS:**
FREN 4082 - Introduction to Translation **gtPATHWAYS:**
FREN 4210 - French Civilization - Twentieth and Twenty-First Centuries **gtPATHWAYS:**

Total: 27 Hours

French Electives

Choose two (at least one at 4000 level) from:

FREN 3120 - French Cultural Identities: Myths and Realities **gtPATHWAYS:**
FREN 3130 - Current Topics of the French-Speaking World **gtPATHWAYS:**
FREN 3140 - Contemporary Francophone Cultures **gtPATHWAYS:**
FREN 4200 - French Civilization Through the Nineteenth Century **gtPATHWAYS:**
Any 3000- or 4000-level literature course (not already taken from required list)

Total: 6 Hours

Business Courses

(please be aware of prerequisites in business course descriptions)

ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
MGMT 1000 - Introduction to Business **gtPATHWAYS:**
MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**
MKTG 3000 - Principles of Marketing **gtPATHWAYS:**
One 3000-level course in international business

Total: 15 Hours

Recommended

Official proficiency exam (Paris Chamber of Commerce)

Track B Major Total: 48 Hours

Secondary Foreign Language Teacher Licensure Program

With this option, students complete a major in French along with additional course work required for certification to teach French in the public schools. This program should be chosen early in the students' careers. See the description of Undergraduate Teacher Licensure on the School of Education & Human Development (SEHD) Urban Community Teacher Education program page for more information. You may also contact the CLAS Advising Office (phone 303-556-2555 or visit North Classroom, 4002) and the French advisor for more information.

Geography BA

Requirements for Major in Geography

Students must declare a major by the time they have completed 60 semester hours of course work. The geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty. Five degree options are available for the major in geography: general, environmental science, environmental

studies, urban studies and planning and earth science. Total semester-hour requirements vary among the five options, but all options require a minimum of 24 hours of upper-division credit. In addition, for each option, at least 15 semester hours must be taken at CU Denver.

Option 1—General Geography
Option 2—Environmental Science
Option 3—Environmental Studies
Option 4—Urban Studies and Planning
Option 5—Earth Science

Option 1—General Geography

Option Advisors: Frederick B. Chambers and Brian Page

OPTION 1 REQUIREMENTS

Lower division

GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

GEOG 3232 - Weather and Climate **gtPATHWAYS:**
GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
-OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 18 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses, **including at least one course from each of the following subfields**:

Physical Geography

GEOG 3240 - Colorado Climates **gtPATHWAYS:**
GEOG 3302 - Water Resources **gtPATHWAYS:**
GEOG 4010 - Landscape Geochemistry **gtPATHWAYS:**
GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
GEOG 4240 - Principles of Geomorphology **gtPATHWAYS:**
GEOG 4270 - Glacial Geomorphology **gtPATHWAYS:**

Human Geography

ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2
GEOG 2202 - Natural Hazards **gtPATHWAYS:** GT-SS2
GEOG 3300 - Population and Resources in the World Environment **gtPATHWAYS:**
GEOG 3430 - Geography of Tourism **gtPATHWAYS:**
GEOG 3501 - Geography of Health **gtPATHWAYS:**
GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
-OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
-OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
GEOG 4350 - Environment and Society in the American Past **gtPATHWAYS:**
-OR- GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
GEOG 4420 - The Politics of Nature **gtPATHWAYS:**
-OR- GEOG 5420 - The Politics of Nature **gtPATHWAYS:**
GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
-OR- GEOG 5640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
GEOG 4680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**
-OR- GEOG 5680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**
GEOG 4710 - Disasters, Climate Change, and Health **gtPATHWAYS:**

Regional Geography

GEOG 1102 - World Regional Geography **gtPATHWAYS:** GT-SS2
GEOG 3100 - Geography of Colorado **gtPATHWAYS:**
GEOG 3120 - Geography of Europe **gtPATHWAYS:**
GEOG 3130 - Central America and the Caribbean **gtPATHWAYS:**
GEOG 3140 - Geography of South America **gtPATHWAYS:**
GEOG 3150 - Middle East **gtPATHWAYS:**
GEOG 3160 - Geography of China **gtPATHWAYS:**

Techniques for Geographical Analysis

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
GEOG 4070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**

GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
-OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
-OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
-OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
GEOG 4220 - Environmental Impact Assessment **gtPATHWAYS:**
-OR- GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
-OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
-OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

Total: 18 Hours

OPTION TOTAL: 36 HOURS

Option 2—Environmental Science

Option Advisor: Frederick B. Chambers

Option 2 allows geography majors to concentrate on course work in environmental science.

ANCILLARY COURSES

Option 2 students must take one general biology and one general chemistry course (both with labs), OR a sequence of either (BIOL 2051 and 2061 with labs or CHEM 2031 and 2061 with labs). If applying to the MS in Environmental Sciences program, students must have taken both sequences. Course choices with descriptions are below:

BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
and BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
(4 semester hours total), followed by:
BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
and BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
(4 semester hours total)

CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
and CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1

(4 semester hours total), followed by:
CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
and CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
(5 semester hours total)

OPTION 2 REQUIREMENTS

Lower division

ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1
GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
-OR- ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

GEOG 3232 - Weather and Climate **gtPATHWAYS:**
GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
-OR- GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
-OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
-OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 22 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Environmental Science

GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
-OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**

Plus one class from the following list:

ENVS 3082 - Energy and the Environment **gtPATHWAYS:**
ENVS 5030 - Environmental Geology **gtPATHWAYS:**
GEOG 3240 - Colorado Climates **gtPATHWAYS:**
GEOG 4010 - Landscape Geochemistry **gtPATHWAYS:**
GEOG 4240 - Principles of Geomorphology **gtPATHWAYS:**

GEOG 4270 - Glacial Geomorphology **gtPATHWAYS:**

Upper-Division Environmental-Oriented Biology or Chemistry (3 Hours)

One upper-division biology or chemistry course related to the student's environmental science interest must be taken as part of the environmental science option.

Techniques for Environmental Analysis

Quantitative methods (choose one course from the following):

GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
-OR- GEOL 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
MATH 2830 - Introductory Statistics **gtPATHWAYS:** GT-MA1
PSYC 2090 - Statistics and Research Methods **gtPATHWAYS:**
SOCY 3121 - Statistics **gtPATHWAYS:**

Geo-Spatial Analysis (choose one course from the following):

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
-OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
-OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
-OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
-OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**

Total: 18 Hours

OPTION TOTAL: 40 HOURS

Option 3—Environmental Studies

Option Advisors: Rafael Moreno and Deborah Thomas

Option 3 gives geography majors the opportunity to concentrate on the topic of human-environmental interaction, emphasizing environmental policy, sustainability and social issues.

OPTION 3 REQUIREMENTS

Lower division

ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1
ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

GEOG 3232 - Weather and Climate **gtPATHWAYS:**
GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
-OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 22 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Environmental Studies

Choose three courses from the following:

GEOG 3300 - Population and Resources in the World Environment **gtPATHWAYS:**
GEOG 3302 - Water Resources **gtPATHWAYS:**
GEOG 3501 - Geography of Health **gtPATHWAYS:**
GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
-OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
GEOG 4350 - Environment and Society in the American Past **gtPATHWAYS:**
-OR- GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
GEOG 4420 - The Politics of Nature **gtPATHWAYS:**
-OR- GEOG 5420 - The Politics of Nature **gtPATHWAYS:**
GEOG 4680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**
-OR- GEOG 5680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**

Environmental Policy and Planning

Choose two courses from the following:

GEOG 4220 - Environmental Impact Assessment **gtPATHWAYS:**
-OR- GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
-OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
GEOG 4260 - Natural Resource Planning and Management **gtPATHWAYS:**
-OR- PUAD 5631 - Seminar in Environmental Politics and Policy **gtPATHWAYS:**
GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
-OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
GEOG 4440 - Science, Policy and the Environment **gtPATHWAYS:**
-OR- GEOG 5440 - Science, Policy and the Environment **gtPATHWAYS:**
GEOG 4710 - Disasters, Climate Change, and Health **gtPATHWAYS:**
PUAD 5633 - Seminar in Natural Resource and Environmental Health Law **gtPATHWAYS:**

Techniques for Environmental Analysis

Choose one course from the following:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
GEOG 4070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**
GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
-OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
-OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
-OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
-OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

Community/Professional Experience

(optional but highly recommended)

GEOG 3939 - Internship **gtPATHWAYS:**
-OR- GEOG 4995 - Travel Study **gtPATHWAYS:**

Total: 18 Hours

OPTION TOTAL: 40 HOURS

Note: Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internships may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

Option 4—Urban Studies and Planning

Option Advisors: Brian Page and Amanda Weaver

Option 4 allows geography majors to concentrate on social and spatial aspects of metropolitan growth and change. Students are given the opportunity to take advanced planning courses in their junior and senior years.

OPTION 4 REQUIREMENTS

Lower Division

GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2
GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

GEOG 3232 - Weather and Climate **gtPATHWAYS:**
GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
-OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 21 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Urban Studies, both of the following (4000 or 5000 level):

GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
-OR- GEOG 5640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
GEOG 4680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**
-OR- GEOG 5680 - Urban Sustainability: Perspectives and Practice **gtPATHWAYS:**

Urban Planning (choose three courses from the following list):

GEOG 4000 - Planning Methods I **gtPATHWAYS:**
-OR- URPL 5510 - Planning Methods I **gtPATHWAYS:**
GEOG 4220 - Environmental Impact Assessment **gtPATHWAYS:**
-OR- GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
-OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
GEOG 4260 - Natural Resource Planning and Management **gtPATHWAYS:**
-OR- URPL 6653 - Natural Resource Planning and Management **gtPATHWAYS:**
GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
-OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
GEOG 4400 - Regional Economic Development **gtPATHWAYS:**
-OR- URPL 6671 - Regional Economic Development **gtPATHWAYS:**
GEOG 4630 - Transportation Planning I: Transport Network Analysis **gtPATHWAYS:**
-OR- URPL 6673 - Transportation Planning I: Network Analysis **gtPATHWAYS:**
GEOG 4670 - Transportation Planning II: Urban Transportation Planning **gtPATHWAYS:**
-OR- URPL 6674 - Transportation Planning II **gtPATHWAYS:**
GEOG 4710 - Disasters, Climate Change, and Health **gtPATHWAYS:**
URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**

Techniques for Urban Analysis

Choose one course from the following:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
GEOG 4070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**
GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**
GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
-OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**

-OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**

GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
-OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
-OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**

Community/Professional Experience

(optional but highly recommended)

GEOG 3939 - Internship **gtPATHWAYS:**
-OR- GEOG 4995 - Travel Study **gtPATHWAYS:**

Total: 18 Hours

OPTION TOTAL: 39 HOURS

Note: Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internship may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

Option 5—Earth Science

Option Advisor: Ryan Sincavage

Option 5 allows geography majors to concentrate on studying natural and physical processes within and on the surface of the planet.

OPTION 5 REQUIREMENTS

Lower division

ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
-OR- GEOG 1302 - Introduction to Human Geography **gtPATHWAYS:**
GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1
GEOL 1082 - Physical Geology: Internal Processes **gtPATHWAYS:** GT-SC1
GEOG 2080 - Introduction to Mapping and Map Analysis **gtPATHWAYS:**

Upper division

GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
-OR- GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
-OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**

GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
-OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

Total: 20 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Earth Science

GEOG 3232 - Weather and Climate **gtPATHWAYS:**
GEOG 4240 - Principles of Geomorphology **gtPATHWAYS:**
GEOL 3011 - Mineralogy **gtPATHWAYS:**
GEOL 3421 - Sedimentation and Stratigraphy **gtPATHWAYS:**

Plus one of the following courses:
GEOG 3240 - Colorado Climates **gtPATHWAYS:**
GEOG 4010 - Landscape Geochemistry **gtPATHWAYS:**
GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
-OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
GEOG 4270 - Glacial Geomorphology **gtPATHWAYS:**
GEOL 3032 - Geology of Colorado **gtPATHWAYS:**
GEOL 4030 - Environmental Geology **gtPATHWAYS:**
-OR- ENVS 5030 - Environmental Geology **gtPATHWAYS:**
GEOL 4111 - Field Methods In Geology **gtPATHWAYS:**
GEOL 4402 - Unsaturated Zone Hydrology **gtPATHWAYS:**

Techniques for Earth Science Analysis

Choose one course from the following:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
-OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
-OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**
-OR- GEOL 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

GEOL 4111 - Field Methods In Geology **gtPATHWAYS:**

Total: 20 Hours

OPTION TOTAL: 40 HOURS

Senior Exit Examination

All majors are required to take a senior exit examination based on required courses in the discipline.

History BA

The bachelor's degree in history provides students with firm grounding for advanced studies in education, librarianship, law, business and public service, as well as graduate work in the humanities and social sciences broadly. History is an all-inclusive discipline, making it an excellent choice for students with a wide variety of career goals.

For the BA in history, students must complete a minimum of 36 semester hours of history course work. Majors must complete at least 18 upper-division (3000- and 4000-level) hours at the University of Colorado Denver. Majors must take a minimum of 15 credit hours in history at the 4000 level, including HIST 4839, the History Seminar. Not more than 48 hours of history will be counted toward graduation requirements. No grade below a *C* (2.0) will count toward major requirements to graduate.

Course Requirements

Required History Courses

HIST 3031 - Theory and Practice of History: An Introduction to the Major **gtPATHWAYS:**
HIST 4839 - History Seminar **gtPATHWAYS:**
Students must complete HIST 3031 before enrolling in HIST 4839.

Total: 6 Hours

Distribution Requirement

A minimum of 6 semester hours in each of the following areas: United States, Europe and world (Africa, Asia, Latin America). At least 3 semester hours in each area must be upper-division (3000- and 4000-level).

Total: 18 Hours

Electives

The degree requires a minimum of 12 additional semester hours of electives, which can be satisfied by a combination of additional history courses, history internships, or history honors independent study for eligible students.

Total: 12 Hours

Major Total: 36 Hours

BA in History with Secondary Licensure

Students seeking secondary social studies teacher licensure may pursue a BA in history. This option enables them to complete their history major as well as fulfill requirements for licensure at the undergraduate level.

If you are interested in this option, you should meet with a CLAS advisor as soon as possible. You can complete your degree, including licensure, within a 4-year graduation plan, but only if you declare it early in your college career and meet regularly with your advisors.

To earn the professional teacher licensure, you will complete a major in history and then complete licensure courses in the School of Education & Human Development (SEHD). See Undergraduate Teacher Licensure on the SEHD Urban Community Teacher Education program page for more information. The licensure process requires that you be admitted into the SEHD to complete licensure classes. You will be working with your CLAS advisor through the application process.

Get to know your advisor! He/she is your guide through what can be a complex process dictated by the State of Colorado. Call 303-556-8316 for more information.

Human Resources Management Emphasis—BS in Business Administration

Human resources management offers opportunities for students to develop professional competence in the areas of personnel administration and development. Students acquire an understanding of, and skills in, developing and implementing human resources

systems, including recruitment, selection, evaluation, training, motivation and compensation.

Required Course

MGMT 3010 - Managing People for a Competitive Advantage **gtPATHWAYS:**

Electives

Choose two:

MGMT 4420 - Human Resources Management: Staffing **gtPATHWAYS:**
MGMT 4430 - Human Resources Management: Training **gtPATHWAYS:**
MGMT 4440 - Human Resource Management: Performance Management **gtPATHWAYS:**
MGMT 4450 - Human Resources Management: Compensation **gtPATHWAYS:**

Management Electives

Choose three:

Any MGMT Course (3 semester hours)
BLAW 4120 - Legal Issues for Entrepreneurs **gtPATHWAYS:**
ENTP 3000 - Principles of Entrepreneurship **gtPATHWAYS:**

Total: 18 Hours

Individually Structured Major BA

Requirements for the Major

The ISM program plan requires course work over two or three disciplines. A discipline is defined as a single department or program such as biology, ethnic studies or math. The ISM program plan must comply with the following policies:

Between 48 and 54 semester hours are allowed for the program plan.
A minimum of 16 semester hours must be upper-division credit.
A minimum of 30 semester hours must be completed in liberal arts and sciences course work.
Each discipline requires a minimum of 15 semester hours, of which at least 3 must be upper-division hours.

- A minimum of 6 semester hours in each discipline must be taken from CU Denver faculty.
- A maximum of one discipline may be outside CLAS.
- A third optional discipline may be a mixture of course work, excluding courses from the first and second disciplines.
- An ISM title must be consistent with the academic theme and disciplines in the program plan.

The ISM program plan contract is approved by faculty for each discipline and submitted along with a cover letter identifying the ISM focus or academic theme to the CLAS Advising Office, North Classroom, 4002, for college approval by the assistant/associate dean. The ISM program plan must be approved before one-third of the ISM course work is completed. Typically, a maximum of 18-21 hours of previously completed courses is allowed.

Graduation requirements for ISM students include a minimum 2.0 GPA for all ISM course work, a minimum 2.0 GPA in each discipline in the program plan and a minimum of 24 hours of course work taken from CU Denver faculty.

Information Systems Emphasis—BS in Business Administration

The information systems program at the University of Colorado Denver is a nationally accredited program for students who want to design and implement effective solutions to meet organizational and management needs for information, control and decision making.

An information systems (ISMG) emphasis draws on a diverse set of skills and strengths requiring creative and innovative thinking at the intersections of disciplinary knowledge and practice. Information systems students learn how information technology, effective teamwork and leadership and sound project management combine to enable innovation and change, to improve organizational agility and to add competive value. Courses require extensive hands-on projects, teamwork and use of high-end technology. A combination of technical skills gained in class work with broad based business process knowledge enables our graduates to be ideally situated to take leading roles in shaping the technology-based future of employers in the Rocky Mountain region and the nation.

Undergraduate options

The Business School at the University of Colorado Denver offers a bachelor of science in business administration where you may choose information systems as your primary core specialty:

Information Systems, Bachelor of Science in Business Administration degree
Or you may choose to add an information systems speciality to another business discipline.

Accounting and Information Systems emphasis
Financial Management Systems emphasis
Management and Information Systems emphasis
Marketing and Information Systems emphasis

Career Opportunities

Careers in information systems continue to be one of the highest growth markets in the business world. A student completing the information systems program curriculum will be prepared for challenging careers as business analyst, database analyst, Web content manager, project manager, IT consultant and information auditing and compliance specialist. Employment possibilities include financial operations, health care, management consulting, service operations, transportation and logistics and government.

Information systems is becoming the foundation of all business activities, and a solid understanding of the role of information systems in business and in the national and global economy is now critical for every business student. The information systems emphasis focuses on effective use of information technology in business. You are equipped with logical and analytical thinking in all areas of business and a strong basis for continued career growth in a variety of growing professions. You will develop the technical skills, business know-how and administrative insights required for acquisition, deployment and management of IT resources and services development, operation and evolution os IS infrastructure for use in accounting, finance, marketing, management and other business processes.

Curriculum

The courses emphasize both team and individual work, allowing students to gain critical thinking skills, knowledge and experience to analyze, design, program, implement and use information.

Requirements for the Information Systems emphasis

Lower Division

ISMG 2050 - Introduction to Business Problem Solving **gtPATHWAYS:** (fall or spring)
ISMG 2800 - Designing for the Web **gtPATHWAYS:** (spring)

Upper Division: Junior Year

ISMG 3000 - Principles of Information Systems **gtPATHWAYS:**
ISMG 3500 - Enterprise Data and Content Management **gtPATHWAYS:** (fall)
ISMG 3600 - System Strategy, Architecture and Design **gtPATHWAYS:** (spring)

Upper Division: Senior Year

ISMG 4200 - Building Business Applications **gtPATHWAYS:** (fall)
ISMG 4700 - Business Data Communications and Networking **gtPATHWAYS:** (spring)
ISMG 4900 - Project Management and Practice **gtPATHWAYS:** (fall or spring)

Important note

It is particularly important to take the required courses in the proper squence to fulfill the prerequisites and ensure you can complete your degree within four years. Please refer to the sample degree plan for the recommended course sequence.

Information Systems Electives

ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
CSCI 2312 - Intermediate Programming **gtPATHWAYS:**
CSCI 2421 - Data Structures and Program Design **gtPATHWAYS:**
ISMG 4300 - Information Security and Compliance **gtPATHWAYS:**
ISMG 4750 - Business Intelligence and Financial Modeling **gtPATHWAYS:**
ISMG 4760 - Customer Relationship Management **gtPATHWAYS:**

Specialization in a minor area

You may also choose a secondary business minor area to support your career objectives.

Accounting

Choose two from the following:

ACCT 4054 - Accounting Systems and Data Processing **gtPATHWAYS:**
ACCT 3220 - Intermediate Financial Accounting I **gtPATHWAYS:**
ACCT 3230 - Intermediate Financial Accounting II **gtPATHWAYS:**
ACCT 4780 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**

Finance

Choose two from the following:

FNCE 3500 - Management of Business Capital **gtPATHWAYS:**
FNCE 3700 - Investment and Portfolio Management **gtPATHWAYS:**
FNCE 3600 - Financial Markets and Institutions **gtPATHWAYS:**
FNCE 4750 - Business Intelligence and Financial Modeling **gtPATHWAYS:**

Human Resource Management

Choose two from the following:

MGMT 3010 - Managing People for a Competitive Advantage **gtPATHWAYS:**
MGMT 4420 - Human Resources Management: Staffing **gtPATHWAYS:**
MGMT 4430 - Human Resources Management: Training **gtPATHWAYS:**
MGMT 4450 - Human Resources Management: Compensation **gtPATHWAYS:**
MGMT 4770 - Human Resource Information Systems **gtPATHWAYS:**

Management

Choose two from the following:

MGMT 4350 - Leading Organizational Change **gtPATHWAYS:**
MGMT 4370 - Organization Design **gtPATHWAYS:**
MGMT 4400 - Environments of International Business **gtPATHWAYS:**

Marketing

Choose two from the following:

MKTG 3100 - Marketing Research **gtPATHWAYS:**
MKTG 3200 - Buyer Behavior **gtPATHWAYS:**
MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**
MKTG 4760 - Customer Relationship Management **gtPATHWAYS:**

NOTE:

All information systems courses are not offered every semester.

International Business Emphasis—BS in Business Administration

Increasingly, businesses are reorienting their thinking, planning and operations to capitalize on opportunities that exist in the world marketplace. Every phase of business is affected by this reorientation. For individuals with the appropriate skills, training and interest, international business provides excellent career opportunities.

The international business curriculum is designed to enhance and build on thorough training in basic business skills and to provide students with additional skills and knowledge appropriate to international business.

Required Foundation Courses

MGMT 4370 - Organization Design **gtPATHWAYS:**
MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**

Required Emphasis Courses

FNCE 4370 - International Financial Management **gtPATHWAYS:**
MGMT 4400 - Environments of International Business **gtPATHWAYS:**
MGMT 4410 - Operations of International Business **gtPATHWAYS:**
MKTG 4200 - International Marketing **gtPATHWAYS:**

Total: 18 Hours

A second area of emphasis in business is highly recommended. In addition, serious consideration should be given to advanced study of a foreign language and to either a minor or a certificate in international affairs, offered by the College of Liberal Arts and Sciences.

Elective Business Emphasis Courses (9 semester hours)

Three business courses (3000 or 4000 level), 3 semester hours each
Students are strongly recommended to take courses within the same business discipline, including internationally-oriented courses within the discipline such as MKTG 4220 - Asian Business Development and Marketing and ACCT 4370 - International Accounting.

International Studies BA

Program Requirements

The major consists of 48 to 51 semester hours, structured as follows:

- complete 9 semester hours from a list of introductory courses listed below
- choose three thematic concentrations from the following five:
  - language and culture, international relations and comparative politics, economics and development, international commerce, and regional societies and history. Majors complete 12 hours in each theme (except international commerce, which requires 15). Below is a list of preapproved courses in each concentration. Students wishing to apply courses not on the list may do so with the approval of the program director.
- a capstone seminar (3 semester hours) for students in their last year
- the major is interdisciplinary, and students must take classes in at least three different disciplines (anthropology, economics, geography, history, international commerce/business, modern languages, political science or religious studies). No more than 18 hours in any one discipline will be accepted toward the major.
- students are expected to develop a regional specialization. They must choose courses from the introductory and thematic concentration lists that contribute to an understanding of a world region.
- all international studies majors must demonstrate a proficiency in a language other than English. This may be fulfilled with the fourth semester of a foreign language course sequence. Students must receive a grade of *C* or better in all language courses; they also have the option of testing out of this requirement.
- majors must complete at least half (24 hours) of the semester hours at CU Denver. A cumulative GPA of 2.5 or better is required, with a minimum grade of *C-* earned in all major courses to graduate.

Required Courses

Introductory Courses

Choose one course from each of the following three groups:

Choose one:

ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
GEOG 1102 - World Regional Geography **gtPATHWAYS:** GT-SS2

Choose one:

INTB 3000 - Global Perspectives **gtPATHWAYS:**
PSCI 3022 - Introduction to Comparative Politics **gtPATHWAYS:**
PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**

Choose one:

ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
HIST 3451 - Introduction to African History **gtPATHWAYS:**
HIST 3460 - Introduction to Latin American History **gtPATHWAYS:**
HIST 3470 - Introduction to Asian History **gtPATHWAYS:**
HIST 3480 - Introduction to European History **gtPATHWAYS:**
HIST 3483 - Introduction to Modern South Asia **gtPATHWAYS:**
RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3

Total: 9 Hours

Thematic Concentrations

Students must take a minimum of four upper-division courses in each of three of the following five concentrations, for a total of 36 semester hours (12 hours in each concentration). Please note that the concentration in international commerce requires five courses rather than four, for a total of 39 semester hours. The list below does not include all the international courses applicable to the major, only the ones frequently taught. It is expected to change as departments develop new courses and hire new faculty in different areas.

Note: Concentrations are interdisciplinary and are not the same as academic departments. Students must take courses in at least three different academic departments and no more than 18 semester hours in any one department.

Language, Culture and Literature

This concentration aims at deepening the student's understanding of the cultural underpinnings and worldviews of different societies.

Modern languages: any upper-division courses in the Department of Modern Languages except Methods of Teaching French/German/Spanish. We have not listed the courses individually because there are so many upper-division courses on world literature and culture available in modern languages.

ANTH 3121 - Language, Culture, and Communication **gtPATHWAYS:**
ANTH 4130 - Comparative Religious Systems **gtPATHWAYS:**
-OR- RLST 4010 - Comparative Religious Systems **gtPATHWAYS:**
PHIL 4650 - Differing Concepts of God **gtPATHWAYS:**

-OR- RLST 4400 - Differing Concepts of God **gtPATHWAYS:**

International Relations and Comparative Politics

Courses in this concentration stress comparative approaches, diplomacy and conflict resolution. Students will have an understanding of how different societies make decisions and manage international relations. How do other cultures conceive of and practice power?

ANTH 4180 - The Nature of Power **gtPATHWAYS:**
HIST 3121 - The World at War, 1914-1945 **gtPATHWAYS:**
HIST 4032 - Globalization in World History Since 1945 **gtPATHWAYS:**
HIST 4220 - U.S. Foreign Policy Since 1912 **gtPATHWAYS:**
HIST 4412 - Mexico and the United States: People and Politics on the Border **gtPATHWAYS:**
HIST 4471 - The Second World War **gtPATHWAYS:**
HIST 4475 - The Vietnam War **gtPATHWAYS:**
* PSCI 3022 - Introduction to Comparative Politics **gtPATHWAYS:**
* PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**
PSCI 4057 - Religion and Politics **gtPATHWAYS:**
-OR- RLST 4500 - Religion and Politics **gtPATHWAYS:**
PSCI 4105 - Comparative Politics: Europe **gtPATHWAYS:**
PSCI 4146 - Indigenous Politics **gtPATHWAYS:**
PSCI 4156 - The Arab-Israeli Peace Process **gtPATHWAYS:**
PSCI 4185 - Corruption in the U.S. and Abroad **gtPATHWAYS:**
PSCI 4216 - International Politics: Human Rights **gtPATHWAYS:**
PSCI 4225 - Democracy and Democratization **gtPATHWAYS:**
PSCI 4226 - The United Nations in World Affairs **gtPATHWAYS:**
PSCI 4236 - American Foreign Policy **gtPATHWAYS:**
PSCI 4266 - International Law **gtPATHWAYS:**
PSCI 4286 - International Relations: War or Peace? **gtPATHWAYS:**
PSCI 4726 - Russian and Chinese Foreign Policy **gtPATHWAYS:**
PSCI 4736 - The Middle East in World Affairs **gtPATHWAYS:**
PSCI 4807 - Revolution and Political Violence **gtPATHWAYS:**
PSCI 4995 - Travel Study **gtPATHWAYS:**

* If not taken to fulfill the introductory major requirements.

Economics, Development and Environment

Students taking this concentration will develop an understanding of economic processes in an international context. The courses offer comparative approaches and cultural perspectives on development and environment.

Note: Students in this concentration must take ECON 2012 - Principles of Economics: Macroeconomics as one of their three introductory courses.

Required economics course

ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1

Choose three upper division courses from the following:

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
ANTH 4070 - Culture of Development and Globalization **gtPATHWAYS:**
ANTH 4140 - Principles of Economic Anthropology **gtPATHWAYS:**
ANTH 4170 - Culture and the Environment **gtPATHWAYS:**
ANTH 4390 - Laboratory Methods in Archaeology **gtPATHWAYS:**
ECON 4081 - Intermediate Macroeconomic Theory **gtPATHWAYS:**
ECON 4230 - Law and Economics **gtPATHWAYS:**
ECON 4410 - International Trade **gtPATHWAYS:**
ECON 4420 - International Finance **gtPATHWAYS:**
ECON 4540 - Environmental Economics **gtPATHWAYS:**
ECON 4770 - Economic Development--Theory and Problems **gtPATHWAYS:**
GEOG 3300 - Population and Resources in the World Environment **gtPATHWAYS:**
GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
GEOG 3430 - Geography of Tourism **gtPATHWAYS:**
GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
INTB 3000 - Global Perspectives **gtPATHWAYS:**
PSCI 4085 - Comparative Public Policy **gtPATHWAYS:**
PSCI 4126 - Introduction to International Political Economy **gtPATHWAYS:**
PSCI 4235 - Politics and Markets in Latin America **gtPATHWAYS:**
PSCI 4248 - Gender, Globalization and Development **gtPATHWAYS:**
PSCI 4326 - Advanced International Political Economy: Globalization **gtPATHWAYS:**
PSCI 4365 - Global Ecological Crises **gtPATHWAYS:**
PSCI 4555 - International Women's Resistance **gtPATHWAYS:**

International Commerce

The objective of this concentration is to give students an introduction to international business practices.

ECON 2012 and ECON 2022 are prerequisites for most of these courses. Note that the first three courses are prerequisites for MGMT 4400 and MKTG 4200. Students opting for this concentration must take both MGMT 4400 and MKTG 4200. Students must meet

Business School entrance requirements for the international commerce concentration, with a 3.0 GPA overall or in the last 24 hours.

Note: This concentration requires 15 hours, not 12.

ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:** (MATH 1070 or MATH 1110 prerequisite and sophomore standing).
* MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**
* MKTG 3000 - Principles of Marketing **gtPATHWAYS:**
* MGMT 4400 - Environments of International Business **gtPATHWAYS:**
* MKTG 4200 - International Marketing **gtPATHWAYS:**

* Students must have junior standing to take the 3000-level courses and must be formally admitted to the international studies program to take the 4000-level courses.

Regional Societies and History

Students in this concentration are expected to develop a historical understanding of how nations and political systems develop. To understand why international actors behave in a given way, one needs to understand the historical background of those actors; this concentration will familiarize students with that background.

ANTH 4220 - Community in Global Context **gtPATHWAYS:**
ANTH 4250 - Culture Change in the Modern World **gtPATHWAYS:**
ANTH 4740 - Ethnography of Mexico and Central America **gtPATHWAYS:**
ANTH 4995 - Travel Study **gtPATHWAYS:**
GEOG 3120 - Geography of Europe **gtPATHWAYS:**
GEOG 3130 - Central America and the Caribbean **gtPATHWAYS:**
GEOG 3140 - Geography of South America **gtPATHWAYS:**
GEOG 3150 - Middle East **gtPATHWAYS:**
HIST 3350 - Colonial Latin America **gtPATHWAYS:**
HIST 3500 - African History in Novels and Films **gtPATHWAYS:**
HIST 3995 - Travel Study **gtPATHWAYS:**
HIST 4027 - Enlightenment and Revolution **gtPATHWAYS:**
HIST 4028 - After the Revolutions: Nineteenth Century Intellectual History **gtPATHWAYS:**
HIST 4029 - Age of Anxiety in Europe **gtPATHWAYS:**
HIST 4046 - Victorians and Victorianism **gtPATHWAYS:**
HIST 4051 - Britain and The Empire **gtPATHWAYS:**
HIST 4062 - Modern France, 1789 to the Present **gtPATHWAYS:**
HIST 4071 - Modern Germany **gtPATHWAYS:**
HIST 4074 - Post-War Germany **gtPATHWAYS:**
HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917 **gtPATHWAYS:**

HIST 4083 - Russia Since 1917 **gtPATHWAYS:**
HIST 4086 - Eastern Europe **gtPATHWAYS:**
HIST 4303 - Sex and Gender in Modern Britain **gtPATHWAYS:**
HIST 4411 - Modern Mexico **gtPATHWAYS:**
HIST 4414 - Nationalism and State Building in Latin America, 1750-1850 **gtPATHWAYS:**
HIST 4415 - Social Revolutions in Latin America **gtPATHWAYS:**
HIST 4421 - Modern China **gtPATHWAYS:**
HIST 4451 - Southern Africa **gtPATHWAYS:**
HIST 4455 - African Struggle for Independence **gtPATHWAYS:**
HIST 4460 - The Islamic World's Golden Age **gtPATHWAYS:**
HIST 4461 - The Modern Middle East **gtPATHWAYS:**
HIST 4621 - Explorers and Exploration **gtPATHWAYS:**
PSCI 4155 - Political Systems of the Middle East and North Africa **gtPATHWAYS:**
PSCI 4165 - Islamic Politics and Culture **gtPATHWAYS:**
-OR- RLST 3100 - Islamic Politics and Culture **gtPATHWAYS:**
PSCI 4505 - The Post-Soviet World: Origins and Present Condition **gtPATHWAYS:**
PSCI 4554 - Chicano and Latino Politics **gtPATHWAYS:**
PSCI 4615 - Politics and Government of China **gtPATHWAYS:**
RLST 3400 - Asian Philosophies and Religions **gtPATHWAYS:**
-OR- PHIL 3666 - Asian Philosophies and Religions **gtPATHWAYS:**
RLST 3500 - Religions of India **gtPATHWAYS:**
RLST 3660 - Chinese Philosophy and Culture **gtPATHWAYS:**
-OR- PHIL 3981 - Chinese Philosophy and Culture **gtPATHWAYS:**

International Studies Capstone Course

All majors must take a 3-semester-hour seminar focusing on a global issue. Currently the designated capstone courses are:

HIST 4417 - Commodities and Globalization: Dessert in World History **gtPATHWAYS:**
PSCI 4126 - Introduction to International Political Economy **gtPATHWAYS:**

Management Emphasis—BS in Business Administration

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management.

Required Foundation Courses

MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**

Required Emphasis Courses

MGMT 3010 - Managing People for a Competitive Advantage **gtPATHWAYS:**
MGMT 4350 - Leading Organizational Change **gtPATHWAYS:**
MGMT 4370 - Organization Design **gtPATHWAYS:**

Choose two:

Any upper-division MGMT course (3 semester hours)
BLAW 4120 - Legal Issues for Entrepreneurs **gtPATHWAYS:**
ENTP 3000 - Principles of Entrepreneurship **gtPATHWAYS:**

Total: 18 Hours

These 6 hours must be in addition to MGMT courses that were used to satisfy the international business or diversity requirements.

Management/Information Systems (MGIS)

Within the management curriculum students can choose to add additional courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Information System courses

ISMG 4500 - Database Management and Applications **gtPATHWAYS:**
ISMG 4600 - Systems Analysis and Design **gtPATHWAYS:**
ISMG 4900 - Project Management and Practice **gtPATHWAYS:**

Total: 9 Hours

Marketing Emphasis—BS in Business Administration

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the development of specific products or services, planning and implementing ways to take products or services to the market, securing the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.

Required Foundation Courses

BLAW 4120 - Legal Issues for Entrepreneurs **gtPATHWAYS:**
MGMT 4370 - Organization Design **gtPATHWAYS:**

Required Emphasis Courses

MKTG 3100 - Marketing Research **gtPATHWAYS:**
MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**
MKTG required 3 courses (9 semester hours): CHOOSE FROM:

Electives

Choose three:

MKTG 3200 - Buyer Behavior **gtPATHWAYS:**
MKTG 4000 - Advertising **gtPATHWAYS:**
MKTG 4200 - International Marketing **gtPATHWAYS:**
MKTG 4220 - Asian Business Development and Marketing **gtPATHWAYS:**
MKTG 4580 - International Transportation **gtPATHWAYS:**
MKTG 4700 - Personal Selling and Sales Management **gtPATHWAYS:**
MKTG 4950 - Special Topics **gtPATHWAYS:**

Total: 21 Hours

In addition to the three required courses beyond the core, students may select marketing electives, business electives and nonbusiness electives that support their particular

career orientations. The marketing faculty advisor can assist the student in choosing an appropriate set of electives to fit career objectives.

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

Marketing/Information Systems (MKIS)

Within the marketing curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Information System Courses

ISMG 4500 - Database Management and Applications **gtPATHWAYS:**
ISMG 4600 - Systems Analysis and Design **gtPATHWAYS:**
ISMG 4900 - Project Management and Practice **gtPATHWAYS:**

Required Emphasis Courses

MKTG 3100 - Marketing Research **gtPATHWAYS:**
MKTG 4050 - Applied Marketing Management **gtPATHWAYS:**
ISMG 4760 - Customer Relationship Management **gtPATHWAYS:**
or
MKTG 4760 - Customer Relationship Management **gtPATHWAYS:**

Choose two:

MKTG 3200 - Buyer Behavior **gtPATHWAYS:**
MKTG 4000 - Advertising **gtPATHWAYS:**
MKTG 4220 - Asian Business Development and Marketing **gtPATHWAYS:**
MKTG 4700 - Personal Selling and Sales Management **gtPATHWAYS:**
MKTG 4720 - Internet Marketing **gtPATHWAYS:**
MKTG 4950 - Special Topics **gtPATHWAYS:**

Total: 24 Hours

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

Mathematics BS

Degree Requirements

Required Core Courses for All Mathematics Majors

MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
MATH 3000 - Introduction to Abstract Mathematics **gtPATHWAYS:**
MATH 3191 - Applied Linear Algebra **gtPATHWAYS:**
MATH 4310 - Introduction to Real Analysis I **gtPATHWAYS:**

TOTAL REQUIRED CORE: 21 HOURS

IN ADDITION, ALL STUDENTS MUST SATISFY THE FOLLOWING REQUIREMENTS:

Programming experience: MATH 3250 (Problem-Solving Tools) or MATH 4650 (Numerical Analysis I)
Capstone Experience: MATH 4779 (Math Clinic) or MATH 4015 (Capstone Course for Secondary Teachers)
Statistics Requirement: MATH 3800 (Probability and Statistics for Engineers) or MATH 4820 (Statistics)
Depth in Proofcraft Requirement: at least one additional class requiring significant proof-writing. Choose from MATH 3140, 4110, 4201, 4220, 4320 and 4408
Applied/Modeling Requirement: at least one class containing significant applied/modeling content. Choose from MATH 3301, 3302, 4387, 4409, 4733, 4791, 4792, 4793 and 4794
A total of at least 36 upper-division credits (typically 12 courses)
All mathematics options require at least 48 credits total for the bachelor's degree

Required Courses for Each Option

GENERAL MATHEMATICS OPTION

All core courses (21 semester hours), plus the following:

MATH 4779 - Math Clinic **gtPATHWAYS:**

One course chosen from:
MATH 3250 - Problem Solving Tools **gtPATHWAYS:**

MATH 4650 - Numerical Analysis I **gtPATHWAYS:**

One course chosen from:
MATH 3800 - Probability and Statistics for Engineers **gtPATHWAYS:**
MATH 4820 - Statistics **gtPATHWAYS:**

One course chosen from:
MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
MATH 4110 - Theory of Numbers **gtPATHWAYS:**
MATH 4201 - Topology **gtPATHWAYS:**
MATH 4220 - Higher Geometry II **gtPATHWAYS:**
MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**
MATH 4408 - Applied Graph Theory **gtPATHWAYS:**

One course chosen from:
MATH 3301 - Introduction to Operations Research I - Deterministic Systems **gtPATHWAYS:**
MATH 3302 - Operations Research II **gtPATHWAYS:**
MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
MATH 4409 - Applied Combinatorics **gtPATHWAYS:**
MATH 4733 - Partial Differential Equations **gtPATHWAYS:**
MATH 4791 - Continuous Modeling **gtPATHWAYS:**
MATH 4792 - Probabilistic Modeling **gtPATHWAYS:**
MATH 4793 - Discrete Math Modeling **gtPATHWAYS:**
MATH 4794 - Optimization Modeling **gtPATHWAYS:**

Electives:
Four approved math electives (at least 12 semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. (Note: Students cannot use MATH 3195 to satisfy this requirement if both MATH 3191 and MATH 3200 are being applied toward this degree.)
General B.S. in Mathematics Total: 48-49 Hours

APPLIED MATHEMATICS OPTION

All core courses (21 semester hours), plus the following:

MATH 3200 - Elementary Differential Equations **gtPATHWAYS:**
MATH 4650 - Numerical Analysis I **gtPATHWAYS:**
MATH 4779 - Math Clinic **gtPATHWAYS:**

One course chosen from:
MATH 3800 - Probability and Statistics for Engineers **gtPATHWAYS:**
MATH 4820 - Statistics **gtPATHWAYS:**

One course chosen from:

MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
MATH 4110 - Theory of Numbers **gtPATHWAYS:**
MATH 4201 - Topology **gtPATHWAYS:**
MATH 4220 - Higher Geometry II **gtPATHWAYS:**
MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**
MATH 4408 - Applied Graph Theory **gtPATHWAYS:**

Two courses chosen from:

MATH 3301 - Introduction to Operations Research I - Deterministic Systems **gtPATHWAYS:**
MATH 3302 - Operations Research II **gtPATHWAYS:**
MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
MATH 4733 - Partial Differential Equations **gtPATHWAYS:**
MATH 4791 - Continuous Modeling **gtPATHWAYS:**
MATH 4792 - Probabilistic Modeling **gtPATHWAYS:**
MATH 4793 - Discrete Math Modeling **gtPATHWAYS:**
MATH 4794 - Optimization Modeling **gtPATHWAYS:**

Electives:

Two approved math electives (at least 6 semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. (Note: Students cannot use MATH 3195 to satisfy this requirement if both MATH 3191 and MATH 3200 are being applied toward this degree.)

Applied Mathematics Option Total: 48-49 Hours

PROBABILITY AND STATISTICS OPTION

All core courses (21 semester hours), plus the following:

MATH 3200 - Elementary Differential Equations **gtPATHWAYS:**
MATH 4650 - Numerical Analysis I **gtPATHWAYS:**
MATH 4779 - Math Clinic **gtPATHWAYS:**
MATH 4810 - Probability **gtPATHWAYS:**
MATH 4820 - Statistics **gtPATHWAYS:**

One course chosen from:

MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
MATH 4792 - Probabilistic Modeling **gtPATHWAYS:**

One course chosen from:

MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
MATH 4110 - Theory of Numbers **gtPATHWAYS:**

MATH 4201 - Topology **gtPATHWAYS:**
MATH 4220 - Higher Geometry II **gtPATHWAYS:**
MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**
MATH 4408 - Applied Graph Theory **gtPATHWAYS:**

Electives:
Two approved math electives (at least 6 semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. (Note: Students cannot use MATH 3195 to satisfy this requirement if both MATH 3191 and MATH 3200 are being applied toward this degree.)
Probability and Statistics Option Total: 48-49 Hours

ACTUARIAL SCIENCE OPTION

All core courses (21 semester hours), plus the following:

MATH 3200 - Elementary Differential Equations **gtPATHWAYS:**
MATH 4650 - Numerical Analysis I **gtPATHWAYS:**
MATH 4779 - Math Clinic **gtPATHWAYS:**
MATH 4810 - Probability **gtPATHWAYS:**
MATH 4820 - Statistics **gtPATHWAYS:**

One course chosen from:
MATH 3301 - Introduction to Operations Research I - Deterministic Systems **gtPATHWAYS:**
MATH 3302 - Operations Research II **gtPATHWAYS:**
MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**
MATH 4409 - Applied Combinatorics **gtPATHWAYS:**
MATH 4733 - Partial Differential Equations **gtPATHWAYS:**
MATH 4791 - Continuous Modeling **gtPATHWAYS:**
MATH 4793 - Discrete Math Modeling **gtPATHWAYS:**
MATH 4794 - Optimization Modeling **gtPATHWAYS:**

One course chosen from:
MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
MATH 4110 - Theory of Numbers **gtPATHWAYS:**
MATH 4201 - Topology **gtPATHWAYS:**
MATH 4220 - Higher Geometry II **gtPATHWAYS:**
MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**
MATH 4408 - Applied Graph Theory **gtPATHWAYS:**

One course chosen from:
MATH 4792 - Probabilistic Modeling **gtPATHWAYS:**
MATH 5350 - Mathematical Theory of Interest **gtPATHWAYS:**

(MATH 5350 strongly recommended)

Elective:
One approved math elective (at least 3 semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. (Note: Students cannot use MATH 3195 to satisfy this requirement if both MATH 3191 and MATH 3200 are being applied toward this degree.)
Actuarial Science Option Total: 48-49 Hours

Suggested minor for acturial science major option:

Actuaries need a background in business, particularly accounting, economics and finance. You are strongly advised to do a minor in one of these areas. Recommended classes are:

ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
FNCE 3000 - Principles of Finance **gtPATHWAYS:**

MATHEMATICS EDUCATION OPTION

All core courses (21 semester hours), plus the following:

MATH 3140 - Introduction to Modern Algebra **gtPATHWAYS:**
MATH 3210 - Higher Geometry I **gtPATHWAYS:**
MATH 4010 - History of Mathematics **gtPATHWAYS:**
MATH 4012 - An Advanced Perspective on Number and Operation **gtPATHWAYS:**
MATH 4013 - An Inquiry-based Approach to Geometry **gtPATHWAYS:**
MATH 4014 - Statistical Knowledge for Teaching **gtPATHWAYS:**
MATH 4015 - Capstone Course for Secondary Teachers **gtPATHWAYS:**
MATH 4110 - Theory of Numbers **gtPATHWAYS:**
MATH 4409 - Applied Combinatorics **gtPATHWAYS:**

One course chosen from:
MATH 3250 - Problem Solving Tools **gtPATHWAYS:**
MATH 4650 - Numerical Analysis I **gtPATHWAYS:**

One course chosen from:
MATH 3800 - Probability and Statistics for Engineers **gtPATHWAYS:**
MATH 4820 - Statistics **gtPATHWAYS:**

Mathematics Education Option Total: 49 Hours

NOTE:

Certification by the School of Education & Human Development (SEHD) is required for public school teaching. See the description of Undergraduate Teacher Licensure on the School of Education & Human Development (SEHD) Urban Community Teacher Education program page for more information.

Portfolio, Interview, Survey

In the semester of graduation, students must:

- submit a portfolio consisting of two papers, typically written for previous courses, that demonstrate mathematical and writing proficiency
- participate in an exit interview, which may be scheduled by the department administrative assistant
- complete a senior survey, available from the department administrative assistant

Math Majors Considering Graduate Study

Mathematics majors who are considering graduate study in mathematics should plan to take the following courses as part of their major:

MATH 4310 - Introduction to Real Analysis I **gtPATHWAYS:**
MATH 4320 - Introduction to Real Analysis II **gtPATHWAYS:**

Mechanical Engineering BS

Typical Curriculum for BS (Mechanical Engineering—see note 1)

Freshman Year

First Semester

CHEM 1130 - Engineering General Chemistry **gtPATHWAYS:**
ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01 (*see note 2*)
MECH 1025 - CAD and Graphics for Mechanical Engineering **gtPATHWAYS:**
MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1

Total: 15 Hours

Second Semester

MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
Core Curriculum Electives (*see note 3*) (6 semester hours)

Total: 15 Hours

Sophomore Year

First Semester

MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
MECH 2023 - Statics **gtPATHWAYS:** *(see note 4)*
PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
PHYS 2341 - General Physics Lab II **gtPATHWAYS:**
Core Curriculum Electives *(see note 3)* (6 semester hours)

Total: 18 Hours

Second Semester

ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02
MECH 3012 - Thermodynamics **gtPATHWAYS:**
MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**
MECH 2033 - Dynamics **gtPATHWAYS:** (*see note 4)*
MECH 3030 - Electric Circuits and Systems **gtPATHWAYS:**
MECH 3032 - Electric Circuits and Systems Lab **gtPATHWAYS:**

Total: 17 Hours

Junior Year

First Semester

MECH 3010 - Elementary Numerical Methods and Programming **gtPATHWAYS:**
MECH 3021 - Introduction to Fluid Mechanics **gtPATHWAYS:**
MECH 3022 - Thermodynamics II **gtPATHWAYS:**
MECH 3027 - Measurements **gtPATHWAYS:**
MECH 3028 - Laboratory of Mechanical Measurements **gtPATHWAYS:**
MECH 3043 - Strength of Materials **gtPATHWAYS:**

Total: 16 Hours

Second Semester

MECH 3023 - System Dynamics I: Vibrations **gtPATHWAYS:**
MECH 3024 - Introduction to Materials Science **gtPATHWAYS:**
MECH 3031 - Fluids/Thermal Laboratory **gtPATHWAYS:**
MECH 3034 - Properties of Engineering Materials **gtPATHWAYS:**
MECH 3035 - Design of Mechanical Elements **gtPATHWAYS:**
MECH 3042 - Heat Transfer **gtPATHWAYS:**
MECH 3065 - Intermediate Dynamics **gtPATHWAYS:**

Total: 17 Hours

Senior Year

First Semester

MECH 3145 - Manufacturing Processes Design **gtPATHWAYS:**
MECH 4023 - System Dynamics II: Controls **gtPATHWAYS:**
MECH 4035 - Senior Design I **gtPATHWAYS:**
MECH Technical Electives *(see note 5)* (6 semester hours)

Total: 15 Hours

Second Semester

MECH 4045 - Senior Design II **gtPATHWAYS:**
MECH Technical Electives (6 semester hours)
Core Curriculum Electives (*see note 3*) (6 semester hours)

Total: 15 Hours

Notes

Students enrolled prior to fall 2006 may choose either the new core curriculum or the old core curriculum.
The communication requirements include ENGL 1020 and ENGL 2030.
Common core requirements of the College of Engineering and Applied Science. Refer to the “Undergraduate Core Curriculum in Engineering” in this catalog or to the “Common Core Requirements” guide available from your advisor for further information.

CVEN 2121 and CVEN 3111 may be substituted for MECH 2023 and MECH 2033 respectively.
Not all courses may be offered every semester.

Program Total: 128 Hours

Students should check with departmental advisors to determine their degree requirements. The particular curriculum to be satisfied by each student is the one published in the catalog *current* at the time of their matriculation. For additional information, see the departmental advisor.

Students should refer to the section in this chapter on “Academic Policies” of the College of Engineering and Applied Science. In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior level courses and should have completed their junior-level mechanical engineering courses before starting their senior-level mechanical engineering electives. All students should see their advisors at least once each semester.

Music Industry Studies Track - Music BS

CAM General Course Requirements

General Music Information

Undergraduate Degree Requirements

The music program has a competitive application process. Please refer to the CAM Web site for details and information. To be eligible for a BS in music, MIS track, students must complete 38 semester hours of music performance and musicianship courses, 12 semester hours of music industry studies core courses and 30 semester hours of music business or recording arts courses. No audition is required as part of the application procress. Students must pass major courses with a C (2.0) or better.

Music Performance, Musicianship and MIS Core Courses

MUSC 2300 - Introduction to Songwriting **gtPATHWAYS:**
MUSC 2540 - Audio Production I **gtPATHWAYS:**
MUSC 2560 - Audio Production II **gtPATHWAYS:**

MUSC 2700 - Introduction to Music Business **gtPATHWAYS:**

MUSC 3210 - Music and Entertainment Marketing **gtPATHWAYS:**
or
MUSC 3220 - Artist Management **gtPATHWAYS:**

PMUS 1023 - Piano Class **gtPATHWAYS:** Level I
PMUS 1024 - Piano Class II **gtPATHWAYS:**

PMUS 1025 - Piano Class III **gtPATHWAYS:**
or
PMUS 1040 - Class Guitar **gtPATHWAYS:**
or
PMUS 1050 - Voice Class I **gtPATHWAYS:**

PMUS 1026 - Piano Class IV **gtPATHWAYS:**
or
PMUS 1041 - Class Guitar II **gtPATHWAYS:**
or
PMUS 1060 - Voice Class II **gtPATHWAYS:**

PMUS 1100 - Music Theory I **gtPATHWAYS:**
PMUS 1110 - Ear Training and Sight Singing I **gtPATHWAYS:**
PMUS 1200 - Music Theory II **gtPATHWAYS:**
PMUS 1210 - Ear Training and Sight Singing II **gtPATHWAYS:**
PMUS 1310 - Sight Reading and Improvisation **gtPATHWAYS:**
PMUS 1500 - General Recital
PMUS 1500 - General Recital **gtPATHWAYS:**
2 semesters of MIS applied lessons (4 semester hours)
2 semesters of ensembles (2 semester hours)

PMUS 2200 - Jazz Theory **gtPATHWAYS:**
or
MUSC 2220 - Commercial Electronic Music Composition **gtPATHWAYS:**
or
MUSC 3310 - Songwriting II **gtPATHWAYS:**

PMUS 3830 - History and Literature of Music I **gtPATHWAYS:**
PMUS 3831 - History and Literature of Music II **gtPATHWAYS:**
Electives in Performance (6 semester hours)

Total: 50 Hours

Students select either music business or recording arts and complete all listed courses and elective credits.

Music Business Courses

MUSC 3210 - Music and Entertainment Marketing **gtPATHWAYS:**
or
MUSC 3220 - Artist Management **gtPATHWAYS:**

MUSC 3690 - Concert Promotion, Tour, and Venue Management **gtPATHWAYS:**
MUSC 3700 - Music and Entertainment Business in the Digital Age **gtPATHWAYS:**
MUSC 3710 - CAM Records **gtPATHWAYS:**
MUSC 3720 - Law and the Music Industry **gtPATHWAYS:**
MUSC 4740 - Music Business Analysis **gtPATHWAYS:**
MUSC 4890 - Music Business Senior Seminar **gtPATHWAYS:**
Music Business Electives (9 semester hours)

Total: 30 Hours

Recording Arts Courses

Note: The recording arts emphasis is competitive. Students must be accepted into the program before they are eligible to register for any of the recording arts upper division courses (with the exception of PHYS 3620 which should be completed prior to admission into the program). Please consult CAM advising for more details.

PHYS 3620 - Sound and Music **gtPATHWAYS:**
MUSC 3550 - Critical Listening for Recording Arts **gtPATHWAYS:**
MUSC 4505 - Audio Post Production I **gtPATHWAYS:**
MUSC 4550 - Audio Production III **gtPATHWAYS:**
MUSC 4560 - Mastering & Advanced Digital Audio **gtPATHWAYS:**
MUSC 4580 - Audio Production Seminar I **gtPATHWAYS:**
MUSC 4581 - Audio Production Seminar II **gtPATHWAYS:**
Recording Arts Electives (9 semester hours)

Total: 30 Hours

Philosophy BA

Students must declare a major by the time they have completed 60 semester hours of course work. A total of 36 semester hours must be completed for the philosophy major, at least 18 of which must be taken at CU Denver. A minimum grade of *C* (2.0) is required

in each course. For those students who qualify for and fulfill the requirements for graduation with honors, a total of at least 39 hours is required.

A total of 18 upper-division semester hours are required for the major, and no more than 6 hours below the 3000 level may be counted toward the major. Courses taken at other institutions must be approved by an advisor in the Department of Philosophy to be applied toward the major.

Unless otherwise noted, registration for 4000-level courses in philosophy require a minimum grade of *C* (2.0) in every prior philosophy course and completion of at least PHIL 3002 or PHIL 3022 or permission of instructor.

Program Requirements

Required Courses

PHIL 3002 - Ancient Greek Philosophy **gtPATHWAYS:**
PHIL 3022 - Modern Philosophy **gtPATHWAYS:**
(It is recommended, but not required, that PHIL 3002 be taken before PHIL 3022)
PHIL 3440 - Introduction to Symbolic Logic **gtPATHWAYS:**
PHIL 4760 - Kant **gtPATHWAYS:**

Total: 12 Hours

Additional distribution requirements

(All are upper-division courses)

One course in social/political philosophy
One course in ethics
One course in Continental philosophy
One course in EITHER American or analytic philosophy
One course with specific focus in the history of philosophy (may be fulfilled by a course in a single figure)

Total: 15 Hours

Electives

Choose three:

One upper-division elective (may include courses from previous lists that are not counted toward those requirements)
Two electives at any level

Total: 9 Hours

Major Total: 36 Hours

Course work required for graduation with honors:

3-6 semester hours taken over two semesters of:

PHIL 4950 - Honors Thesis **gtPATHWAYS:**

Physics BS

Program Requirements

Students must declare their intention to major in physics by the time they have completed 60 semester hours and complete between 47 and 51 semester hours (depending on the track chosen) in physics and related topics. Additionally, all tracks require 16 semester hours in math ancillary courses. No grade below a *C* (2.0) can be used to meet the requirements for the major. At least 12 semester hours of the requirements for the major must be completed at CU Denver.

A senior thesis, usually from participation in research, is required for all students wishing to graduate with departmental honors. All other students are encouraged to do research leading to a project report or senior thesis.

Required Courses Common to All Tracks

Required Physics Courses

PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**
PHYS 2341 - General Physics Lab II **gtPATHWAYS:**
PHYS 2711 - Vibrations and Waves **gtPATHWAYS:**
PHYS 2811 - Modern Physics I **gtPATHWAYS:**
PHYS 3120 - Methods of Mathematical Physics **gtPATHWAYS:**
PHYS 3711 - Junior Laboratory I **gtPATHWAYS:**
PHYS 3811 - Quantum Mechanics **gtPATHWAYS:**

Total physics courses required for all tracks: 25 Hours

Required Ancillary Courses

MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
MATH 3195 - Linear Algebra and Differential Equations **gtPATHWAYS:**

Note: The department will accept the following combination of math courses in place of MATH 3195:
MATH 3191 - Applied Linear Algebra **gtPATHWAYS:**
MATH 3200 - Elementary Differential Equations **gtPATHWAYS:**

Total ancillary math courses required for all tracks: 16 Hours

Total required semester hours for all physics major tracks: 41 Hours

Pure and Applied Physics (Track 1)

Take in addition to the courses common to all tracks:

PHYS 3211 - Analytical Mechanics **gtPATHWAYS:**
PHYS 3411 - Thermal Physics **gtPATHWAYS:**
PHYS 3721 - Junior Laboratory II **gtPATHWAYS:**
***** PHYS 4331 - Principles of Electricity and Magnetism **gtPATHWAYS:**
PHYS 4711 - Senior Laboratory I **gtPATHWAYS:**
(or a course in computational physics approved by advisor)

* *Note:* Students who must *retake* PHYS 4331 may fulfill this requirement by obtaining a *C* or better in
PHYS 4351 - Bioelectromagnetism **gtPATHWAYS:**

Elective Physics Courses

Six semester hours of physics-related electives at 3000-level or above approved by advisor, including up to 3 hours of independent study

Total Track 1 Specific Courses: 21 Hours

Plus total required courses for all physics majors: 41 hours

TRACK ONE TOTAL: 62 HOURS

Biophysics and Medical Physics (Track 2)

Take in addition to the courses common to all tracks:

PHYS 3251 - Biophysics of the Body **gtPATHWAYS:**
PHYS 3451 - Biophysics of the Cell **gtPATHWAYS:**
PHYS 4351 - Bioelectromagnetism **gtPATHWAYS:**
(recommended option)
-OR- PHYS 4331 - Principles of Electricity and Magnetism **gtPATHWAYS:**

Biophysics electives (8-9 hours)

Biophysics electives at the 3000-level or above approved by advisor (including up to 3 semester hours independent study and/or two courses, PHYS 3151 and PHYS 3161, listed below)

-OR-

The following four courses (an option primarily for pre-med physics majors):

* BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
* BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1

PHYS 3151 - Biophysics Outlook I **gtPATHWAYS:**
PHYS 3161 - Biophysics Outlook II **gtPATHWAYS:**

Plus a laboratory:

PHYS 3721 - Junior Laboratory II **gtPATHWAYS:**

-OR-

The following two courses (an option primarily for pre-med physics majors):

* BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
* BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1

AND

Numerical modeling *or* probability and statistics course approved by advisor: **3 semester hours**

Total Track 2 Specific Courses: 25 Hours

Plus total required courses for all physics majors: 41 hours

TRACK TWO TOTAL: 66 HOURS

Major Total: 62-66 Hours

PRE-MED STUDENTS

Note: courses above marked * are generally required for medical school admissions. In addition, the following are generally required for medical school admissions, but NOT for the biophysics and medical physics track:

CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**
CHEM 3418 - Organic Chemistry Laboratory I **gtPATHWAYS:**
CHEM 3421 - Organic Chemistry II **gtPATHWAYS:**
CHEM 3428 - Organic Chemistry Laboratory II **gtPATHWAYS:**

Total additional pre-med (but not required for Track 2): 19 Hours

Political Science BA

Undergraduate students must declare their intention to major in political science by the time they have completed 60 semester hours, and must complete a minimum of 36 semester hours in political science, of which at least 21 must be upper-division courses. Fifteen of the 36 hours must be taken from CU Denver faculty. Courses are distributed among the primary fields as listed in this section, i.e., American politics, comparative politics, international relations, political theory and public policy and administration. To count for the major, all course work must be completed with a grade of *C* (2.0) or better. Two cognate courses (which don't count toward the 36 hours) from the list below must also be completed.

Traditional Option

Required Core

PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice **gtPATHWAYS:** GT-SS1
PSCI 1101 - American Political System **gtPATHWAYS:** GT-SS1
PSCI 3011 - Research Methods **gtPATHWAYS:**
-OR- PSCI 4011 - GIS in Political Science **gtPATHWAYS:**

Total: 9 Hours

Choose two:

PSCI 4207 - Theories of Social and Political Change **gtPATHWAYS:**

PSCI 4407 - Early Political Thought **gtPATHWAYS:**
PSCI 4417 - Modern Political Thought **gtPATHWAYS:**
PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
PSCI 4437 - Coercion and the State **gtPATHWAYS:**
PSCI 4457 - American Political Thought **gtPATHWAYS:**

Total: 6 Hours

One 4000-level course in each of three fields:

American politics, comparative politics, and international relations

Total: 9 Hours

Experiential-Learning Requirement *

Choose one:

PSCI 3914 - The Urban Citizen **gtPATHWAYS:**
PSCI 3939 - Internship **gtPATHWAYS:**
PSCI 4934 - CU at the Capitol **gtPATHWAYS:**
Experiential learning project in any P SC class: **3 semester hours**

* Students with significant volunteer experience in the community or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the requirement (36 hours still required).

Total: 3 Hours

Electives

Three political science elective courses

Total: 9 Hours

Political Science Total: 36 Hours

Required Cognate Courses

In addition to the 36 hours above, choose two of the following cognate courses:

ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1

HIST 1016 - World History to 1500 **gtPATHWAYS:**
HIST 1026 - World History Since 1500 **gtPATHWAYS:**
HIST 1211 - Western Civilization I **gtPATHWAYS:**
HIST 1212 - Western Civilization II **gtPATHWAYS:**
HIST 1361 - U.S. History to 1876 **gtPATHWAYS:** GT-HI1
HIST 1362 - U.S. History Since 1876 **gtPATHWAYS:** GT-HI1

Total: 6 Hours

Major Total: 42 Hours

Public Policy Option

This option was designed for students who specifically desire to pursue careers in public policy and/or public administration in the public or nonprofit sectors. Grounded in basic political science theory and familiarity with American, comparative and international politics, this BA track emphasizes the specifically political aspects of public policy processes and settings. Cases will emphasize key policy issues confronting U.S. local, state and national decision makers and citizens. A focus on politics and the policy-making process will prepare students conceptually and methodologically to move beyond partisan politics to address how leaders can best mobilize resources to achieve constituent goals consistent with the public interest.

Required Core

PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice **gtPATHWAYS:** GT-SS1
PSCI 1101 - American Political System **gtPATHWAYS:** GT-SS1
PSCI 3011 - Research Methods **gtPATHWAYS:**

Total: 9 Hours

One 4000-level course in each of the following three fields:

American Politics

PSCI 4002 - Topics in Political Science **gtPATHWAYS:**
PSCI 4014 - Media and Politics **gtPATHWAYS:**
PSCI 4024 - Legislatures and Legislation **gtPATHWAYS:**
PSCI 4025 - Local Governance and Globalization **gtPATHWAYS:**
PSCI 4044 - The Presidency **gtPATHWAYS:**

PSCI 4094 - Seminar: American Politics **gtPATHWAYS:**
PSCI 4124 - Denver Politics **gtPATHWAYS:**
PSCI 4324 - Politics, Public Policy and Leadership **gtPATHWAYS:**
PSCI 4354 - Environmental Politics **gtPATHWAYS:**
PSCI 4374 - Public Priorities for the 21st Century **gtPATHWAYS:**
PSCI 4477 - Constitutional Law I **gtPATHWAYS:**
PSCI 4487 - Constitutional Law II **gtPATHWAYS:**
PSCI 4545 - Immigration Politics **gtPATHWAYS:**

Comparative Politics and International Relations

PSCI 4085 - Comparative Public Policy **gtPATHWAYS:**
PSCI 4124 - Denver Politics **gtPATHWAYS:**
PSCI 4185 - Corruption in the U.S. and Abroad **gtPATHWAYS:**
PSCI 4226 - The United Nations in World Affairs **gtPATHWAYS:**
PSCI 4236 - American Foreign Policy **gtPATHWAYS:**
PSCI 4266 - International Law **gtPATHWAYS:**
PSCI 4326 - Advanced International Political Economy: Globalization **gtPATHWAYS:**
PSCI 4645 - Comparative Political Leadership **gtPATHWAYS:**

Public Policy and Administration

PSCI 4009 - Politics of the Budgetary Process **gtPATHWAYS:**
PSCI 4024 - Legislatures and Legislation **gtPATHWAYS:**
PSCI 4084 - Local Government and Administration **gtPATHWAYS:**
PSCI 4274 - Conflict Resolution and Public Consent Building **gtPATHWAYS:**
PSCI 4414 - Organizational Change Agents **gtPATHWAYS:**
PSCI 4644 - Ethical Responsibilities of Leaders **gtPATHWAYS:**

Total: 9 Hours

Elective courses

Choose any two additional courses from the list above, plus choose one other upper or lower division PSCI course.

Total: 9 Hours

Two political theory courses

PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
PSCI 4437 - Coercion and the State **gtPATHWAYS:**

Total: 6 Hours

Experiential-Learning Requirement *

Choose one:

PSCI 3939 - Internship **gtPATHWAYS:**
PSCI 4934 - CU at the Capitol **gtPATHWAYS:**

* Students with significant volunteer experience in the community or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the requirement (36 hours still required).

Total: 3 Hours

Two cognate courses

ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1

Total: 6 Hours

Public Policy Option Total: 42 Hours

Psychology BA

Students should consult with the advisor when they declare a psychology major, which must be done once they have completed 60 semester hours of course work. Psychology BA major requirements include at least 37 and not more than 48 semester hours in psychology. Of these, at least 15 hours must be in upper-division courses taught by CU Denver faculty. No grade below *C* (2.0) will be accepted toward the major requirements. Note that a prior college-level algebra course is strongly recommended for PSYC 2090.

PSYC 3939, Internship/Cooperative Education, does NOT count toward the 37-hour minimum or the 15-hour upper-division requirement, but it does count as elective psychology credit.

Program Requirements

Required Courses

PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3
PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3
PSYC 2090 - Statistics and Research Methods **gtPATHWAYS:**
PSYC 2220 - Biological Basis of Behavior **gtPATHWAYS:** GT-SC2

Total: 13 Hours

Group A: Choose three, including one or both PSYC 3222 and PSYC 4144:

PSYC 3104 - Behavioral Genetics **gtPATHWAYS:**
PSYC 3222 - Principles of Learning and Behavior **gtPATHWAYS:**
PSYC 3254 - Introduction to Animal Behavior **gtPATHWAYS:**
PSYC 3262 - Health Psychology **gtPATHWAYS:**
PSYC 3263 - Hormones and Behavior **gtPATHWAYS:**
PSYC 3265 - Drugs, Brain and Behavior **gtPATHWAYS:**
PSYC 3724 - Developmental Psychobiology **gtPATHWAYS:**
PSYC 3810 - Neuropsychology **gtPATHWAYS:**
PSYC 3822 - Aging, Brain and Behavior **gtPATHWAYS:**
PSYC 4054 - Behavioral Neuroscience **gtPATHWAYS:**
PSYC 4144 - Human Cognition **gtPATHWAYS:**
PSYC 4164 - Psychology of Perception **gtPATHWAYS:**

Total: 9 Hours

Group B: Choose four, including at least two or all three of PSYC 3205, PSYC 3305, and PSYC 4415:

PSYC 3090 - Research Methods in Experimental Psychology **gtPATHWAYS:**
PSYC 3135 - Organizational Psychology **gtPATHWAYS:**
PSYC 3205 - Human Development I: Child Psychology **gtPATHWAYS:**
PSYC 3215 - Human Development II: Adolescence and Adulthood **gtPATHWAYS:**
PSYC 3235 - Human Sexuality **gtPATHWAYS:**
PSYC 3305 - Abnormal Psychology **gtPATHWAYS:**
PSYC 3405 - Family Psychology **gtPATHWAYS:**
PSYC 3505 - Psychology and the Law **gtPATHWAYS:**
PSYC 3610 - Psychological Trauma **gtPATHWAYS:**
PSYC 3611 - Psychology of Women **gtPATHWAYS:**
PSYC 3612 - Domestic Abuse **gtPATHWAYS:**
PSYC 4415 - Experimental Social Psychology **gtPATHWAYS:**
PSYC 4455 - Theories of Personality **gtPATHWAYS:**
PSYC 4485 - Psychology of Cultural Diversity **gtPATHWAYS:**
PSYC 4500 - Psychotherapy **gtPATHWAYS:**

PSYC 4645 - Industrial Psychology **gtPATHWAYS:**
PSYC 4730 - Clinical Psychology: Ethics and Issues **gtPATHWAYS:**

Total: 12-13 Hours

One integrative course:

PSYC 4511 - History of Psychology **gtPATHWAYS:**

Total: 3 Hours

BA Major Total: 37-38 Hours

PSYCHOLOGY BS REQUIREMENTS

Psychology BS

Students must declare a major by the time they have completed 60 semester hours of course work. To be admitted to the BS major, students must have sophomore standing and have received grades of *B* or better in General Biology I and II for majors with laboratory, or the equivalent. Students must take at least 48 hours and a maximum of 56 semester hours in psychology, biology and chemistry that will count toward graduation. A minimum of 15 upper-division semester hours must be taken from CU Denver faculty. No grade below *C* is acceptable toward the major requirements; i.e., psychology, biology or chemistry courses in which a student earns a *C-* or below will not count toward the major.

Psychology Requirements

Required Psychology Courses

PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3
PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3
PSYC 2090 - Statistics and Research Methods **gtPATHWAYS:**
PSYC 2220 - Biological Basis of Behavior **gtPATHWAYS:** GT-SC2
PSYC 4054 - Behavioral Neuroscience **gtPATHWAYS:**

Total: 16 Hours

Choose two:

PSYC 3090 - Research Methods in Experimental Psychology **gtPATHWAYS:**
PSYC 3104 - Behavioral Genetics **gtPATHWAYS:**
PSYC 3222 - Principles of Learning and Behavior **gtPATHWAYS:**
PSYC 3254 - Introduction to Animal Behavior **gtPATHWAYS:**
PSYC 3263 - Hormones and Behavior **gtPATHWAYS:**
PSYC 3265 - Drugs, Brain and Behavior **gtPATHWAYS:**
PSYC 3724 - Developmental Psychobiology **gtPATHWAYS:**
PSYC 3810 - Neuropsychology **gtPATHWAYS:**
PSYC 3822 - Aging, Brain and Behavior **gtPATHWAYS:**
PSYC 4164 - Psychology of Perception **gtPATHWAYS:**

Total: 6-7 Hours

Experiential Learning Requirement

Students must complete at least one of the following (all require consultation with BS advisor AND permission of instructor):

PSYC 3939 - Internship **gtPATHWAYS:** (2.75 GPA required)
PSYC 4840 - Independent Study: PSYC **gtPATHWAYS:**
Honors Project in Psychology (3.5 GPA required): **3 Semester Hours**

Total: 3 Hours

Physical and Biological Science Requirements

Required Courses

BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1

Total: 17 Hours

Choose two:

BIOL 3225 - Human Physiology **gtPATHWAYS:**
BIOL 3244 - Human Anatomy **gtPATHWAYS:**
BIOL 3611 - General Cell Biology **gtPATHWAYS:**

BIOL 3654 - General Microbiology **gtPATHWAYS:**
BIOL 3832 - General Genetics **gtPATHWAYS:**
BIOL 4134 - Human Genetics **gtPATHWAYS:**
BIOL 4165 - Neurobiology **gtPATHWAYS:**
BIOL 4621 - Immunology **gtPATHWAYS:**
CHEM 4810 - General Biochemistry I **gtPATHWAYS:**

Total: 6-8 Hours

BS Major Total: 48-51 Hours

Additional elective courses in psychology, biology and chemistry may be taken up to the maximum of 56 hours.

PSYCHOLOGY BA REQUIREMENTS

Public Health BA

Director: David P. Tracer, Professor of Health and Behavioral Sciences and Anthropology
Office: Administration Building, 280
Telephone: 303-556-6792
Fax: 303-556-8501
E-mail: David.Tracer@ucdenver.edu

Website:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/hbsc/Programs/Bachelors/Pages/Bachelors.aspx

The Bachelor of Arts in Public Health consists of 43 credit hours in required classes. Each class must be completed with a grade of *C* (2.0) or higher to count for the major. The major classes for the BA degree are organized into four categories: (1) public health core, (2) quantitative methods, (3) biological sciences and (4) electives.

FOR BS IN PUBLIC HEALTH, CLICK HERE

Program Requirements

Public Health Required Courses

Seven courses (two still in development):

PBHL 2000 - Introduction to Public Health

PBHL 2020 - Introduction to Environmental Health **gtPATHWAYS:**
PBHL 3001 - Introduction to Epidemiology **gtPATHWAYS:**
PBHL 3070 - Global Public Health
PBHL 4040 - Social Determinants of Health **gtPATHWAYS:**
One health policy course and a capstone experience are still being developed. Check the Health and Behavioral Sciences bachelors programs website for current information.

Total: 23 Hours

Quantitative Methods

This one-course requirement may be fulfilled with a wide array of statistics courses offered in a number of disciplines. Examples include:

ANTH 4050, MATH 2830, MATH 4830, PSYC 3090, SOCY 3121

The particular class chosen to fulfill the quantitative methods requirement should be cleared with the undergraduate program director/advisor in advance.

Total: 3 Hours

Electives

The three-course electives requirement may be fulfilled from a wide array of over 100 courses offered in the College of Liberal Arts and Sciences. A listing of pre-approved classes is available online. Other classes may be chosen to fulfill the electives requirement, but must be cleared with the undergraduate program director/advisor in advance.

Total: 9 Hours

Public Health Core Total: 35 Hours

Biological Sciences Ancillary Courses

Choose two of the following (also fulfill the campuswide core requirement in biological and physical sciences):

BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1
-OR- BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
with BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1

BIOL 1560 - Basic Biology: From Cells to Organisms **gtPATHWAYS:** GT-SC1
-OR- ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1

Total: 8 Hours

Major Total: 43 Hours

Public Health BS

Director: David P. Tracer, Professor of Health and Behavioral Sciences and Anthropology
Office: Administration Building, 280
Telephone: 303-556-6792
Fax: 303-556-8501
E-mail: David.Tracer@ucdenver.edu

Website:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/hbsc/Programs/Bachelors/Pages/Bachelors.aspx

The Bachelor of Science in Public Health consists of 71 credit hours in required classes. Each class must be completed with a grade of *C* (2.0) or higher to count for the major. The major classes for the BS degree are organized into five categories: (1) public health core, (2) quantitative methods, (3) biological sciences, (4) additional math and science and (5) electives.

FOR BA IN PUBLIC HEALTH, CLICK HERE

Program Requirements

Public Health Required Courses

Seven courses (two still in development):

PBHL 2000 - Introduction to Public Health
PBHL 2020 - Introduction to Environmental Health **gtPATHWAYS:**
PBHL 3001 - Introduction to Epidemiology **gtPATHWAYS:**
PBHL 3070 - Global Public Health
PBHL 4040 - Social Determinants of Health **gtPATHWAYS:**
One health policy course and a capstone experience are still being developed. Check the Health and Behavioral Sciences bachelors programs website for current information.

Total: 23 Hours

Quantitative Methods

This one-course requirement may be fulfilled with a wide array of statistics courses offered in a number of disciplines. Examples include:

ANTH 4050, MATH 2830, MATH 4830, PSYC 3090, SOCY 3121

The particular class chosen to fulfill the quantitative methods requirement should be cleared with the undergraduate program director/advisor in advance.

Total: 3 Hours

Electives

The two-course electives requirement may be fulfilled from a wide array of over 100 courses offered in the College of Liberal Arts and Sciences. A listing of pre-approved classes is available online. Other classes may be chosen to fulfill the electives requirement, but must be cleared with the undergraduate program director/advisor in advance.

Total: 6 Hours

Public Health Core Total: 32 Hours

Biological Sciences Ancillary Courses

Take all of the following lecture/lab courses (also fulfill the campuswide core requirement in biological and physical sciences):

BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1

Total: 8 Hours

Additional Math and Science Ancillary Courses

Take all of the following:

CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1

CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**
CHEM 3421 - Organic Chemistry II **gtPATHWAYS:**
MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
(fulfills the math requirement for the campuswide core)
PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1
PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1

Total: 31 Hours

Major Total: 71 Hours

Sociology BA

Students must declare a major by the time they have completed 60 semester hours of course work. The major requires a total of 34 hours with an average grade of *C* (2.0) in all courses. At least 16 of the 34 hours must be upper-division (3000-4000 level) courses. The maximum number of hours allowed in sociology is 48.

Course Requirements

Core Courses

The core consists of the following group of courses, all of which must be completed with a grade of *C* (2.0) or better:

SOCY 1001 - Introduction to Sociology **gtPATHWAYS:** GT-SS3
SOCY 3001 - Urban Sociology **gtPATHWAYS:**
* SOCY 3111 - Research Methods **gtPATHWAYS:**
* SOCY 3121 - Statistics **gtPATHWAYS:**
* SOCY 4150 - History of Sociological Theory **gtPATHWAYS:**
* SOCY 4160 - Contemporary Sociological Theory **gtPATHWAYS:**

Total: 19 Hours

*Must be taken from Downtown Campus faculty

Electives: 15 Hours

Choose a minimum of 15 hours and a maximum of 29 hours of electives in sociology, with an average grade of *C* (2.0) in all courses.

Major Total: 34 Hours

All prospective majors should contact the department as early in their academic careers as possible for information and for assignment to a major advisor. Transfer or returning students should consult with the department chairman concerning completion of the core courses.

The department requires that at least 13 hours of sociology be taken from Downtown Campus faculty, including the following courses: SOC 3111, 3121, 4150 and 4160.

Spanish BA

The Spanish program studies the language, linguistics, literature, culture and civilization of Spain, Spanish America and the Spanish-speaking areas of the United States.

Admission and Grade Requirements

To be admitted to major status in Spanish, students must have an overall GPA of *C*+ (2.3). The minimum grade acceptable in any course applied to a Spanish major or minor is a *C* (2.0). The GPA in all courses applied to a Spanish major or minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a Spanish major or minor.

Residency Requirement

The BA in Spanish requires 30 semester hours of upper-division course work in Spanish and 6 additional hours in related fields. A minimum of 18 semester hours of Spanish course work for the major, and 9 hours for the minor, must be taken from Spanish faculty at CU Denver. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses.

Proficiency Requirement

Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.

Course Requirements for the Major

Students majoring in Spanish for the BA degree must complete 30 semester hours of upper-division course work, at least 12 of which must be at the 4000 level. All course work applied to the 30-semester-hour minimum must be taught in Spanish. In addition, students must complete 6 semester hours in courses in related fields outside the curriculum in Spanish.

Program Requirements

Language, Literature and Culture Track

LITERATURE

SPAN 3252 - Introduction to the Study of Literature **gtPATHWAYS:**
At least one course on the literature of Spain: **3 semester hours**
At least one course on the literature of Spanish America: **3 semester hours**

Total: 9 Hours

LANGUAGE SKILLS AND THEORY

SPAN 3060 - Hispanic Phonetics: Theory and Practice **gtPATHWAYS:**
6 additional hours in language skills and theory

Total: 9 Hours

CULTURE AND CIVILIZATION OF SPAIN OR SPANISH AMERICA

Choose two:

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact **gtPATHWAYS:**
SPAN 3212 - Spanish American Culture and Civilization **gtPATHWAYS:**
SPAN 3213 - Contemporary Latin American Culture and Institutions **gtPATHWAYS:**
SPAN 3221 - Culture and Civilization of Spain I **gtPATHWAYS:**
SPAN 3222 - Culture and Civilization of Spain II **gtPATHWAYS:**
SPAN 3223 - Contemporary Spanish Culture and Institutions **gtPATHWAYS:**
SPAN 3230 - Ibero-American Cultures through Film **gtPATHWAYS:**
SPAN 4230 - Modern Culture of Spain through Film and Narrative **gtPATHWAYS:**

Total: 6 Hours

ELECTIVES

Two SPAN electives, to be taken at the 4000 level

Total: 6 Hours

RELATED FIELDS

Choose 2 courses from the following fields of study (see Modern Languages departmental web site for a list of pre-approved courses):

Latin American studies (from fields such as history, geography, political science, art history)
Hispanic American studies
Linguistics (in the fields of anthropology or English)
Comparative literature
Upper-division courses in another foreign language

Total: 6 Hours

MAJOR TOTAL: 36 Hours

International Language and Culture for the Professions Track

This option in the Spanish major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. (However, students who wish to be certified to teach Spanish in the public schools should consult the department for information concerning the undergraduate language licensure program.)

International Spanish for the professions is a controlled-enrollment major that takes two years to complete. Interested students should contact the Spanish advisor in the Department of Modern Languages to declare the major. This should be done as early as possible in the student's academic career, but not later than the second semester of the sophomore year.

PREREQUISITES

(These courses do not count toward the major total of 45 semester hours)

ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1
ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1
MATH 1070 - Algebra for Social Sciences and Business **gtPATHWAYS:** GT-MA1
-OR- MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1
(or higher level math course)
SPAN 2110 - Second Year Spanish I **gtPATHWAYS:**
-OR- SPAN 2120 - Second Year Spanish II **gtPATHWAYS:**

REQUIRED SPANISH COURSES

SPAN 3082 - Introduction to Translation I **gtPATHWAYS:**
SPAN 3252 - Introduction to the Study of Literature **gtPATHWAYS:**
SPAN 3700 - Spanish for International Business I **gtPATHWAYS:**
SPAN 3710 - Spanish for International Business II **gtPATHWAYS:**

Total: 12 Hours

Two of the following language skills and theory courses:

SPAN 3010 - Advanced Conversation and Composition I **gtPATHWAYS:**
SPAN 3020 - Advanced Conversation and Composition II **gtPATHWAYS:**
SPAN 3060 - Hispanic Phonetics: Theory and Practice **gtPATHWAYS:**
SPAN 3310 - Spanish Writing and Grammar I **gtPATHWAYS:**

Total: 6 Hours

One of these must be either SPAN 3213 or 3223, while the other may be any of the following:

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact **gtPATHWAYS:**
SPAN 3212 - Spanish American Culture and Civilization **gtPATHWAYS:**
SPAN 3213 - Contemporary Latin American Culture and Institutions **gtPATHWAYS:**
SPAN 3222 - Culture and Civilization of Spain II **gtPATHWAYS:**
SPAN 3223 - Contemporary Spanish Culture and Institutions **gtPATHWAYS:**
SPAN 3230 - Ibero-American Cultures through Film **gtPATHWAYS:**

Total: 6 Hours

Electives

Two SPAN electives, to be taken at the 4000 level.

Total: 6 Hours

SPANISH TOTAL: 30 Hours

BUSINESS COURSES

(please be aware of prerequisites in business course descriptions)

ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
MGMT 1000 - Introduction to Business **gtPATHWAYS:**
MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**
MGMT 4400 - Environments of International Business **gtPATHWAYS:**
MKTG 3000 - Principles of Marketing **gtPATHWAYS:**

Business Total: 15 Hours

SPANISH BUSINESS OPTION TOTAL: 45 Hours

RECOMMENDED:

Language study abroad / international travel or field study
Internship in target language
Official proficiency exam

Undergraduate Licensure Program in Spanish

With this option, students complete a major in Spanish along with additional course work required for certification to teach Spanish in the public schools. This program should be chosen early in the students' careers. See the description of Undergraduate Teacher Licensure on the School of Education & Human Development (SEHD) Urban Community Teacher Education program page for more information. You may also contact the CLAS Advising Office (phone 303-556-2555 or visit North Classroom, 4002) and the Spanish advisor for more information.

Honors in Spanish

Students who complete all the requirements for the Spanish major (as outlined above) and meet the following criteria are encouraged to talk with the Spanish faculty about participation in the honors program. Successful completion of this program by students majoring in Spanish leads to graduation with the distinction of *cum laude*, *magna cum laude* or *summa cum laude*.

Cum laude

Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better

Magna cum laude or summa cum laude

Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better
—and—
6 semester hours of Spanish 4840, Independent Study, spread over two semesters. The candidate must present the independent study topic for approval by the faculty honors committee by the end of the semester preceding the independent study. At the end of the independent study project, and at least one month before the end of the second semester, the candidate shall submit a **written thesis** to the faculty honors committee.
The designation of *magna* or *summa* will be the decision of the faculty honors committee.

Theatre, Film and Television BA

All students pursuing a bachelor of arts (BA) in theatre, film and television complete a total of at least 53 semester hours for the major: 38 semester hours of foundation courses and 15 semester hours of approved electives. Each course must be completed with a C (2.0) or better. At least 24 of the major semester hours must be earned at CU Denver. Students must also follow the College of Arts and Media's **general degree requirements.**

Students in the theatre, film and video production program are required to know and abide by the policies and procedures outlined in the TFVP Student Handbook, available by contacting CAMadvising@ucdenver.edu.

Required Foundation Courses

TFVP 1050 - Video Production/Post-Production I **gtPATHWAYS:**
TFVP 1100 - Introduction to Theatre, Film, and Television **gtPATHWAYS:**
TFVP 1110 - Production Design: Theatre, Film and Video **gtPATHWAYS:**
TFVP 1550 - Scriptwriting I **gtPATHWAYS:**
TFVP 1611 - Acting Lab I **gtPATHWAYS:**
TFVP 2090 - Production Management Techniques **gtPATHWAYS:**
TFVP 2100 - Visual Culture **gtPATHWAYS:**
TFVP 2800 - Elements of Directing **gtPATHWAYS:**
TFVP 2810 - Introduction to Production Process **gtPATHWAYS:**
TFVP 3820 - Production Process **gtPATHWAYS:**
TFVP 3910 - BA Junior Project **gtPATHWAYS:**
TFVP 4910 - BA Senior Project **gtPATHWAYS:**

Select two courses from the following:

FILM 3070 - History of Silent Film Production **gtPATHWAYS:**
FILM 3080 - History of Sound Film Production **gtPATHWAYS:**
THTR 3610 - Performance: Theory/History/Criticism I **gtPATHWAYS:**
THTR 4610 - Performance: Theory/History/Criticism II **gtPATHWAYS:**

Approved Elective Courses

Select 15 semester hours from the following:

FILM 2050 - Film/Video Prod/Post II **gtPATHWAYS:**
FILM 2500 - Screenwriting: Short Scripts for Film and TV **gtPATHWAYS:**
FILM 3111 - Shooting Action and Physical Effects **gtPATHWAYS:**
FILM 3264 - Advanced Digital Effects **gtPATHWAYS:**
FILM 3270 - Film/Video Production III **gtPATHWAYS:**
FILM 3275 - Film and Video Postproduction III **gtPATHWAYS:**
FILM 3300 - Advanced Lighting for Film and Video **gtPATHWAYS:**
FILM 3350 - Editing Aesthetics **gtPATHWAYS:**
FILM 3400 - Intermediate Screenwriting **gtPATHWAYS:**
FILM 4270 - Film and Video Production IV **gtPATHWAYS:**
FILM 4280 - Film and Video Postproduction IV **gtPATHWAYS:**
FILM 4400 - Advanced Screenwriting **gtPATHWAYS:**
FILM 4500 - Writing for Episodic Television **gtPATHWAYS:**
FILM 4600 - Topics in Film **gtPATHWAYS:**
TFVP 3860 - Applications Seminar **gtPATHWAYS:**
THTR 2530 - Acting: Character and Staging **gtPATHWAYS:**
THTR 2560 - Topics in Theatre **gtPATHWAYS:**
THTR 2700 - Art for the Theatre **gtPATHWAYS:**
THTR 3530 - Acting: Character and Text **gtPATHWAYS:**
THTR 3560 - Topics in Theatre **gtPATHWAYS:**
THTR 3720 - Lighting Design **gtPATHWAYS:**
TFVP 3730 - Scenery Design **gtPATHWAYS:**
TFVP 3740 - Costume Design **gtPATHWAYS:**
THTR 4530 - Acting: Character and Media **gtPATHWAYS:**
THTR 4550 - Playwriting: The Short Form **gtPATHWAYS:**
THTR 4560 - Topics in Theater **gtPATHWAYS:**
THTR 4760 - Topics in Design **gtPATHWAYS:**
TFVP 4560 - Directors at Work **gtPATHWAYS:**
TFVP 4570 - Directing Practicum **gtPATHWAYS:**

Total for Program: 53 Hours

Theatre, Film and Television BFA

The Department of Theatre, Film and Video Production offers a bachelor of fine arts (BFA) program in film/theatre production or writing/directing. The BFA's goal is to provide training at a professional skill level while implementing overall departmental goals, culminating in a comprehensive review that requires successful completion of a portfolio and/or thesis project. The program prepares students to begin their careers with entry-level positions in their areas of study, start their personal creative work or continue their studies in a graduate program.

Emphases and Degree Requirements

All students pursuing a BFA in theatre, film and television complete a total of at least 78 semester hours for the major: 36 semester hours of foundation courses and 42 semester hours in an emphasis area. Students choose between emphases in film/theatre production and writing/directing; see detailed course requirements below. Each course must be completed with a C (2.0) or better. At least 24 of the major semester hours must be earned at CU Denver. Students must also follow the College of Arts & Media's **general degree requirements.**

Admission Procedures and Incoming Assessment Criteria for BFA

The first step for students seeking a BFA is to apply to the university and be accepted under the theatre, film and television bachelor of arts (BA) program. Typically, after at least three semesters and satisfactory completion of foundation sequence courses in theatre, video/television and film, the qualified student is able to audition/interview during spring semester for admittance into the BFA program the following fall.

Assessment for admission to the BFA program includes the following:

- *Cumulative Grade Point Average* of 2.75 or better in film, video and theatre course work.
- *Department Interview.* Each student is interviewed by members of the Theatre, Film and Video Production faculty to ascertain whether the student's aspirations and expectations are related to those of the BFA program.
- *Diagnostic Exam and Essay.* Students are required to take an objective examination and write an essay on material covered in the foundation sequence courses. This examination is offered during the spring semester.
- *Résumé.* The résumé should include theatre/film/video work experience and education to date.

Successful completion of foundation courses (see below) with a grade of C (2.0) or better in each course. Students should have at least 24 foundation semester hours completed or in progress at the time of application in spring semester. Note that the BFA foundation courses may also apply toward the Theatre, Film and Television BA degree requirements (for those who pursue the BA instead of the BFA).

Development and successful presentation of a portfolio of the student's work to date. Faculty review each student's classroom, studio and production work.

For further information, including annual spring semester application deadlines, please contact CAMadvising@ucdenver.edu.

Transfer Students

Transfer students are considered on a case-by-case basis. However, a minimum of at least one semester (12 semester hours) "residency" in the BA program is required before students can participate in spring audition/interviews for possible admittance into the BFA program. Students are only admitted to the BFA for fall semester.

Admission Deferment

Students admitted to the BFA program may defer their admission for one year, to the fall semester of the academic years following their original admission to the program. Students must contact the Theatre, Film and Video Production Department (303-556-2781) to formally request their deferment. If more than one year elapses after a student's semester of admission and that student has not begun BFA emphasis course requirements, full reapplication is required to attempt to pursue the BFA.

Student Handbook

All students in the theatre, film and video production program are required to know and abide by the policies and procedures outlined in the TFVP Student Handbook, available by contacting CAMadvising@ucdenver.edu.

Required Foundation Courses for Both Film/Theatre Production and Writing/Directing Emphases

TFVP 1050 - Video Production/Post-Production I **gtPATHWAYS:**
TFVP 1100 - Introduction to Theatre, Film, and Television **gtPATHWAYS:**
TFVP 1110 - Production Design: Theatre, Film and Video **gtPATHWAYS:**
TFVP 1550 - Scriptwriting I **gtPATHWAYS:**
TFVP 1611 - Acting Lab I **gtPATHWAYS:**
TFVP 2090 - Production Management Techniques **gtPATHWAYS:**

TFVP 2100 - Visual Culture **gtPATHWAYS:**
TFVP 2800 - Elements of Directing **gtPATHWAYS:**
TFVP 2810 - Introduction to Production Process **gtPATHWAYS:**
TFVP 3820 - Production Process **gtPATHWAYS:**

Select two courses from the following:
FILM 3070 - History of Silent Film Production **gtPATHWAYS:**
FILM 3080 - History of Sound Film Production **gtPATHWAYS:**
THTR 3610 - Performance: Theory/History/Criticism I **gtPATHWAYS:**
THTR 4610 - Performance: Theory/History/Criticism II **gtPATHWAYS:**

Total for Foundation: 36 Hours

Film and Theatre Production Emphasis Courses

Required Courses

FILM 2050 - Film/Video Prod/Post II **gtPATHWAYS:**
FILM 2060 - Film and Video Lighting and Grip **gtPATHWAYS:**
FILM 2640 - Introduction to Digital Effects **gtPATHWAYS:**
TFVP 3222 - Theatre, Film & Video Business **gtPATHWAYS:**
TFVP 3550 - Directing Process **gtPATHWAYS:**
TFVP 4090 - Senior Seminar & Project **gtPATHWAYS:**
TFVP 4095 - Senior Thesis Project **gtPATHWAYS:** (pass/fail)
ARTS 3939 - Internship **gtPATHWAYS:** (3 semester hours)

Approved Elective Courses

Select 18 semester hours from the following:

FILM 2500 - Screenwriting: Short Scripts for Film and TV **gtPATHWAYS:**
FILM 3111 - Shooting Action and Physical Effects **gtPATHWAYS:**
FILM 3264 - Advanced Digital Effects **gtPATHWAYS:**
FILM 3270 - Film/Video Production III **gtPATHWAYS:**
FILM 3275 - Film and Video Postproduction III **gtPATHWAYS:**
FILM 3300 - Advanced Lighting for Film and Video **gtPATHWAYS:**
FILM 3350 - Editing Aesthetics **gtPATHWAYS:**
FILM 3400 - Intermediate Screenwriting **gtPATHWAYS:**
FILM 4270 - Film and Video Production IV **gtPATHWAYS:**
FILM 4280 - Film and Video Postproduction IV **gtPATHWAYS:**
FILM 4400 - Advanced Screenwriting **gtPATHWAYS:**
FILM 4500 - Writing for Episodic Television **gtPATHWAYS:**
FILM 4600 - Topics in Film **gtPATHWAYS:**

THTR 2530 - Acting: Character and Staging **gtPATHWAYS:**
THTR 2560 - Topics in Theatre **gtPATHWAYS:**
THTR 2700 - Art for the Theatre **gtPATHWAYS:**
THTR 3530 - Acting: Character and Text **gtPATHWAYS:**
THTR 3560 - Topics in Theatre **gtPATHWAYS:**
THTR 3720 - Lighting Design **gtPATHWAYS:**
TFVP 3730 - Scenery Design **gtPATHWAYS:**
TFVP 3740 - Costume Design **gtPATHWAYS:**
TFVP 3860 - Applications Seminar **gtPATHWAYS:**
THTR 4530 - Acting: Character and Media **gtPATHWAYS:**
THTR 4550 - Playwriting: The Short Form **gtPATHWAYS:**
THTR 4560 - Topics in Theater **gtPATHWAYS:**
THTR 4730 - Advanced Scenic Design **gtPATHWAYS:**
TFVP 4570 - Directing Practicum **gtPATHWAYS:**

_____ - Upper-division Film Studies Course from the English Department (max of 6 semester hours)

_____ - Audio Production and Post Production Music Courses Related to Theatre, Film or Video (max of 6 semester hours)

Total for Film and Theatre Production Emphasis: 42 hours

Writing/Directing Emphasis Courses

Required Courses

FILM 2500 - Screenwriting: Short Scripts for Film and TV **gtPATHWAYS:**
TFVP 3550 - Directing Process **gtPATHWAYS:**
TFVP 4090 - Senior Seminar & Project **gtPATHWAYS:**
TFVP 4095 - Senior Thesis Project **gtPATHWAYS:** (pass/fail)

TFVP 4560 - Directors at Work **gtPATHWAYS:**
or
TFVP 4570 - Directing Practicum **gtPATHWAYS:**

THTR 3530 - Acting: Character and Text **gtPATHWAYS:**

____ - Internship (3 semester hours)

____ - Two Upper-division Screenwriting Courses (6 semester hours)

Approved Elective Courses

Select 15 semester hours from the following:

FILM 2050 - Film/Video Prod/Post II **gtPATHWAYS:**
FILM 2060 - Film and Video Lighting and Grip **gtPATHWAYS:**
FILM 2640 - Introduction to Digital Effects **gtPATHWAYS:**
FILM 3111 - Shooting Action and Physical Effects **gtPATHWAYS:**
FILM 3264 - Advanced Digital Effects **gtPATHWAYS:**
FILM 3270 - Film/Video Production III **gtPATHWAYS:**
FILM 3275 - Film and Video Postproduction III **gtPATHWAYS:**
FILM 3300 - Advanced Lighting for Film and Video **gtPATHWAYS:**
FILM 3350 - Editing Aesthetics **gtPATHWAYS:**
FILM 3400 - Intermediate Screenwriting **gtPATHWAYS:**
FILM 4270 - Film and Video Production IV **gtPATHWAYS:**
FILM 4280 - Film and Video Postproduction IV **gtPATHWAYS:**
FILM 4400 - Advanced Screenwriting **gtPATHWAYS:**
FILM 4500 - Writing for Episodic Television **gtPATHWAYS:**
FILM 4600 - Topics in Film **gtPATHWAYS:**
TFVP 3222 - Theatre, Film & Video Business **gtPATHWAYS:**
TFVP 3860 - Applications Seminar **gtPATHWAYS:**
THTR 2530 - Acting: Character and Staging **gtPATHWAYS:**
THTR 2560 - Topics in Theatre **gtPATHWAYS:**
THTR 2700 - Art for the Theatre **gtPATHWAYS:**
THTR 3560 - Topics in Theatre **gtPATHWAYS:**
THTR 3720 - Lighting Design **gtPATHWAYS:**
TFVP 3730 - Scenery Design **gtPATHWAYS:**
TFVP 3740 - Costume Design **gtPATHWAYS:**
THTR 4530 - Acting: Character and Media **gtPATHWAYS:**
THTR 4550 - Playwriting: The Short Form **gtPATHWAYS:**
THTR 4560 - Topics in Theater **gtPATHWAYS:**
THTR 4760 - Topics in Design **gtPATHWAYS:**

Upper-division Film Studies Courses from the English Department (max of 6 hours)

Audio Production and Post Production Music Courses Related to Theatre, Film or Video (max of 6 semester hours)

Total for Writing/Directing Emphasis: 42 Hours

Undergraduate Minors

Anthropology Minor

A minimum of 18 semester hours in anthropology must be completed with an average of *C* (2.0) or better. Nine of the 18 hours must be upper division and 9 hours must be taken from CU Denver faculty.

Program Requirements

Required Courses

Choose a minimum of three courses from the following:

ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3
ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1
ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
ANTH 3101 - Foundations of Cultural Anthropology **gtPATHWAYS:**
ANTH 3301 - World Prehistory **gtPATHWAYS:**
ANTH 3512 - Human Evolution **gtPATHWAYS:**

Total: 9-11 Hours

Elective Courses

Total: 7-9 Hours

Minor total: 18 Hours

Art History Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver. Each course must be completed with a C (2.0) or better. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in art history may not pursue a minor in art history. Consult a CAM advisor for further details.

Program Requirements

FINE 2600 - Art History Survey I **gtPATHWAYS:**
FINE 2610 - Art History Survey II **gtPATHWAYS:**
____ - Upper-division Art History Electives (9 semester hours)
____ - Studio Arts Elective (3 semester hours)

Total: 18 Hours

Astrophysics Minor

Astrophysics is an important and well-represented subdiscipline of physics. It includes the study of the solar system, galactic and extra-galactic astrophysics, as well as cosmology. A minor in this field combines a theoretical approach with observational analysis. There is also opportunity to do research in this field.

While the Department of Physics offers minors in both physics and astrophysics, it is not possible to receive minors in both fields. A physics minor is not an option for physics majors.

The astrophysics minor requires a total of 17 semester hours, in which no grade below a *C* (2.0) may be used to meet the requirements for the minor. At least 6 semester hours taken for the minor must be completed at the Denver Campus. Requirements for the minor in astrophysics may be used to fulfill the requirements of the major in physics. However, a student majoring in physics who wants to minor in astrophysics needs to take 15 semester hours in astrophysics that do not overlap with the major.

Program Requirements

Required Physics Courses:

PHYS 1052 - General Astronomy I **gtPATHWAYS:** GT-SC1

Either of the following two sequences:

PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1
PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1
Sequence Total: 10 Hours
-OR-
PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**

PHYS 2341 - General Physics Lab II **gtPATHWAYS:**

Sequence Total: 10 Hours

Total Required Courses: 14 Hours

Elective Physics Courses

Choose one:

PHYS 3040 - Modern Cosmology **gtPATHWAYS:**
PHYS 3050 - General Astronomy II **gtPATHWAYS:**
PHYS 3082 - Energy and the Environment **gtPATHWAYS:**
PHYS 3411 - Thermal Physics **gtPATHWAYS:**
PHYS 3820 - Subatomic Physics **gtPATHWAYS:**
* PHYS 3840 - Independent Study: PHYS **gtPATHWAYS:**
PHYS 3939 - Internship **gtPATHWAYS:**
PHYS 4510 - Optics **gtPATHWAYS:**
PHYS 4550 - Astrophysics **gtPATHWAYS:**
* PHYS 4840 - Independent Study: PHYS **gtPATHWAYS:**
* PHYS 4920 - Advanced Undergraduate Seminar **gtPATHWAYS:**
* PHYS 4931 - Internship in Applied Physics **gtPATHWAYS:**
* PHYS 4980 - Advanced Physics Topics **gtPATHWAYS:**

Total Electives: 3 Hours

Minor Total: 17 Hours

*Topics in these classes vary, as do the number of credits which can be earned. See departmental advisor for approval.

Biology Minor

For a biology minor, students must complete all biology core requirements (22 hours), of which a minimum of 9 hours must be completed in residence at CU Denver. The minimum grade in each CU Denver course is *C*- (1.7); however, a GPA of 2.5 is required in biology courses taken at CU Denver to complete the minor. In addition, students must complete one year of general chemistry including laboratory with a grade of *C*- (1.7) or higher.

Course Requirements

BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1
BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
BIOL 3411 - Principles of Ecology **gtPATHWAYS:**
-OR- BIOL 3412 - Fundamentals of Applied Ecology **gtPATHWAYS:**
BIOL 3611 - General Cell Biology **gtPATHWAYS:**
BIOL 3832 - General Genetics **gtPATHWAYS:**

One of the following structure/function courses:

BIOL 3225 - Human Physiology **gtPATHWAYS:**
BIOL 3244 - Human Anatomy **gtPATHWAYS:**
BIOL 3654 - General Microbiology **gtPATHWAYS:**
BIOL 4335 - Plant Science **gtPATHWAYS:**

Ancillary chemistry courses:

CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1

Minor Total: 31 Hours

Business Administration Minor

Students in other undergraduate schools and colleges at the Denver campus wishing to take a minor in business administration must have a 2.0 GPA to enter as a business minor plus a 2.0 GPA in business courses.

Prerequisites

ISMG 2050 - Introduction to Business Problem Solving **gtPATHWAYS:**

MATH 1070 - Algebra for Social Sciences and Business **gtPATHWAYS:** GT-MA1 or
MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1 and
MATH 1080 - Polynomial Calculus **gtPATHWAYS:** GT-MA1

DSCI 2010 - Business Statistics **gtPATHWAYS:** or
a statistics class approved by the Business School and
ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1

Required Courses

MGMT 1000 - Introduction to Business **gtPATHWAYS:**
ACCT 2200 - Financial Accounting and Financial Statement Analysis **gtPATHWAYS:**
BLAW 3000 - Legal and Ethical Environments of Business I **gtPATHWAYS:**
MKTG 3000 - Principles of Marketing **gtPATHWAYS:**
FNCE 3000 - Principles of Finance **gtPATHWAYS:**
MGMT 3000 - Managing Individuals and Teams **gtPATHWAYS:**

Twelve of these 18 hours must be taken while in residence at the Denver campus. If the student has already taken the equivalent of one or more of these courses, other higher-level business courses may be substituted with Business School approval. Up to 6 hours of the 18 required business courses may be taken at another institution. Transfer credit will be granted on the same basis that transfer credit is granted for courses taken by business majors.

Chemistry Minor

The objective of the chemistry minor is to provide broad introductory course work and laboratory experience to science majors without the more technical mathematical and chemical prerequisites required of the chemistry major. The chemistry minor is open to all CLAS students and should prove beneficial for science majors, pre-professional health science majors and students seeking science education certification.

Course work and grade requirements that must be satisfied to obtain a chemistry minor include:

- a minimum of 20 semester hours of chemistry courses, including at least 10 at the upper division level
- upper-division course work must include three of the six subdisciplines that comprise chemistry: analytical, biochemistry, inorganic, organic, physical and environmental chemistry
- a minimum 2.0 GPA for chemistry courses taken at CU Denver
- all chemistry minor courses must be taken for a letter grade rather than with the pass/fail grading option
- to satisfy the department residency requirement, a minimum of 7 upper-division hours of chemistry must be taken at the Denver campus

Course Requirements

All upper division chemistry courses at CU Denver will satisfy course work requirements for the minor. Furthermore, the Department of Chemistry offers courses that have minimum chemistry and mathematics prerequisites and should be considered for the

chemistry minor degree. Choose from the following suggested courses, or other electives approved by your chemistry minor advisor.

Analytical

CHEM 3111 - Analytical Chemistry **gtPATHWAYS:**
CHEM 3118 - Analytical Chemistry Laboratory **gtPATHWAYS:**

Biochemistry

CHEM 3810 - Biochemistry **gtPATHWAYS:**

Organic

CHEM 3411 - Organic Chemistry I **gtPATHWAYS:**
CHEM 3418 - Organic Chemistry Laboratory I **gtPATHWAYS:**
CHEM 3421 - Organic Chemistry II **gtPATHWAYS:**
CHEM 3428 - Organic Chemistry Laboratory II **gtPATHWAYS:**
CHEM 3498 - Honors Organic Chemistry Laboratory II **gtPATHWAYS:**

Inorganic

CHEM 3011 - Inorganic Chemistry **gtPATHWAYS:**

Physical

Course selections to be announced.

Environmental

CHEM 4700 - Environmental Chemistry **gtPATHWAYS:**

MINOR TOTAL: 20 HOURS (minimum)

To register your minor in chemistry, please visit the CLAS advising office in NC 4002. After establishing your minor status, you are encouraged to meet with the chemistry minor advisor, Professor Mark Anderson in NC 3002C.

Chinese Studies Minor

The minor requires a total of 21 semester hours. A minimum of 15 semester hours must be taken from Denver campus faculty. All courses must be completed with a grade of *C* (2.0) or better.

Requirements for the Minor

Required Courses

* CHIN 1000 - China and the Chinese **gtPATHWAYS:** GT-AH1
CHIN 1010 - Beginning Chinese I **gtPATHWAYS:**
CHIN 1020 - Beginning Chinese II **gtPATHWAYS:**

Total: 13 Hours

**Note:* CHIN 1000 should be taken toward the beginning of the minor.

Additional Courses

An additional 8 hours of course work should be selected from the following list of courses:

ANTH 4000 - Special Topics in Anthropology **gtPATHWAYS:**
CHIN 2110 - Second Year Chinese I **gtPATHWAYS:**
CHIN 2120 - Second Year Chinese II **gtPATHWAYS:**
CHIN 3200 - Contemporary Chinese Society and Culture **gtPATHWAYS:**
FINE 4750 - Arts of China **gtPATHWAYS:**
GEOG 3160 - Geography of China **gtPATHWAYS:**
HIST 4420 - Traditional China: China to 1600 **gtPATHWAYS:**
HIST 4421 - Modern China **gtPATHWAYS:**
PSCI 4186 - East Asia in World Affairs **gtPATHWAYS:**
PSCI 4615 - Politics and Government of China **gtPATHWAYS:**
PSCI 4726 - Russian and Chinese Foreign Policy **gtPATHWAYS:**
PHIL 3666 - Asian Philosophies and Religions **gtPATHWAYS:**
PHIL 3981 - Chinese Philosophy and Culture **gtPATHWAYS:**

China-related travel study, taken under the following course numbers:

ANTH 4995 - Travel Study **gtPATHWAYS:**
CHIN 3995 - Travel Study **gtPATHWAYS:**
COMM 4995 - Travel Study **gtPATHWAYS:**
PSCI 4995 - Travel Study **gtPATHWAYS:**

Total: 8 Hours

Minor Total: 21 Hours

Note: New courses may not appear in the course description section of this catalog. Contact the department for further information.

Communication Minor

Knowledge in any area of study, whether in business, politics, biology or sociology, means little unless it can be communicated effectively. The minor in communication is designed to provide students who are not communication majors with knowledge and skills in communication that are useful in any discipline or profession.

The minor in communication requires 18 semester hours, with 12 hours of required courses and 6 hours of electives.

Requirements

Core Courses

COMM 1011 - Fundamentals of Communication **gtPATHWAYS:** GT-SS3
COMM 2020 - Communication, Citizenship, and Social Justice **gtPATHWAYS:**
COMM 2101 - Presentational Speaking **gtPATHWAYS:**
-OR- COMM 2050 - Business and Professional Speaking **gtPATHWAYS:**
COMM 4200 - Persuasion **gtPATHWAYS:**

Total: 12 Hours

Elective Courses

In addition to the four courses specified above, students must take two upper-division courses (3000 level or above) to be selected with the aid of the undergraduate advisor in communication.

Total: 6 Hours

Minor Total: 18 Hours

Grade and Residency Requirements for Minors

A grade of *C* (2.0) or better must be earned in each course completed as part of the minor. No more than 6 of the semester hours for the minor may be transferred from another university.

Computer Science Minor

The Department of Computer Science and Engineering offers a minor in computer science. The requirements for the minor are listed below.

Program Requirements

1. Any undergraduate student currently enrolled in a CU Denver degree program with a major other than computer science and engineering may earn a minor in computer science. This includes students from the College of Engineering and Applied Science, the College of Liberal Arts and Sciences, the Business School, the College of Arts & Media and the School of Public Affairs.
2. The student must complete the following classes with a grade of *C*- or better:

MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
CSCI 1410 - Fundamentals of Computing **gtPATHWAYS:**
CSCI 1411 - Fundamentals of Computing Laboratory **gtPATHWAYS:**
CSCI 2312 - Intermediate Programming **gtPATHWAYS:**
CSCI 2421 - Data Structures and Program Design **gtPATHWAYS:**
CSCI 2511 - Discrete Structures **gtPATHWAYS:**

3. The student must complete (with a *C*- or better) three additional computer science courses at the 3000 level or higher with the approval of an undergraduate advisor.
Note: Some courses at the 3000 level and above require additional prerequisites. A student must fulfill all prerequisites for the courses he/she selects. See the catalog course descriptions for prerequisite information for each course.
4. All computer science courses 3000 level and above must be taken at the Denver campus.
5. At the time of graduation, the student must have a UC Denver cumulative GPA of 2.0 and must have a 2.0 GPA for the eight classes taken for the minor.
6. The student must file a minor declaration form with an undergraduate advisor or with the Engineering Student Services office in North Classroom, 3024. For more information or an advising appointment, contact the Department of Computer Science and Engineering in North Classroom, 2605, or by phone at 303-556-4314.

Creative Writing Minor

The creative writing minor gives students the opportunity to complement their area of major study with experience writing and reading poetry or fiction.

Students minoring in creative writing must complete a total of 15 hours. None of the required courses may be taken pass/fail. Only courses completed with a grade of *C* (2.0) or better may be counted toward the minor. All upper-division courses must be taken with CU Denver English faculty. Students should take ENGL 1020 before beginning the minor. Courses in a minor cannot be counted toward the English major or English Writing major; consult an English advisor for substitutions.

Courses

Required Courses

ENGL 2154 - Introduction to Creative Writing **gtPATHWAYS:**
ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
ENGL 3020 - Poetry Workshop **gtPATHWAYS:**
-OR- ENGL 3050 - Fiction Workshop **gtPATHWAYS:**

Total: 9 Hours

Area Requirements

Choose one corresponding poetry or fiction course:

ENGL 4025 - Advanced Poetry Workshop **gtPATHWAYS:**
ENGL 4055 - Advanced Fiction Workshop **gtPATHWAYS:**
ENGL 3____ Writing Workshop (3000-level not previously taken)

Total: 3 Hours

Elective in Genre of Specialization

Poetry: Students who have taken ENGL 3020, choose one from the following:
ENGL 4160 - Poetics **gtPATHWAYS:**
ENGL 4166 - History of American Poetry **gtPATHWAYS:**
ENGL 4320 - History of Poetry in English **gtPATHWAYS:**

Fiction: Students who have taken ENGL 3050, choose one from the following:
ENGL 4200 - History of the English Novel I **gtPATHWAYS:**
ENGL 4210 - History of the English Novel II **gtPATHWAYS:**
ENGL 4230 - The American Novel **gtPATHWAYS:**
ENGL 4236 - The American Short Story **gtPATHWAYS:**

Total: 3 Hours

Minor Total: 15 Hours

Criminal Justice Minor

Program Requirements

A minor in criminal justice requires 18 semester hours of course work including the following:

CRJU 1001 - Introduction to Criminal Justice **gtPATHWAYS:**
CRJU 2041 - Crime Theory and Causes **gtPATHWAYS:**

Total: 6 Hours

At least one of the following

CRJU 4042 - Corrections **gtPATHWAYS:**
CRJU 4043 - Law Enforcement **gtPATHWAYS:**
CRJU 4044 - Courts and Judicial Process **gtPATHWAYS:**

Total: 3-9 Hours

One to three additional elective courses in criminal justice or ancillary fields.

Demography Minor

Demography is the scientific study of human populations. It is an interdisciplinary field that examines the causes and consequences of health and mortality, population aging, migration, fertility, maternal and child health, interactions between human populations and the environment and population growth and decline.

Students working toward a minor in demography within the Department of Health and Behavioral Sciences (HBS) will acquire focused training in theories and methods of demography. The minor will help students develop important skills in critical thinking and quantitative reasoning, and will prepare them for graduate-level training in demography or related fields and for jobs requiring an understanding of population dynamics. Demographers are frequently employed in occupations including academia, risk assessment, marketing, consulting, non-profits and various local, state and federal government agencies.

For more information, email demographyminor@ucdenver.edu.

Program Requirements for the Minor

All students must complete a **minimum of 18 credits drawn from the approved course list** (see below). Although students may count courses taken for other majors or minors toward the requirements for the demography minor, they must still take at least **18 credits that count exclusively toward the demography minor**.

All undergraduate CU Denver students are eligible to take this minor, and must achieve a *C* (2.0) or above in all the courses for them to be counted toward the minor. A minimum of 15 credit hours, at least 12 of which must be upper division courses, must be taken in residence at CU Denver.

Note: Students should check for prerequisites when enrolling in courses.

Survey Courses

Students must choose at least one **of the following; both** may **be counted toward the minor:**

HBSC 2051 - Introduction to Population Studies **gtPATHWAYS:**
SOCY 4220 - Population Change and Analysis **gtPATHWAYS:**

Quantitative Methods

Must choose at least one **of the following; additional courses** may not **count toward the minor:**

MATH 2830 - Introductory Statistics **gtPATHWAYS:** GT-MA1
HBSC 3001 - Introduction to Epidemiology **gtPATHWAYS:**
PBHL 3001 - Introduction to Epidemiology **gtPATHWAYS:**

Strong Demographic Themes

Must choose at least one **of the following; more** may **count toward the minor:**

ANTH 4260 - Human Reproductive Ecology **gtPATHWAYS:**
HBSC 3071 - Global Topics in Sexual and Reproductive Health **gtPATHWAYS:**
HBSC 4020 - Global Health: Comparative Public Health Systems **gtPATHWAYS:**
HBSC 4040 - Social Determinants of Health **gtPATHWAYS:**
SOCY 3520 - Topics in Sociology **gtPATHWAYS:** (when offered as Medical Sociology topic)
SOCY 4440 - Social Inequality **gtPATHWAYS:**

Other Electives

These courses may be used to fulfill remaining credits:

BIOL 3412 - Fundamentals of Applied Ecology **gtPATHWAYS:**
ECON 3100 - Economics of Race and Gender **gtPATHWAYS:**
ECON 3400 - Economics of Sex and Drugs **gtPATHWAYS:**
GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2
GEOG 3300 - Population and Resources in the World Environment **gtPATHWAYS:**
GEOG 3501 - Geography of Health **gtPATHWAYS:**
HBSC 3002 - Ethnicity, Health and Social Justice **gtPATHWAYS:**
HBSC 3031 - Health, Human Biology and Behavior **gtPATHWAYS:**
HBSC 3200 - Human Migration: Nomads, Sojourners, and Settlers **gtPATHWAYS:**
-OR- ANTH 3200 - Human Migration: Nomads, Sojourners, and Settlers **gtPATHWAYS:**
HBSC 4200 - The Global HIV/AIDS Epidemic **gtPATHWAYS:**
-OR- HBSC 5200 - The Global HIV/AIDS Epidemic **gtPATHWAYS:**
PSCI 4545 - Immigration Politics **gtPATHWAYS:**
SOCY 3700 - Sociology of the Family **gtPATHWAYS:**
SOCY 4772 - Advanced Topics in Sociology **gtPATHWAYS:** (when offered as Crime and Inequality Over the Life Course topic)

Digital Design Minor

The digital design program emphasis integrates aesthetic, creative, and critical thought with expertise in advanced electronic media. Configured as an interdisciplinary arts and design laboratory, digital design offers a hands-on education combining new art technologies and design concepts in a concentrated theoretical framework that promotes an understanding of the cultural impact and uses of digital technologies. Through this interdisciplinary approach of combining arts and communication, digital design strives to produce artists and designers who will use technology in innovative ways in both commercial and artistic spheres.

Students who are applying for an entrance into the digital design emphasis or the digital design minor are required to submit a written statement, a designed portfolio, and transcript(s) (official or unofficial) from CU Denver and all previous higher education institutions. The digital design course sequence starts in the fall semester. Students who meet the following requirements may apply. Upon acceptance students can register for upper-division digital design classes.

University of Colorado Denver Students

You have completed, or are in the process of completing, the following foundation studio classes: FINE 1100, FINE 1400, FINE 2015, FINE 2405 and FINE 2415.

(FINE 2405 and FINE 2415 should be taken after a student's freshman year and are offered only in fall.)

A cumulative fine arts/art history GPA of 2.70.

Transfer Students

You have completed, and are transferring, a minimum of 24 credit hours from a previous institution.

You have completed, or are in the process of completing, the equivalents of the following foundation studio classes: FINE 1100, FINE 1400, FINE 2405 and FINE 2415.

A cumulative fine arts/art history GPA of 2.70.

APPLICATION PORTFOLIO REQUIREMENTS

Properly prepared application packets must be uploaded to http://designucd.com by 5 p.m. on November 1 or on the following business day if the deadline falls on a weekend or holiday. Students should register and create a page one week prior to uploading so that they understand how to format and prepare work.

Applications are only accepted online and must be formatted to the specifications listed on http://designucd.com/portfolio. The portfolio samples should consist of images (jpgs) and embedded video. Written work may be in .PDF format or integrated into the submission. **It is VERY important for students to visit the submission page early and begin uploads one week before the due date.** Late submissions due to technical difficulties on the part of the applicant will NOT be accepted.

The Evaluation Process

A committee of digital design faculty members reviews the application packet. The decision for admission into the digital design program is based on the portfolio, written statement and grades/GPA. For acceptance, the committee looks for a high level of skill and sophistication in studio, written and presentation skills.

If not admitted into the digital design program, a student has the choice of attempting the review process again the following year or selecting another program. Students not admitted into the digital design program are encouraged to schedule a meeting with a digital design faculty member to learn of ways to improve portfolios for future admissions.

Portfolios are evaluated based on organization, craft, quality, creativity of ideas, compositional skills, concepts and consistency. Additional evaluation is based on the applicant's statement and overall fine arts performance to date.

The application is evaluated on the following criteria:

Presentation - Is the portfolio well crafted and well organized in content and presentation? Are all of the required components included?

- **Visual Literacy** - Does the portfolio reflect sensitivity to design concepts and visual logic, and does it demonstrate fundamental compositional understanding? Does the work communicate effectively?
- **Technical Skill** - Does the portfolio reflect a strong knowledge of tools and materials and a strong aptitude for digital design skills?
- **Conceptual Skills** - Do the portfolio and written statement demonstrate analytical thinking as it applies to visual art and design? Is there a developing conceptual exploration of the digital medium?
- **Written Statement** - Does the statement reflect an understanding of digital design and explain your goals as a student in the digital design program? Are potential strengths and weaknesses addressed clearly?
- **Academic Performance** - Do your grades reflect a commitment to learning and growth?

Portfolio

- The portfolio must include 10-12 electronic examples of your creative work. At least four portfolio works must be taken from Intro to Digital Design or Typography. Additional works may comprise design, drawing, sculpture, photography, installation, painting, video, etc.
- All artwork must include a corresponding brief explanation of the concept and creative process behind each piece.

Written

The written statement should address all of the following in a clear, detailed and accurate essay no more than two pages in length. The content of the answers has significant impact on the committee's decision whether to offer admission to the digital design program.

- The applicant describes why he or she would like to be a designer in the digital design program and what goals and expectations the applicant has regarding design as a career. Include any special considerations that would be useful for the committee in making a decision, such as a high GPA, art-related extracurricular activities or relevent professional experience.
- The applicant reflects on the artists and designers who have influenced his or her artistic interests. Use at least two examples of their work, discussing both form and content.
- The applicant identifies their creative strengths and areas that need further development. How will the applicant best utilize strengths? How does the applicant plan to resolve any deficiencies in work and performance?

Course Transcripts

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions.

Questions

Please contact CAMadvising@ucdenver.edu for program and portfolio information, or contact the digital design area head, Brian DeLevie, at brian.delevie@ucdenver.edu.

Those applying to the minor (and not the major) are not required to complete the following courses or their college-level equivalents:

FINE 1100 - Drawing I
FINE 1400 - Two Dimensional Design
FINE 2015 - Intermedia Foundations

However, students must show equivalent studio work in their application portfolios.

Additional Information about the Minor

All courses for the minor must be taken at CU Denver unless approved otherwise by the digital design faculty advisor. Each course must be completed with a C (2.0) or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 9 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to major requirements. Students pursuing a major in any of the studio arts may not pursue a digital design minor. Consult a CAM advisor for further details.

Minor Course Requirements

FINE 2405 - Introduction to Digital Design **gtPATHWAYS:**
FINE 2415 - Typography Studio **gtPATHWAYS:**
FINE 3414 - Motion Design I **gtPATHWAYS:**
FINE 3415 - Design Studio I **gtPATHWAYS:**
FINE 3424 - Interactive Media **gtPATHWAYS:**
FINE 3434 - 3D Motion Design **gtPATHWAYS:**
FINE 4632 - Media History and Aesthetics **gtPATHWAYS:**

Total: 21 Hours

Economics Minor

Students minoring in economics must complete a minimum of 15 semester hours in economics. All course work must be completed at CU Denver or the Department of Economics reserves the right to test the student's competence in the material covered. No grade below *C*- will be counted toward the minor requirements.

Courses

ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1

ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1

—plus—

Three upper-division electives in economics: **9 semester hours**
(ECON 3100 - Economics of Race and Gender is acceptable)

Total: 15 Hours

At least two upper-division courses must not overlap with courses required in the student's major program.

Educational Studies Minor

The preparation of high-quality K–12 teachers is dependent on both content knowledge and teaching methodologies. The College of Liberal Arts and Sciences, in cooperation with the School of Education & Human Development, offers an educational studies minor to assist undergraduate students unable to fit licensure course work into their bachelor's degree and to prepare them for the graduate-level licensure programs.

The CLAS educational studies minor is flexible in design and individually tailored for each student to complete some content requirements required for admission into the graduate-level teacher licensure programs at UC Denver. The educational studies minor requires course work in psychology and human development, democratic schooling principles, a K–12 internship and undergraduate course work required for licensure outside college and major requirements.

The educational studies minor is open to all Downtown Campus undergraduate students. For more information, students should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555.

Environmental Sciences Minor

The environmental sciences minor offers students exposure to the breadth of environmental issues. Students may emphasize the natural/physical sciences, the social sciences and humanities or structure their own mixed emphasis.

Program Requirements

Lecture/Laboratory Courses

Choose two lecture/laboratory courses (see Note 2):

BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1

and BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1
BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1
and BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1
CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1
and CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1
CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1
and CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1
ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1
GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1
GEOL 1082 - Physical Geology: Internal Processes **gtPATHWAYS:** GT-SC1
PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
and PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1
and PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1

Total: 8-10 Hours

Upper-division Courses

Choose three upper-division courses outside of the student's major discipline from the following list (see Notes 5 and 6):

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
BIOL 3411 - Principles of Ecology **gtPATHWAYS:**
CHEM 4700 - Environmental Chemistry **gtPATHWAYS:** (see note 4)
ECON 4540 - Environmental Economics **gtPATHWAYS:**
ENVS 3082 - Energy and the Environment **gtPATHWAYS:**
-OR- PHYS 3082 - Energy and the Environment **gtPATHWAYS:**
GEOG 3232 - Weather and Climate **gtPATHWAYS:**
GEOG 3240 - Colorado Climates **gtPATHWAYS:**
GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
-OR- ENVS 5020 - Earth Environments and Human Impacts **gtPATHWAYS:**
GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
-OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**
GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
-OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**

GEOG 4220 - Environmental Impact Assessment **gtPATHWAYS:**
-OR- GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
-OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
GEOG 4240 - Principles of Geomorphology **gtPATHWAYS:**
GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
-OR- GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
GEOG 4270 - Glacial Geomorphology **gtPATHWAYS:**
GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
-OR- GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
GEOG 4350 - Environment and Society in the American Past **gtPATHWAYS:**
-OR- GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
GEOL 4030 - Environmental Geology **gtPATHWAYS:**
HIST 4232 - Historic Preservation **gtPATHWAYS:**
HIST 4810 - Special Topics **gtPATHWAYS:**
PSCI 4354 - Environmental Politics **gtPATHWAYS:**

Total: 9 Hours

Minor Total: 17-19 Hours

Notes:

All work submitted for an environmental sciences minor must have a grade of *C* (2.0) or above.
The lecture/laboratory sequence can be part of the requirements for the major, but not in the student's major department (i.e., a biology major cannot use the general biology sequence, but could use the general chemistry sequence, which is also required for the biology major).
Students must take a minimum of 9 hours of the upper-division courses at the Downtown Campus.
If the student plans to go on to the MS in environmental sciences program, he/she should choose courses other than CHEM 4700. This is a core course in the MS in environmental sciences program.
Many of the upper-division courses have prerequisites; the student must check the catalog for prerequisite requirements for these courses.
The four upper-division elective courses for the environmental sciences minor cannot be from the student's major discipline, even if the particular course is not counted toward the major.

Ethics Minor

A total of 15 semester hours is required for an ethics minor, with a minimum grade of *C* (2.0) in each course.

Required Courses

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community **gtPATHWAYS:** GT-AH3

Choose four:

PHIL 3150 - History of Ethics **gtPATHWAYS:**
PHIL 3200 - Social and Political Philosophy **gtPATHWAYS:**
PHIL 3250 - Business Ethics **gtPATHWAYS:**
PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
PHIL 3939 - Internship **gtPATHWAYS:**
PHIL 4150 - Twentieth Century Ethics **gtPATHWAYS:**
PHIL 4242 - Bioethics **gtPATHWAYS:**

Minor Total: 15 Hours

For those students who major in philosophy and minor in ethics, no course can satisfy the requirements for both. For example, if a student takes PHIL 4150, Twentieth Century Ethics, it cannot satisfy the requirement in the major for a course in 19th or 20th century philosophy.

Ethnic Studies Minor

Requirements for the Minor

The minor in ethnic studies offers students the opportunity to enhance and broaden the body of knowledge acquired in their chosen majors and to apply it in a variety of careers involving intercultural relations. Students are required to complete 18 semester hours (6 courses) in ethnic studies with a grade of *C* or better. These hours are to be taken with CU Denver faculty (any exception needs to be approved by the ethnic studies advisor). At least 9 of the required 18 hours must be in courses numbered 3000 or above.

The 18 hours required for the minor must be distributed as follows:

Core Courses

ETST 2000 - Introduction to Ethnic Studies **gtPATHWAYS:** GT-SS3

Total: 3 Hours

Additional Courses

Select four upper- or lower-division ETST courses from the following four focal U.S. racial/ethnic groups

- Asian-Americans
- African-Americans
- American Indians
- Chicanos/as and Latinos/as

Total: 12 Hours

Elective

ETST elective course of your choice.

Total: 3 Hours

Minor Total: 18 Hours

Film Studies Minor

The film studies minor offers students the opportunity to gain an informed understanding of the sophisticated medium of film, its language and history. Courses cover critical writing about cinema, creative screenwriting, the evolution of Hollywood movies, international cinema and film in its cultural context. The film studies minor makes a valuable complement to a range of undergraduate majors.

Students must complete a total of 15 hours for the film studies minor. None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of *C* (2.0) or better may be counted toward the minor. A minimum of 9 hours must be taken with CU Denver faculty. Students are also advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division topics in film courses. No more than two online film studies courses can be counted toward the minor. Courses in a minor cannot be counted toward the English major or English Writing major; consult an English advisor for substitutions. [Courses marked by an asterisk are repeatable if taken as a different genre/director/topic.]

Courses

Required Courses

ENGL 2250 - Introduction to Film **gtPATHWAYS:**
ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
ENGL 3070 - Film History I **gtPATHWAYS:**
-OR- ENGL 3080 - Film History II **gtPATHWAYS:**

Total: 9 Hours

Electives

Choose two:

ENGL 2415 - Introduction to Movie Writing **gtPATHWAYS:**
ENGL 3070 - Film History I **gtPATHWAYS:**
-OR- ENGL 3080 - Film History II **gtPATHWAYS:**
* ENGL 3075 - Film Genres **gtPATHWAYS:**
* ENGL 3085 - Film Directors **gtPATHWAYS:**
ENGL 3200 - From Literature to Film **gtPATHWAYS:**
* ENGL 3300 - Topics in Film **gtPATHWAYS:**
ENGL 4420 - Film Theory and Criticism **gtPATHWAYS:**
* ENGL 4770 - Topics in English: Film and Literature **gtPATHWAYS:** (film topics only)

Total: 6 Hours

Total: 15 Hours

French Minor

Students minoring in French must complete 15 semester hours of upper-division French courses (courses numbered 3000 and above). The minor in French must include at least one language skills class, chosen from the following:

Required Courses

Choose one:

FREN 3010 - French Phonetics and Pronunciation **gtPATHWAYS:**
FREN 3020 - Oral Practice **gtPATHWAYS:**
FREN 3050 - Advanced Grammar and Composition **gtPATHWAYS:**
FREN 3060 - Advanced French Language Skills **gtPATHWAYS:**

Total: 3 Hours

Electives

In addition, students minoring in French must complete four additional upper-division French courses

Total: 12 Hours

Minor Total: 15 Hours

Geography Minor

Students must complete 15 semester hours in geography, including at least 6 semester hours of upper-division courses. Students must achieve a grade of *C* (2.0) or above on required courses. At least 9 semester hours of upper-division geography courses must be completed at CU Denver.

Geology Minor

At least two of the upper-division requirements must be completed at CU Denver. Transfer students who have earned the equivalent of all these courses elsewhere must complete a minimum of two of the required upper-division courses at CU Denver. No grade below a *C* (2.0) will be counted toward the minor requirements.

Required Courses

GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1
GEOL 1082 - Physical Geology: Internal Processes **gtPATHWAYS:** GT-SC1

Choose at least two of the following courses:

GEOL 3011 - Mineralogy **gtPATHWAYS:**
GEOL 3421 - Sedimentation and Stratigraphy **gtPATHWAYS:**
GEOL 4030 - Environmental Geology **gtPATHWAYS:**

Minor Total: 15-16 Hours

German Minor

The German program provides a variety of courses for students interested in German language, linguistics, literature, history, philosophy, music and art.

Admission and Grade Requirements

To be admitted to minor status in German, students must have an overall GPA of *C*+ (2.3). The minimum grade acceptable in any course applied to a German minor is a *C* (2.0). The GPA in all courses applied to a German minor at CU Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a German minor.

Residency Requirement

The German minor requires 15 semester hours of upper-division course work. A minimum of 6 semester hours must be taken from German faculty at CU Denver. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the minor only with departmental approval before enrollment in those courses.

Students who have completed course work through an approved exchange program must also complete a residency requirement of a minimum of 6 credits of upper-division German courses. This residency requirement must include at least 3 semester hours of language skills courses at CU Denver.

Course Requirements for the Minor

Students minoring in German must complete 15 hours of upper division German courses (courses numbered 3000 and above). The minor in German must include at least one language skills course:

Required Courses

Choose one:

GRMN 3050 - Phonetics and Pronunciation of German **gtPATHWAYS:**
GRMN 3060 - Advanced German Language Skills I **gtPATHWAYS:**
GRMN 3070 - Advanced German Language Skills II **gtPATHWAYS:**
GRMN 3080 - Advanced German Language Skills III **gtPATHWAYS:**
GRMN 3090 - Advanced German Language Skills IV **gtPATHWAYS:**

Total: 3 Hours

Electives

In addition, students minoring in German must complete four additional German courses.

Total: 12 Hours

Minor Total: 15 Hours

Students taking a German course taught in English must complete a portion of the course work (e.g., papers and exams) in German for the course to count toward the minor.

History Minor

Students interested in a minor in history are required to complete 18 hours of course work. At least 12 semester hours must be completed at CU Denver. No grade below a *C* (2.0) will count toward the minor.

Students minoring in history must take at least 9 credit hours of upper division (3000- and 4000-level) courses.

Course Requirements

Required Course

HIST 3031 - Theory and Practice of History: An Introduction to the Major
gtPATHWAYS:

Total: 3 Hours

Distribution Requirement

A minimum of 3 semester hours must be taken in each of the following areas: United States, Europe and World.

Total: 9 Hours

Electives

Choose at least 6 hours of elective upper-division history credit.

Total: 6 Hours

Minor Total: 18 Hours

Law Studies Minor

Program Requirements

A total of 18 semester hours must be completed for the law studies minor. The courses must be taken in residence at CU Denver. A minimum grade of *C* is required in each course and students must maintain a GPA of 3.0 in courses taken toward the minor. Every course taken for the minor must be upper division. Courses taken for the minor cannot serve to fulfill requirements of the undergraduate core, and students should check with their major department to determine whether courses counted toward the law studies minor can fulfill major requirements. To apply for this minor, students must complete and submit a major/minor change declaration form to the CLAS Advising Office in North Classroom, 4002.

Required Courses

HUMN 3250 - Introduction to Law Studies **gtPATHWAYS:**
(offered every fall)
PHIL 4260 - Philosophy of Law **gtPATHWAYS:**
(offered every spring)
COMM 4680 - Mass Communication Law and Policy **gtPATHWAYS:**
(offered fall and spring)
COMM 4750 - Legal Reasoning and Writing **gtPATHWAYS:**
(offered once a year)

Total: 12 Hours

Electives

Choose two:

BLAW 3000 - Legal and Ethical Environments of Business I **gtPATHWAYS:**
COMM 4681 - Communication Issues in Trial Court Practices and Processes **gtPATHWAYS:**
COMM 4683 - Media in the Courtroom **gtPATHWAYS:**
COMM 4710 - Topics in Communication **gtPATHWAYS:**
(when offered as the topic, "Communication in Jury Decision Making")
CRJU 4430 - Law and Society **gtPATHWAYS:**
PSCI 4494 - Judicial Politics **gtPATHWAYS:**
PSCI 4427 - Law, Politics and Justice **gtPATHWAYS:**
PSYC 3505 - Psychology and the Law **gtPATHWAYS:**

Total: 6 Hours

Minor Total: 18 Hours

The law studies program also recommends a course in informal logic to aid in preparation for the LSAT (e.g., PHIL 2441).

Literature Minor

This program is designed for students who are interested in the study of English literature but who have elected to major in another area. The recommended series of courses allows students to become acquainted with some of the methods of literary study and with a number of the most important literary works.

The literature minor allows students to complement their area of major study with systematic experience in literature.

Students minoring in literature must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of *C* (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with CU Denver English faculty. Courses in a minor cannot be counted toward the English major or English Writing major; consult an English advisor for substitutions.

Courses

Required Courses

ENGL 2450 - Introduction to Literature **gtPATHWAYS:**
ENGL 3001 - Critical Writing **gtPATHWAYS:**

Total: 6 Hours

Area Requirements

Any three upper division courses listed for the English major, Literature Option area requirements.

Total: 9 Hours

Minor Total: 15 Hours

Mathematics Minor

Program Requirements

MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1
MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1
MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1
Three additional upper-division math courses (3 or more semester hours each, excluding MATH 3040) — **9 semester hours**

Minor Total: 21 Hours

Minimum of 21 semester hours with a *C* average.

Note: At least 6 of the upper-division semester hours must be taken at CU Denver. Students must receive a grade of *C* or better in order for the course to be counted toward the minor requirements.

Philosophy Minor

A total of 15 semester hours is required for the minor in philosophy, with a minimum grade of *C* (2.0) in each course.

Program Requirements

Required Courses:

PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World **gtPATHWAYS:** GT-AH3
PHIL 3002 - Ancient Greek Philosophy **gtPATHWAYS:**
PHIL 3022 - Modern Philosophy **gtPATHWAYS:**
(It is recommended but not required that PHIL 3002 be taken before PHIL 3022.)

Total: 9 Hours

Electives

Choose two additional philosophy courses, one of which must be at the upper-division level.

Total: 6 Hours

Minor Total: 15 Hours

Religious studies courses cannot be used to fulfill the requirements for the minor.

Physics Minor

A total of 16 semester hours is required for a minor in physics. No grade below a *C* (2.0) can be used to meet the requirements for the minor. At least 6 semester hours of the requirements for the minor must be completed at CU Denver.

Program Requirements

Required Physics Courses

Either of the following two sequences:

PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1
PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1
PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1
PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1
Sequence Total: 10 Hours
-OR-
PHYS 2311 - General Physics I: Calculus-Based **gtPATHWAYS:**
PHYS 2321 - General Physics Lab I **gtPATHWAYS:**
PHYS 2331 - General Physics II: Calculus-Based **gtPATHWAYS:**

PHYS 2341 - General Physics Lab II **gtPATHWAYS:**
Sequence Total: 10 Hours

Elective Physics Courses

An additional 6 semester hours of electives: 3 at the 2000 level or above, and 3 at the 3000 level or above.
Total: 6 Hours

Minor Total: 16 Hours

Political Science Minor

A student can earn an undergraduate minor in political science by completing 15 semester hours distributed as shown below. At least 9 of the 15 hours must be taken from CU Denver faculty.

Course Requirements

One lower-division course

PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice
gtPATHWAYS: GT-SS1
-OR- PSCI 1101 - American Political System **gtPATHWAYS:** GT-SS1

Four 4000-level courses

Choose one 4000-level course in each of four fields: political theory, American politics, comparative politics and international relations.

Minor Total: 15 Hours

Psychology Minor

Program Requirements

A minor in psychology requires the completion of 15 semester hours with a grade of *C* (2.0) or better in each course, including the following courses:

Two introductory courses:
PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3
PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3

One of the following courses:
PSYC 3222 - Principles of Learning and Behavior **gtPATHWAYS:**
PSYC 4144 - Human Cognition **gtPATHWAYS:**

One of the following courses:
PSYC 3205 - Human Development I: Child Psychology **gtPATHWAYS:**
PSYC 3305 - Abnormal Psychology **gtPATHWAYS:**
PSYC 4415 - Experimental Social Psychology **gtPATHWAYS:**

One capstone (final) course:
PSYC 4511 - History of Psychology **gtPATHWAYS:** (Prereq: 12 credit hours in psychology)

At least 6 upper-division semester hours must be taken from CU Denver faculty. Further information about the department may be obtained from department advisors or by calling 303-556-8565.

Public Health Minor

To earn a minor in public health, a minimum of 24 semester hours are required, of which 12 must be upper-division and taken from CU Denver faculty. Students must achieve no less than a *C* (2.0) in each course applied toward minor requirements. Up to 6 credit hours completed toward a major or minor in another department may be counted toward the minor in public health.

Program Requirements

Tier 1: General Public Health

All students pursuing the public health minor are **required** to take the following two courses:

PBHL 2000 - Introduction to Public Health
PBHL 3010 - Human Sexuality and Public Health **gtPATHWAYS:**

Total: 8 Hours

Tier 2: Public Health Foci

Choose at least two of the following four courses:

PBHL 2020 - Introduction to Environmental Health **gtPATHWAYS:**
PBHL 3030 - Health Policy
PBHL 3070 - Global Public Health
PBHL 4040 - Social Determinants of Health **gtPATHWAYS:**

Note: Students may elect to take all four of these courses in lieu of taking two of the elective courses listed in Tier 4 below.

Total: 6 Hours

Tier 3: Biological Background

Choose one of the following three courses:

ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1
BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1
BIOL 1560 - Basic Biology: From Cells to Organisms **gtPATHWAYS:** GT-SC1

Total: 4 Hours

Tier 4: Electives

Choose two of the following courses:

PBHL 2051 - Introduction To Population Studies **gtPATHWAYS:**
PBHL 3010 - Human Sexuality and Public Health **gtPATHWAYS:**
PBHL 3021 - Fundamentals of Health Promotion **gtPATHWAYS:**
PBHL 3031 - Health, Human Biology and Behavior **gtPATHWAYS:**
PBHL 3041 - Health, Culture and Society **gtPATHWAYS:**
PBHL 3071 - Global Topics In Sexual and Reproductive Health **gtPATHWAYS:**
PBHL 4021 - Community Health Assessment
PBHL 4080 - Global Health Practice **gtPATHWAYS:**
PBHL 4200 - The Global HIV/AIDS Epidemic **gtPATHWAYS:**
ANTH 4090 - Political Economy of Drugs **gtPATHWAYS:**
ANTH 4260 - Human Reproductive Ecology **gtPATHWAYS:**
COMM 4500 - Health Communication **gtPATHWAYS:**
COMM 4620 - Health Risk Communication **gtPATHWAYS:**
GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
PSYC 3235 - Human Sexuality **gtPATHWAYS:**

PSYC 3262 - Health Psychology **gtPATHWAYS:**
SOCY 3520 - Topics in Sociology **gtPATHWAYS:**
(when Medical Sociology is the topic)

Total: 6 Hours

Total: 24 Hours

Check the department website for additional course offerings.

Religious Studies Minor

Eighteen semester hours, at least 9 of which must be upper division and at least 9 semester hours taken with CU Denver faculty. A minimum cumulative GPA of 2.0 for all CU Denver courses taken in the minor is required, with no individual course grade lower than a *C* (2.0).

Program Requirements

Required Courses (9 hours):

RLST 1610 - Introduction to Religious Studies **gtPATHWAYS:** GT-AH3

One course in Western religions chosen from approved list:

* RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3
RLST 2700 - The Bible as Literature **gtPATHWAYS:**
-OR- ENGL 2520 - The Bible as Literature **gtPATHWAYS:**
RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference **gtPATHWAYS:**
RLST 3060 - History of Early Christianity **gtPATHWAYS:**
RLST 3740 - Biblical Traditions: Old Testament **gtPATHWAYS:**
RLST 3760 - Biblical Studies: New Testament **gtPATHWAYS:**
RLST 3770 - Archaeological Discoveries Relating to the Bible **gtPATHWAYS:**
RLST 4070 - Western Religious Thought **gtPATHWAYS:**
-OR- PHIL 4710 - Western Religious Thought **gtPATHWAYS:**
RLST 4400 - Differing Concepts of God **gtPATHWAYS:**
-OR- PHIL 4650 - Differing Concepts of God **gtPATHWAYS:**
* RLST 4440 - Concepts of the Soul **gtPATHWAYS:**
-OR- * PHIL 4470 - Concepts of the Soul **gtPATHWAYS:**
* RLST 4460 - Death and Concepts of Afterlife **gtPATHWAYS:**

* Fulfills requirement for either Eastern or Western religion, but not both simultaneously

One course in Eastern religions chosen from approved list:

* RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3
RLST 3400 - Asian Philosophies and Religions **gtPATHWAYS:**
-OR- PHIL 3666 - Asian Philosophies and Religions **gtPATHWAYS:**
RLST 3500 - Religions of India **gtPATHWAYS:**
RLST 3660 - Chinese Philosophy and Culture **gtPATHWAYS:**
-OR- PHIL 3981 - Chinese Philosophy and Culture **gtPATHWAYS:**
RLST 4080 - Eastern Religious Thought **gtPATHWAYS:**
-OR- PHIL 4720 - Eastern Religious Thought **gtPATHWAYS:**
RLST 4160 - Mysticism **gtPATHWAYS:**
* RLST 4440 - Concepts of the Soul **gtPATHWAYS:**
-OR- * PHIL 4470 - Concepts of the Soul **gtPATHWAYS:**
* RLST 4460 - Death and Concepts of Afterlife **gtPATHWAYS:**

* Fulfills requirement for either Eastern or Western religion, but not both simultaneously

Elective courses (9 hours):

The remaining 9 hours to equal the required 18 hours will count as electives, to be chosen from the full list of courses (below).

Other courses, such as certain special topics, art history courses featuring religious themes and others may count toward the minor at the discretion of the course instructor and the director.

RLST 1610 - Introduction to Religious Studies **gtPATHWAYS:** GT-AH3
* RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3
RLST 2680 - The American Indian Experience **gtPATHWAYS:**
-OR- ETST 2606 - The American Indian Experience **gtPATHWAYS:**
RLST 2700 - The Bible as Literature **gtPATHWAYS:**
-OR- ENGL 2520 - The Bible as Literature **gtPATHWAYS:**
RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference **gtPATHWAYS:**
RLST 3060 - History of Early Christianity **gtPATHWAYS:**
RLST 3080 - Reformation Europe **gtPATHWAYS:**
-OR- HIST 4022 - Reformation Europe **gtPATHWAYS:**
RLST 3100 - Islamic Politics and Culture **gtPATHWAYS:**
-OR- PSCI 4165 - Islamic Politics and Culture **gtPATHWAYS:**
RLST 3300 - Shamanic Traditions **gtPATHWAYS:**
RLST 3400 - Asian Philosophies and Religions **gtPATHWAYS:**

-OR- PHIL 3666 - Asian Philosophies and Religions **gtPATHWAYS:**
RLST 3500 - Religions of India **gtPATHWAYS:**
RLST 3660 - Chinese Philosophy and Culture **gtPATHWAYS:**
-OR- PHIL 3981 - Chinese Philosophy and Culture **gtPATHWAYS:**
RLST 3720 - Religious Narratives **gtPATHWAYS:**
-OR- ENGL 3520 - Religious Narratives **gtPATHWAYS:**
RLST 3740 - Biblical Traditions: Old Testament **gtPATHWAYS:**
RLST 3760 - Biblical Studies: New Testament **gtPATHWAYS:**
RLST 3770 - Archaeological Discoveries Relating to the Bible **gtPATHWAYS:**
RLST 4000 - Religion and Cultural Diversity **gtPATHWAYS:**
RLST 4010 - Comparative Religious Systems **gtPATHWAYS:**
-OR- ANTH 4130 - Comparative Religious Systems **gtPATHWAYS:**
RLST 4020 - Sociology of Religion **gtPATHWAYS:**
-OR- SOCY 4610 - Sociology of Religion **gtPATHWAYS:**
RLST 4040 - Psychology of Religion **gtPATHWAYS:**
RLST 4060 - Philosophy of Religion **gtPATHWAYS:**
-OR- PHIL 4600 - Philosophy of Religion **gtPATHWAYS:**
RLST 4070 - Western Religious Thought **gtPATHWAYS:**
-OR- PHIL 4710 - Western Religious Thought **gtPATHWAYS:**
RLST 4080 - Eastern Religious Thought **gtPATHWAYS:**
-OR- PHIL 4720 - Eastern Religious Thought **gtPATHWAYS:**
RLST 4100 - Special Topics in Religion **gtPATHWAYS:**
RLST 4160 - Mysticism **gtPATHWAYS:**
RLST 4260 - Kosmos: Theories of the Universe **gtPATHWAYS:**
-OR- PHIL 3420 - Kosmos: Theories of the Universe **gtPATHWAYS:**
RLST 4280 - Current Perspectives on the Evolution of Consciousness and Culture **gtPATHWAYS:**
-OR- GEOL 3100 - Current Perspectives on the Evolution of Consciousness and Culture **gtPATHWAYS:**
-OR- PHIL 3100 - Current Perspectives on the Evolution of Consciousness and Culture **gtPATHWAYS:**
RLST 4300 - Myth and Symbol **gtPATHWAYS:**
RLST 4320 - Spirituality in the Modern World **gtPATHWAYS:**
RLST 4340 - The Hero's Journey **gtPATHWAYS:**
-OR- ENGL 3530 - The Hero's Journey **gtPATHWAYS:**
RLST 4360 - Freudian and Jungian Perspectives in Dream Analysis **gtPATHWAYS:**
RLST 4400 - Differing Concepts of God **gtPATHWAYS:**
-OR- PHIL 4650 - Differing Concepts of God **gtPATHWAYS:**
RLST 4420 - Goddess Traditions **gtPATHWAYS:**
-OR- WGST 4420 - Goddess Traditions **gtPATHWAYS:**
* RLST 4440 - Concepts of the Soul **gtPATHWAYS:**
-OR- * PHIL 4470 - Concepts of the Soul **gtPATHWAYS:**
* RLST 4460 - Death and Concepts of Afterlife **gtPATHWAYS:**
RLST 4480 - Perspectives on Good and Evil **gtPATHWAYS:**

-OR- PHIL 4480 - Perspectives on Good and Evil **gtPATHWAYS:**
RLST 4500 - Religion and Politics **gtPATHWAYS:**
-OR- PSCI 4057 - Religion and Politics **gtPATHWAYS:**
RLST 4730 - Whores and Saints: Medieval Women **gtPATHWAYS:**
-OR- ENGL 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
-OR- WGST 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
RLST 4840 - Independent Study: RLST **gtPATHWAYS:**

Minor Total: 18 Hours

Sculpture Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver. Each course must be completed with a C (2.0) or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 9 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue a sculpture minor. Consult a CAM advisor for further details.

Program Requirements

FINE 1500 - Three-Dimensional Design **gtPATHWAYS:**
FINE 2500 - Bronze Casting and Metal Sculpture **gtPATHWAYS:**
FINE 2510 - Wood and Metal Sculpture **gtPATHWAYS:**
____ - Art History Elective (3 semester hours)

Select three courses from the following:

FINE 3500 - Modeling and Casting the Figure **gtPATHWAYS:**
FINE 3510 - Installation Art **gtPATHWAYS:**
FINE 4500 - Kinetic Sculpture **gtPATHWAYS:**
FINE 4510 - Advanced Sculpture **gtPATHWAYS:**

Total: 21 Hours

Social Justice Minor

Requirements for the Minor

The minor consists of 18 semester hours, structured as follows:

- A required introductory class (with either a social science or humanities focus); see below.
- An experiential learning component of 3 semester hours.
- Upper-division course work to be determined by individual students in consultation with the social justice minor director. At least two disciplines must be represented.
- A 3-semester-hour capstone seminar that will provide opportunity for further reflection on the experiential learning projects and student group projects.

Required course

Choose one:

SJUS 2000 - Democratic Participation and Social Justice **gtPATHWAYS:**
SJUS 2010 - Social Justice: Theories, Narratives, and Technologies **gtPATHWAYS:**

Total: 3 Hours

Internship

A 3-semester-hour internship in any discipline of the social sciences or humanities, involving community work and including a reflective component and public dissemination or report.

Total: 3 Hours

Upper-Division Courses

Choose three (below is a sample list of upper-division courses, but other courses may be considered):

ANTH 3142 - Cultural Diversity in the Modern World **gtPATHWAYS:**
ANTH 4070 - Culture of Development and Globalization **gtPATHWAYS:**
COMM 4022 - Critical Analysis of Communication **gtPATHWAYS:**

COMM 4200 - Persuasion **gtPATHWAYS:**
COMM 4260 - Communication and Conflict **gtPATHWAYS:**
ENGL 3795 - Race and Ethnicity in American Literature **gtPATHWAYS:**
ENGL 4280 - Proposal and Grant Writing **gtPATHWAYS:**
ETST 3108 - Chicano/a and Latino/a History **gtPATHWAYS:**
ETST 3274 - Power, Poverty, Culture **gtPATHWAYS:**
ETST 3396 - History of the American Indian **gtPATHWAYS:**
ETST 3704 - Culture, Racism and Alienation **gtPATHWAYS:**
GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
HBSC 3041 - Health, Culture and Society **gtPATHWAYS:**
HBSC 4021 - Community Health Assessment **gtPATHWAYS:**
HIST 3345 - Immigration and Ethnicity in American History **gtPATHWAYS:**
HIST 4217 - Consumer Culture **gtPATHWAYS:**
HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present **gtPATHWAYS:**
PHIL 3200 - Social and Political Philosophy **gtPATHWAYS:**
PHIL 3280 - War and Morality **gtPATHWAYS:**
PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
PHIL 4920 - Philosophy of Media and Technology **gtPATHWAYS:**
-OR- PHIL 5920 - Philosophy of Media and Technology **gtPATHWAYS:**
PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
PSCI 4025 - Local Governance and Globalization **gtPATHWAYS:**
PSCI 4207 - Theories of Social and Political Change **gtPATHWAYS:**
RLST 4000 - Religion and Cultural Diversity **gtPATHWAYS:**
SOCY 3001 - Urban Sociology **gtPATHWAYS:**
SOCY 3030 - Social Change **gtPATHWAYS:**
SOCY 4440 - Social Inequality **gtPATHWAYS:**

Total: 9 Hours

Capstone

Total: 3 Hours

Minor Total: 18 Hours

Sociology Minor

For an undergraduate minor in sociology, a minimum of 15 semester hours in sociology must be completed with a grade of *C* or better. Nine of these hours must be taken from CU Denver faculty.

Course Requirements

Required Courses

SOCY 1001 - Introduction to Sociology **gtPATHWAYS:** GT-SS3
SOCY 4150 - History of Sociological Theory **gtPATHWAYS:**

Total: 6 Hours

Electives

Nine hours of sociology elective courses, completed with a grade of *C* or better.

Total: 9 Hours

Minor Total: 15 Hours

Spanish Minor

Students minoring in Spanish for the BA degree must complete 15 semester hours of upper-division Spanish courses (courses numbered 3000 and higher). All course work must be taught in Spanish.

The minor in Spanish must include at least one culture and civilization class, chosen from the following:

Program Requirements

Required Courses

Choose one:

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact **gtPATHWAYS:**
SPAN 3212 - Spanish American Culture and Civilization **gtPATHWAYS:**

SPAN 3213 - Contemporary Latin American Culture and Institutions **gtPATHWAYS:**
SPAN 3221 - Culture and Civilization of Spain I **gtPATHWAYS:**
SPAN 3222 - Culture and Civilization of Spain II **gtPATHWAYS:**
SPAN 3223 - Contemporary Spanish Culture and Institutions **gtPATHWAYS:**
SPAN 3230 - Ibero-American Cultures through Film **gtPATHWAYS:**
SPAN 4230 - Modern Culture of Spain through Film and Narrative **gtPATHWAYS:**

Total: 3 Hours

Electives

In addition, students minoring in Spanish must complete four additional upper-division Spanish courses.

Total: 12 Hours

Minor Total: 15 Hours

Studio Art Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver. Each course must be completed with a C (2.0) or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue a studio art minor. Consult a CAM advisor for further details.

Program Requirements

Select two courses from the following:
FINE 1100 - Drawing I **gtPATHWAYS:**
FINE 1150 - Introduction to Photography **gtPATHWAYS:**
FINE 1400 - Two Dimensional Design **gtPATHWAYS:**
FINE 1500 - Three-Dimensional Design **gtPATHWAYS:**
FINE 2015 - Intermedia Foundations **gtPATHWAYS:**
FINE 2200 - Painting I **gtPATHWAYS:**
FINE 3015 - Interdisciplinary Practices **gtPATHWAYS:**

_____ - Art History Elective (3 semester hours)
_____ - Studio Arts Electives (6 semester hours)
_____ - Upper-division Studio Arts Elective (3 semester hours)

Total: 18 Hours

Studio Photography Minor

To declare a CAM minor, see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver. Each course must be completed with a C (2.0) or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue a studio photography minor. Consult a CAM advisor for further details.

Program Requirements

FINE 1150 - Introduction to Photography **gtPATHWAYS:**
FINE 2155 - Introduction to Digital Photography **gtPATHWAYS:**
FINE 3630 - History of Photography **gtPATHWAYS:**

Select three courses from the following:

FINE 3160 - Color and Studio Lighting **gtPATHWAYS:**
FINE 3161 - The Silver Fine Print **gtPATHWAYS:**
Note: must be completed before 3171
FINE 3162 - The Digital Fine Print **gtPATHWAYS:**
Note: must be completed before 3172
FINE 3171 - Concepts and Processes in Photography **gtPATHWAYS:**
FINE 3172 - Digital Bookmaking **gtPATHWAYS:**
FINE 3175 - Creative Commercial Applications **gtPATHWAYS:**

Total: 18 Hours

Sustainability Minor

The sustainability minor is interdisciplinary, drawing on the expertise across CLAS departments: anthropology, biology, chemistry, communication, economics, environmental sciences, geography, geology, history, economics, philosophy, physics and political science. The core courses are taught by a faculty team from natural sciences and social sciences, who will present the concepts from the empirical and humanistic perspectives. The teaching team changes each term so that faculty from any given CLAS department will rotate through the core courses every 3-4 years.

The minor comprises 18 hours, distributed as follows:

- two core courses that introduce students to the systems theories that document how living things affect and are affected by their environments
- two electives chosen from an approved list of CLAS courses
- students select either a field study, internship, service learning or related travel study course
- capstone course in sustainability

Requirements for the Minor

Core Courses

SUST 3010 - The Non-Sustainable Past **gtPATHWAYS:**
SUST 3011 - Toward a Sustainable Future **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two from the following list of approved electives:

Anthropology

ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3
ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1
ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3
ANTH 3006 - Sustainable Development and Equity **gtPATHWAYS:**
ANTH 3301 - World Prehistory **gtPATHWAYS:**
ANTH 3512 - Human Evolution **gtPATHWAYS:**
ANTH 4030 - Ethnobiology **gtPATHWAYS:**
ANTH 4060 - Evolutionary Medicine **gtPATHWAYS:**
ANTH 4070 - Culture of Development and Globalization **gtPATHWAYS:**
ANTH 4170 - Culture and the Environment **gtPATHWAYS:**
ANTH 4220 - Community in Global Context **gtPATHWAYS:**

ANTH 4250 - Culture Change in the Modern World **gtPATHWAYS:**
ANTH 4450 - Development and Conservation: Contemporary Issues **gtPATHWAYS:**
ANTH 4460 - Development and Conservation: Theory and Practice **gtPATHWAYS:**
ANTH 4560 - Human Ecology **gtPATHWAYS:**

Biology

BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1
BIOL 3330 - Plant Diversity **gtPATHWAYS:**
BIOL 3411 - Principles of Ecology **gtPATHWAYS:**
BIOL 3412 - Fundamentals of Applied Ecology **gtPATHWAYS:**
BIOL 3521 - Vertebrate Biology **gtPATHWAYS:**
BIOL 4154 - Conservation Biology **gtPATHWAYS:**

Business

MGMT 4950 - Special Topics in Management **gtPATHWAYS:**
when offered as Business and Sustainability
MKTG 4950 - Special Topics **gtPATHWAYS:**
when offered as Nonprofit and Social Marketing

Chemistry

CHEM 1474 - Core Chemistry: Chemistry For the Consumer **gtPATHWAYS:** GT-SC1
CHEM 4700 - Environmental Chemistry **gtPATHWAYS:**
CHEM 5700 - Environmental Chemistry **gtPATHWAYS:**

Communication

COMM 4282 - Environmental Communication **gtPATHWAYS:**
COMM 5282 - Environmental Communication **gtPATHWAYS:**

Economics

ECON 4530 - Economics of Natural Resources **gtPATHWAYS:**
ECON 4540 - Environmental Economics **gtPATHWAYS:**
ECON 4770 - Economic Development--Theory and Problems **gtPATHWAYS:**
ECON 5530 - Economics of Natural Resources **gtPATHWAYS:**
ECON 5540 - Environmental Economics **gtPATHWAYS:**

Geography / Geology / Environmental Science

ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1
ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2
ENVS 3082 - Energy and the Environment **gtPATHWAYS:**
GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2
GEOG 3302 - Water Resources **gtPATHWAYS:**
GEOG 3411 - Globalization and Regional Development **gtPATHWAYS:**
GEOG 4010 - Landscape Geochemistry **gtPATHWAYS:**
GEOG 4020 - Earth Environments and Human Impacts **gtPATHWAYS:**
GEOL 4030 - Environmental Geology **gtPATHWAYS:**
GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
GEOG 4265 - Sustainability in Resources Management **gtPATHWAYS:**
GEOG 4335 - Contemporary Environmental Issues **gtPATHWAYS:**
GEOG 4350 - Environment and Society in the American Past **gtPATHWAYS:**
GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
GEOG 5265 - Sustainability in Resources Management **gtPATHWAYS:**
GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
GEOG 5640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**

History

HIST 3350 - Colonial Latin America **gtPATHWAYS:**
HIST 3360 - Denver History **gtPATHWAYS:**
HIST 3366 - Environmental History of North America **gtPATHWAYS:**
HIST 3451 - Introduction to African History **gtPATHWAYS:**
HIST 3460 - Introduction to Latin American History **gtPATHWAYS:**
HIST 3470 - Introduction to Asian History **gtPATHWAYS:**
HIST 3606 - Science, Technology, and Society in the Modern World **gtPATHWAYS:**
HIST 4217 - Consumer Culture **gtPATHWAYS:**
HIST 4226 - U.S. Business History **gtPATHWAYS:**
HIST 4227 - American West **gtPATHWAYS:**
HIST 4236 - Colorado Mining and Railroads **gtPATHWAYS:**
HIST 4411 - Modern Mexico **gtPATHWAYS:**
HIST 4417 - Commodities and Globalization: Dessert in World History **gtPATHWAYS:**
HIST 4421 - Modern China **gtPATHWAYS:**
HIST 4431 - Modern Japan **gtPATHWAYS:**
HIST 4451 - Southern Africa **gtPATHWAYS:**
HIST 4461 - The Modern Middle East **gtPATHWAYS:**

HIST 4501 - World History for Educators **gtPATHWAYS:**
HIST 4503 - Topics in History of Science **gtPATHWAYS:**
HIST 4504 - Animals in U.S. History **gtPATHWAYS:**

Physics

PHYS 3082 - Energy and the Environment **gtPATHWAYS:**
PHYS 4850 - Physics for Design and Innovation I **gtPATHWAYS:**
PHYS 4852 - Physics for Design and Innovation II **gtPATHWAYS:**
Note: PHYS 4850 is prerequisite for PHYS 4852
PHYS 5850 - Physics for Design and Innovation I **gtPATHWAYS:**
PHYS 5852 - Physics for Design and Innovation II **gtPATHWAYS:**
Note: PHYS 5850 is prerequisite for PHYS 5852

Philosophy

PHIL 4250 - Environmental Ethics **gtPATHWAYS:**
PHIL 5250 - Environmental Ethics **gtPATHWAYS:**

Political Science

PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
PSCI 3035 - Political Movements: Race and Gender **gtPATHWAYS:**
PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**
PSCI 3914 - The Urban Citizen **gtPATHWAYS:**
PSCI 4009 - Politics of the Budgetary Process **gtPATHWAYS:**
PSCI 4014 - Media and Politics **gtPATHWAYS:**
PSCI 4025 - Local Governance and Globalization **gtPATHWAYS:**
PSCI 4085 - Comparative Public Policy **gtPATHWAYS:**
PSCI 4144 - Indigenous Political Systems **gtPATHWAYS:**
PSCI 4206 - Social Movements, NGOs and Global Politics **gtPATHWAYS:**
PSCI 4207 - Theories of Social and Political Change **gtPATHWAYS:**
PSCI 4215 - Women's Rights, Human Rights: Global Perspectives **gtPATHWAYS:**
PSCI 4226 - The United Nations in World Affairs **gtPATHWAYS:**
PSCI 4248 - Gender, Globalization and Development **gtPATHWAYS:**
PSCI 4324 - Politics, Public Policy and Leadership **gtPATHWAYS:**
PSCI 4326 - Advanced International Political Economy: Globalization **gtPATHWAYS:**
PSCI 4354 - Environmental Politics **gtPATHWAYS:**
PSCI 4365 - Global Ecological Crises **gtPATHWAYS:**
PSCI 4374 - Public Priorities for the 21st Century **gtPATHWAYS:**
PSCI 4545 - Immigration Politics **gtPATHWAYS:**
PSCI 4555 - International Women's Resistance **gtPATHWAYS:**
PSCI 4645 - Comparative Political Leadership **gtPATHWAYS:**

Total: 6 Hours

Experiential learning course

Students choose a field study, internship, service learning or related travel study course.

Total: 3 Hours

Capstone

SUST 4960 - Capstone in Sustainability **gtPATHWAYS:**

Total: 3 Hours

Total: 18 Hours

Theatre, Film and Television Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver. Each course must be completed with a C (2.0) or better. Students pursuing a BA or BFA in the Department of Theatre, Film and Video Production may not declare a minor in theatre, film and television. Consult a CAM advisor for further details.

Program Requirements

TFVP 1050 - Video Production/Post-Production I **gtPATHWAYS:**
TFVP 1100 - Introduction to Theatre, Film, and Television **gtPATHWAYS:**
____ - Theatre, Film and Video Production Electives (12 semester hours)
Chosen in consultation with department advisor

Select two courses from the following (in consultation with department advisor):

FILM 3070 - History of Silent Film Production **gtPATHWAYS:**
FILM 3080 - History of Sound Film Production **gtPATHWAYS:**
THTR 3610 - Performance: Theory/History/Criticism I **gtPATHWAYS:**

THTR 4610 - Performance: Theory/History/Criticism II **gtPATHWAYS:**

Total: 24 Hours

Urban and Regional Planning Minor

The undergraduate planning minor in the Department of Geography and Environmental Sciences provides non-geography undergraduate students the opportunity to pursue studies in the professional field of planning. Geography majors can pursue the urban studies option, so this minor would not be available to these majors.

Geography and urban and regional planning share a common concern for the spatial configuration of the places that we inhabit and enjoy. In recognition of this close association, there is currently an articulation agreement between the Department of Geography and Environmental Sciences and the College of Architecture and Planning that provides students with a mechanism for acceleration through the master of urban and regional planning (MURP) degree program, if accepted into that graduate program. Those students completing the requirements for an undergraduate planning minor may also be eligible to pursue an accelerated MURP degree.

To meet the requirements for this minor, students must complete three core requirements and two electives, totaling 15 semester hours. Although the three core courses may be taken in any order, it is advisable to begin with GEOG 1602, since this course familiarize students with many key concepts used in other classes. All core courses are offered on a yearly basis.

Program Requirements

Required Core

GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2
GEOG 4640 - Urban Geography: Denver and the U.S. **gtPATHWAYS:**
GEOG 4840 - Independent Study: GEOG **gtPATHWAYS:**
(when Urban Sustainability is the topic)

Total: 9 Hours

Electives

Choose two of the following courses:

GEOG 4000 - Planning Methods I **gtPATHWAYS:**

-OR- URPL 5510 - Planning Methods I **gtPATHWAYS:**
GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
-OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
GEOG 4080 - Introduction to GIS **gtPATHWAYS:**
-OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**
GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
-OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**
GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
-OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**
GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
-OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**
GEOG 4230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
-OR- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**
GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
-OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**
GEOG 4400 - Regional Economic Development **gtPATHWAYS:**
GEOG 4630 - Transportation Planning I: Transport Network Analysis **gtPATHWAYS:**
GEOG 4990 - Special Topics **gtPATHWAYS:**
URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**

Total: 6 Hours

Minor Total: 15 Hours

Entrance Requirements

All undergraduate students, except geography majors, are eligible for this minor.

Performance Requirements

Students must complete 15 semester hours in geography and/or planning. Because of the professional nature of this minor and the potential for fast-tracking in the MURP program, 12 semester hours of upper-division courses are required. Students must achieve a grade of *C* (2.0) or higher in required courses. All upper-division courses must be completed at CU Denver and a minimum of 9 semester hours must be completed in CLAS (geography) to satisfy residency requirements.

Women’s and Gender Studies Minor

The women’s and gender studies minor gives students the opportunity to explore gender issues in the humanities and social sciences. To minor in WGST, a student must complete 18 semester hours in WGST courses with a grade of *C* or better. At least 12 semester hours for the WGST minor must be taken with CU Denver faculty, and all courses for the minor must be approved by a WGST advisor.

Requirements for the Minor

1. Required Course: WGST 1050 (3 semester hours)

This course provides an introduction to key concepts, themes and approaches to the interdisciplinary field of women’s and gender studies. It helps students develop an overall framework for WGST in which to place their electives and internship.

WGST 1050 - Introduction to Women's and Gender Studies **gtPATHWAYS:**

2. WGST-related courses at the 3000 level or above (12 semester hours)

These courses combine humanities and social science fields. Advisor approval is required for course selection. Students are strongly urged to take at least one course that focuses on women’s and gender issues in international perspective. Courses which are eligible for WGST credit include (but are not limited to):

Humanities

ENGL 3450 - Twentieth Century Women Writers **gtPATHWAYS:**
ENGL 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**
FREN 4510 - French Women Writers **gtPATHWAYS:**
HIST 3343 - Women in U.S. History **gtPATHWAYS:**
HIST 4230 - Women in the West **gtPATHWAYS:**
HIST 4303 - Sex and Gender in Modern Britain **gtPATHWAYS:**
HIST 4307 - History of Sexuality **gtPATHWAYS:**
HIST 4345 - Gender, Science, and Medicine: 1600 to the Present **gtPATHWAYS:**
PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**
PHIL 4933 - Philosophy of Eros **gtPATHWAYS:**
RLST 4420 - Goddess Traditions **gtPATHWAYS:**
SPAN 4540 - Race, Class, and Gender in Spanish Golden Age Literature **gtPATHWAYS:**
WGST 4306 - Survey of Feminist Thought **gtPATHWAYS:**

-OR- ENGL 4306 - Survey of Feminist Thought **gtPATHWAYS:**
-OR- HIST 4306 - Survey of Feminist Thought **gtPATHWAYS:**

Social Sciences

ANTH 4200 - Gender in Cross-Cultural Perspective **gtPATHWAYS:**
ANTH 4260 - Human Reproductive Ecology **gtPATHWAYS:**
COMM 4020 - Feminist Perspectives on Communication **gtPATHWAYS:**
COMM 4045 - Female-Male Friendships **gtPATHWAYS:**
COMM 4265 - Gender and Communication **gtPATHWAYS:**
COMM 4268 - Communication and Diversity in U.S. History **gtPATHWAYS:**
COMM 4275 - Family Communication **gtPATHWAYS:**
ECON 3100 - Economics of Race and Gender **gtPATHWAYS:**
ECON 3400 - Economics of Sex and Drugs **gtPATHWAYS:**
HBSC 3010 - Human Sexuality and Public Health **gtPATHWAYS:**
PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**
PSCI 3035 - Political Movements: Race and Gender **gtPATHWAYS:**
PSCI 4215 - Women's Rights, Human Rights: Global Perspectives **gtPATHWAYS:**
PSCI 4248 - Gender, Globalization and Development **gtPATHWAYS:**
PSCI 4555 - International Women's Resistance **gtPATHWAYS:**
PSCI 4564 - Gender and Politics **gtPATHWAYS:**
PSCI 4827 - Women and the Law **gtPATHWAYS:**
PSYC 3235 - Human Sexuality **gtPATHWAYS:**
PSYC 3405 - Family Psychology **gtPATHWAYS:**
PSYC 3611 - Psychology of Women **gtPATHWAYS:**
PSYC 3612 - Domestic Abuse **gtPATHWAYS:**
SOCY 3010 - Sociology of Human Sexuality **gtPATHWAYS:**
SOCY 3080 - Sex and Gender **gtPATHWAYS:**
SOCY 3700 - Sociology of the Family **gtPATHWAYS:**
SOCY 4120 - Popular Culture and the American Family **gtPATHWAYS:**
See the WGST Web site for this semester's course offerings.

3. WGST Community Internship (3 semester hours)

An internship working in the community around issues related to women and gender. Working with a WGST advisor and the CU Denver Experiential Learning Center (ELC), students will choose an internship related to their interests in WGST. Through the ELC, students sign up for their internship under WGST 3939. Students will be required to complete a critical writing component comprising an ongoing log about the internship experience and an 8-10 page final paper discussing the interrelationships between the practical internship experience and the theoretical/scholarly insights of women’s and gender studies. Students may also choose to use WGST 2900, Smart Girl Leadership

Training, in lieu of their internship and must follow the requirements of that course and practicum. Students must have taken WGST 1050 before enrolling for their internship.

WGST 3939 - Internship **gtPATHWAYS:**
-OR- WGST 2900 - Smart Girl Leadership Training and Practicum **gtPATHWAYS:**

Total: 18 Hours

Writing Minor

The writing minor allows students to complement their area of major study with systematic experience in writing.

Students minoring in writing must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of *C* (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with CU Denver English faculty.

Students are encouraged to take ENGL 1020 and ENGL 2030 before beginning the minor. Courses in a minor cannot be counted toward the English Major or English Writing major; consult an English advisor for substitutions.

Courses

Required Courses

ENGL 2070 - Grammar, Rhetoric and Style **gtPATHWAYS:**
ENGL 3084 - Multimedia Composition **gtPATHWAYS:**
ENGL 4180 - Argumentation and Logic **gtPATHWAYS:**

Total: 9 Hours

Distributed Course

Choose one course from the following:

ENGL 3154 - Technical Writing **gtPATHWAYS:**
ENGL 3170 - Business Writing **gtPATHWAYS:**
ENGL 4190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:** (non-repeatable)

Total: 3 Hours

Elective

One 3000- or 4000-level course.

Total: 3 Hours

Minor Total: 15 Hours

Undergraduate Experiences

First-Year Seminars

The Office of Undergraduate Experiences at CU Denver offers an optional program of first-year seminars (FYS) designed to assist students to successfully make the transition from high school to college, improve student retention and boost new student confidence. The FYS courses integrate rigorous academic content with academic skills such as library usage, campus resources, information literacy, time management, communication skills and career counseling.

Class size is capped at 24 students to facilitate interaction between student and instructor and to allow the instructor to serve as a mentor in the student's first semester of college. FYS classes engage students in active learning beyond the traditional classroom, laboratory or studio classes. In the FYS courses, students learn about themselves and their abilities. The experiences obtained from the FYS program aim to promote academic exploration and interdisciplinary learning, civic engagement, cultural awareness, leadership, problem solving and other professional skills.

WHY PARTICIPATE?

- higher first semester grades
- higher student satisfaction facilitated by small class size and a faculty mentor
- better utilization of campus resources paid for through student fees
- early exploration of career paths and a suitable major
- more likely to stay in college

Students are encouraged to use the FYS course to explore areas either within or outside their major. Students should work with their academic advisor during orientation to select an appropriate FYS course. All of the courses are 3 semester hours and count in the required core curriculum. Requirements vary slightly, but students should expect weekly writing and readings, participation in events outside the classroom including one service-learning activity and a final project.

Please visit our website for the current course offerings.

University Honors and Leadership Program

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University Honors and Leadership (UHL) is a program of excellence designed for outstanding students who have demonstrated superior achievement in academic performance and/or outstanding leadership qualities. The program is founded on the premise that the integration of rigorous programs of academic excellence and leadership education provides the ideal environment in which to develop the gifts of the next generation of leaders in academia, business, policymaking and service to communities local, national and global.

The UHL program is unique in integrating academic honors and leadership education within a highly selective learning community of outstanding students and faculty. The UHL program allows students to complement their major field of study with a traditional honors experience in the academic honors track or program of leadership education in the leadership studies track. Students move through the UHL program in cohorts that simultaneously promote community, teamwork and individual initiative. All of the UHL courses are multidisciplinary, reflecting our view that that the ability to effectively analyze the challenges faced in all sectors of society can be enhanced by the integration of appropriate pieces drawn from a broad base of perspectives and problem-solving skills. The UHL program complements this with an emphasis on the development of exceptional oral and written communication skills, projects that steep the students in sophisticated research methods and the opportunity to work in teams to solve practical problems in the community.

The Academic Program

UHL is a multidisciplinary cohort program consisting of 27 semester hours of course work to be completed over four years. The UHL courses will substitute for most of the CU Denver general core curriculum requirements.

UHL students are given the opportunity to pursue a traditional honors experience through the academic honors track of the UHL program or to focus on leadership education through the UHL leadership studies track. UHL students have a common first-year experience, taking a core of course work common to both tracks. The second and third years of the UHL program offer programs designed specifically for the academic honors and leadership studies tracks. The UHL students come together for a two-semester capstone research seminar in the fourth year.

UHL Core

The UHL Core is a body of courses the completion of which is required of all UHL students. The UHL core includes:

UNHL 1100 Introduction to University Honors and Leadership
UNHL 2755 UHL Seminar
ENGL 2030 - Core Composition II
UNHL 4991 - Senior Research Seminar I
UNHL 4992 - Senior Research Seminar II

Waiver of English 2030 requirement for UHL Students

All UHL students who have not previously received credit for English 2030 or its equivalent are required to complete a UHL section of English 2030. UHL students who have previously received credit for English 2030 or the equivalent will not receive additional CU Denver credit for English 2030 and so are not required to take the UHL section of this course. Students who believe that they are exempt from the English 2030 requirement should meet with the UHL Advisor to confirm this.

Credit Hour and Distribution Requirements for UHL Certification

UHL students are required to complete 27 student semester hours of UHL courses, including two (2) one-semester-hour UHL seminars, in order to graduate with UHL certification. Students who have previously received credit for English 2030 or the equivalent must complete 24 hours of UHL courses. In addition, students are required to structure their UHL curricula so that they satisfy the CU Denver core curriculum requirements within their UHL programs of study. Students should meet regularly with the UHL advisor in order to ensure that their UHL course work satisfies the necessary requirements for UHL certification and CU Denver graduation.

Academic Honors Track Requirements

The academic honors track offers a unique program for outstanding students entering CU Denver. The academic honors track provides a rigorous academic experience to complement the student's major, provides an environment for lifelong learning and promotes self-discovery. Students will be exposed to complicated problems, competing perspectives and differing approaches to important topics. Undergraduate research will be emphasized in the academic honors track to prepare students for graduate school or any postbaccalaureate professional program.

The second and third year of the academic honors program will develop students' core knowledge areas through the integration of humanities, arts, science, behavioral and social science, international perspectives and cultural diversity by way of multidisciplinary courses where students are exposed to complex multidimensional issues. Students continue to build and broaden their communication, analytical and critical thinking skills. Students will learn to apply knowledge to new areas, expand their view of the world and develop sensitivity and appreciation of the arts, diversity and global society.

A typical course of study for an Academic Honors track student is:

Year 1:

UNHL 1100: Introduction to UHL (3 semester hours)

UNHL 2755: UHL Seminar (two semesters at 1 semester hour each)

English 2030-UHL: Core Composition II (3 semester hours)

Years 2 and 3:

Five UHL Academic Honors track or hybrid electives (15 semester hours)

Year 4:

UNHL 4991: UHL Senior Research Seminar I (2 semester hours) (*currently under development*)

UNHL 4992: UHL Senior Research Seminar II (2 semester hours) (*currently under development*)

NOTE: Academic Honors track students may count one leadership studies track course toward their academic honors graduation requirements. Students who successfully complete the academic honors track will receive a university honors designation on their diploma and on their university transcript. The academic honors track complements, but does not replace, honors programs available in the student's major. Students should

consult advisors in their major as well as the UHL advisor for advice on honors sections. Meeting with advisors is encouraged during the first semester at CU Denver.

Leadership Studies Track Requirements

The leadership studies track is designed to develop skills and experiences that will prepare students for the new systems and challenges of leadership in corporate, institutional and public life. Leadership studies tracks work together to enhance their leadership abilities to meet the challenges of a world characterized by the increasing globalization of leadership responsibilities and the rapid change in what leaders need to learn and know. They confront complex issues, individually and in leadership teams, while taking responsibility for becoming lifelong learners.

Students develop their leadership potential through self-guided learning strategies, practical team projects, theory-based seminars, contact with outstanding leaders and individualized mentoring. The leadership studies track is designed to create a collaborative learning environment where students work in action-oriented teams on innovative solutions to practical issues.

A typical course of study for a leadership studies track student is:

Year 1:

UNHL 1100: Introduction to UHL (3 semester hours)

UNHL 2755: UHL Seminar (two semesters at 1 semester hour each)

English 2030-UHL: Core Composition II (3 semester hours)

Years 2 and 3:

Five UHL Leadership Studies track or hybrid electives (15 semester hours)

Year 4:

UNHL 4991: UHL Senior Research Seminar I (2 semester hours)

UNHL 4992: UHL Senior Research Seminar II (2 semester hours)

NOTE: Leadership track students may count one academic honors track course toward their leadership studies graduation requirements. Students who successfully complete the leadership studies track will graduate with a minor in leadership studies.

UHL Graduation Requirements

To graduate with the appropriate UHL designation (university honors or a minor in leadership studies), students are required to satisfy the course and semester hour requirements specified above and must have a GPA of 3.50 or higher in their UHL courses. No grade below B- (2.70) in a UHL course will count toward the UHL graduation requirements.

Admission

Admission to the UHL program is competitive. In addition to meeting published requirements for admission to CU Denver, students must have a high school GPA, class ranking and SAT/ACT scores commensurate with an honors educational experience. For example, we would expect that applicants would rank in the top 10 percent of their high school class and/or have scored in the 90th percentile or above on the SAT/ACT.

Students who wish to be considered for admission to the UHL program must submit the following application materials:

- A completed UHL application form
- A written essay
- 3 letters of recommendation
- High school transcripts and transcripts for all college-level work completed to date
- SAT and/or ACT scores

We require a personal interview with all students who are selected as finalists for admission.

Applicants for admission to the UHL program should show evidence of ability and desire to:

- Take responsibility for their own learning, for self-discovery and for personal and intellectual growth.
- Learn about and understand diverse, competing perspectives, viewpoints and values
- Profit from varied modes of learning
- Become responsible and contributing members of the UHL program, of the university and of society

Application information can be found on the UHL website at: www.ucdenver.edu/UHL.

Transfer Student Admissions

The UHL program may admit a limited number of transfer students into the UHL program, contingent on the availability of slots in the UHL cohorts. Students may transfer into the UHL program for the second semester of their freshmen year or the first semester of their sophomore year.

Students wishing to apply for admission to the UHL program after the first semester of the freshman year must follow the standard UHL application procedures. In addition, prospective transfer students should include with their application materials copies of transcripts for all college-level work completed to date.

Applicants for transfer admission into the UHL program will be evaluated by the UHL admissions committee on the same basis as traditional UHL admissions candidates, and transfer admissions are subject to the availability of slots in the UHL cohort.

Transfer students are required to complete 27 semester hours of UHL courses, including the UHL core, in order to graduate with UHL certification. The requirement is 24 semester hours for students who have already received credit for English 2030 or its equivalent.

Graduate Degree Programs

Accounting MS

Program Director: Michael Roberts
Telephone: 303-315-8460
E-mail: Michael.Roberts@ucdenver.edu

Faculty

Professors:

Bruce Neumann, PhD, University of Illinois

Associate Professors:

Gary Colbert, PhD, University of Oregon
Carol Dee, PhD, Louisiana State University
L. Ann Martin, PhD, University of Minnesota
Michael Roberts, PhD, Georgia State University

Assistant Professors:

Mary Malina, PhD, University of Colorado Boulder
Craig A. Sisneros, PhD, Arizona State University
Willilam R. Strawser, PhD, Texas A&M University

Senior Instructors:

Elizabeth Connor, MS, Colorado State University
Robert Hockenbury, MS, University of Houston

Instructors:

Cindy Fischer, MA, University of Colorado Boulder
Emily Vera, MS, University of Colorado Denver

The master of science in accounting offers three specializations plus a flexible program which allows students to design individualized courses of study.

The program provides students the opportunity to acquire a thorough understanding of financial and managerial accounting, auditing and taxation in preparation for successful careers in public or private accounting, as well as government or nonprofit accounting.

Students completing the MS in accounting will complete:

- 12 semester hours of required accounting core coursework
- 6 semester hours of elective accounting coursework*
- 6 semester hours of accounting capstones
- 6 semester hours of free business electives

*The elective course work can be selected from graduate accounting courses or by selecting one of the three specializations offered within the program. Students who select the accounting and information systems audit and control (AISAAC) specialization have completely different requirements which are listed under that specialization.

A. Background Accounting Courses*

The MS in accounting also requires completion of the following accounting prerequisites. Prerequistes may be completed at the undergraduate or graduate level, with a grades of B- or higher and a cummulative GPA of 3.0. Students with grades below a B may be subject to probation.

Required Courses:

BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
undergraduate equivalent: ACCT 2200 and ACCT 2220
ACCT 6030 - Financial Accounting **gtPATHWAYS:**
undergraduate equivalent: ACCT 3220 and ACCT 3230
ACCT 6070 - Management Accounting **gtPATHWAYS:**
undergraduate equivalent: ACCT 3320

Total: 9-15 Hours

*Waived for students with appropriate background.

Accounting courses may be taken by nondegree or non-matriculated students.

B. Common Body of Knowledge (CBK)

Based on prior coursework, students may be required to take up to two background courses. The following are suggested:

BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**

C. MS Accounting

Accounting Core

(12 semester hours)

Students should not repeat any course successfully completed at the undergraduate level with a grade of B- or higher. An advisor will evaluate prior coursework to determine substitutions.

BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
ACCT 6020 - Auditing **gtPATHWAYS:**
ACCT 6054 - Accounting Systems and Data Processing **gtPATHWAYS:**
ACCT 6140 - Tax Planning for Managers **gtPATHWAYS:**

Accounting Electives

(6 semester hours)

ACCT courses numbered 6000 or higher excluding ACCT 6030 or ACCT 6070.

Or, courses contributing to **one of the three following specializations may be used to meet this elective requirement.**

D. Accounting Specializations

Students may use a combination of accounting and free electives to complete one of the three following specialization options:

Auditing and Forensic Acounting Specialization

Choose four of the following courses:
ACCT 6020 - Auditing **gtPATHWAYS:**

ACCT 6280 - Professional Judgment and Decision Making in Accounting **gtPATHWAYS:**
ACCT 6340 - Financial Statement Analysis **gtPATHWAYS:**
ACCT 6360 - Fraud Examination **gtPATHWAYS:**
ACCT 6370 - International Accounting **gtPATHWAYS:**
ACCT 6380 - Forensic Accounting **gtPATHWAYS:**
ACCT 6470 - Internal Auditing **gtPATHWAYS:**
ACCT 6510 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**
ACCT 6620 - Advanced Auditing **gtPATHWAYS:**

Financial Accounting Specialization

Choose four of the following courses:
ACCT 6024 - Advanced Financial Accounting **gtPATHWAYS:**
ACCT 6080 - Accounting for Government and Nonprofit Organizations **gtPATHWAYS:**
ACCT 6280 - Professional Judgment and Decision Making in Accounting **gtPATHWAYS:**
ACCT 6340 - Financial Statement Analysis **gtPATHWAYS:**
ACCT 6350 - Current Issues in Professional Accounting **gtPATHWAYS:**
ACCT 6370 - International Accounting **gtPATHWAYS:**

Taxation Specialization

Choose four of the following courses:
ACCT 6140 - Tax Planning for Managers **gtPATHWAYS:**
ACCT 6400 - Taxation of Corporations and Shareholders **gtPATHWAYS:**
ACCT 6410 - Advanced Tax For Individuals **gtPATHWAYS:**
ACCT 6420 - Taxation of Estates and Gifts **gtPATHWAYS:**
ACCT 6430 - International Taxation **gtPATHWAYS:**
ACCT 6440 - Tax Practice and Procedures **gtPATHWAYS:**
ACCT 6450 - Research Problems In Taxation **gtPATHWAYS:**
ACCT 6460 - Advance Topics in Taxation **gtPATHWAYS:**
ACCT 6480 - Partnership Taxation **gtPATHWAYS:**
ACCT 6500 - Advanced Corporate Taxation **gtPATHWAYS:**

E. Accounting Capstone

(6 semester hours)

ACCT 6250 - Seminar: Financial Accounting **gtPATHWAYS:**
ACCT 6260 - Seminar: Managerial Accounting **gtPATHWAYS:**

F. Free Elective

(6 semester hours)

Accounting is increasingly diverse and linked to many business decisions. Accountants may eventually work as systems designers, chief financial officers, cost analysts, budget officers or chief executive officers. Students will be better prepared for their careers if they develop competencies in a related field, which may be chosen from a single discipline such as finance, information systems, decision sciences, entrepreneurship, international business, marketing, or management.

Free electives may consist of any course numbered 6800 or higher with BUSN prefix or any course numbered 6000 or higher with a prefix of ACCT, ENTP, FNCE, INTB, ISMG, MGMT, DSCI, or MKTG excluding ACCT 6030 and ACCT 6070

G. Total: 30 Hours

Accounting and Information Systems Audit and Control (AISAAC) Specialization

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization’s financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

As you will notice the complete 30 semester hour requirements for this specialization are listed below.

Accounting Core

(9 semester hours)

ACCT 6620 - Advanced Auditing **gtPATHWAYS:**

ACCT 6250 - Seminar: Financial Accounting **gtPATHWAYS:**
ACCT 6260 - Seminar: Managerial Accounting **gtPATHWAYS:**

AISAAC Common Courses

(12 semester hours)

ACCT 6020 - Auditing **gtPATHWAYS:**
ACCT 6510 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**
ISMG 6040 - Business Process Management **gtPATHWAYS:**
ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**

Choose three of the following courses:

(9 semester hours)

ACCT 6340 - Financial Statement Analysis **gtPATHWAYS:**
ACCT 6360 - Fraud Examination **gtPATHWAYS:**
ACCT 6800 - Special Topics **gtPATHWAYS:**
ISMG 6080 - Database Management Systems **gtPATHWAYS:**
ISMG 6180 - Information Systems Management and Strategy **gtPATHWAYS:**
ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**
ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**

Total 30 hours

Administrative Leadership and Policy Studies EdS

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311

E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/alps

Principal Licensure

Master of Arts Degree

Education Specialist Degree

Executive Leadership Administrator Licensure Program

Faculty

For information about faculty in this area, visit www.ucdenver.edu/education/alps.

The primary responsibility of the administrative leadership and policy studies (ALPS) faculty is to prepare leaders for public education in Colorado and the nation. Currently, the principal license is required for people seeking building-level administrative positions in Colorado.

Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

Note: Those already holding a master's degree and 5 years of leadership in education should also see the Executive Leadership Program (below) for pursuing administrator licensure.

Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and

online work.
EDUC 5751 - Principal/Administrator Licensing I Semester Hours: 5 to 9
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**
EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9
Total: 32 Hours

MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

Section A: Educational Research

RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3
LCRT 5140 or CLDE 5140 - Multicultural Education Semester Hours: 3

LCRT 5150 or CLDE 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

Section C: Educational Psychology/Special Education

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3
EPSY 5110 - Human Learning. Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

EdS Program

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master’s degree. Generally, for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

Administrator Licensure - Executive Leadership Program

Designed for the professional educator who, already holding a master's degree and 5 years leadership experience in education, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at www.ucdenver.edu/education/elp.

Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission,

students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Administrative Leadership and Policy Studies MA

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

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Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Anthropology, MA

► Graduate School Rules apply to this program.

Plans of Study

MA students may pursue the thesis or non-thesis option.

Thesis Option: A thesis is characterized by three factors: 1) it is based in a research question or problem; 2) it involves original research; 3) there is a fully developed research proposal. A thesis can also encompass a range of format alternatives to the traditional thesis (e.g. article submitted for publication to a peer-reviewed journal, or a video production, internship or museum exhibit, each generally accompanied by a companion paper developing a theoretical or problem-oriented question). The thesis option requires 30 semester hours, including 4-6 hours of thesis.

Non-Thesis Option: This track is defined by additional course work in lieu of a thesis. The non-thesis option requires 36 semester hours of course work.

Thesis Option

The thesis is a major requirement for those in the MA in anthropology thesis track. The thesis should demonstrate the student's ability to apply knowledge and skills gained from the anthropology department's curriculum. A desirable goal for an excellent thesis would be a work of sufficient rigor and quality that it could be considered for publication. Original data collection ("fieldwork") is recommended but not required for the thesis. Analysis of secondary data—whether quantitative, qualitative, visual or other formats—is perfectly acceptable as long as the research is informed by a clearly articulated research question and under-girded by a research proposal.

The traditional thesis is a single document that often incorporates a literature review, definition of a problem, discussion of methods to address the problem, the subsequent research activity and results. However, the student may design a thesis with different emphases, in consultation with their advisor. For example, the goal may instead be a more compact paper submitted to a peer-reviewed journal. Other thesis plans may combine some research activity such as a video production, museum exhibit or an internship, with an accompanying paper. Students pursuing the thesis option must develop a topic and research proposal that specifies their plans in the semester after their completion of 18 credit hours.

The thesis must be defended before a committee of three faculty, at least two of whom need to be on the Department of Anthropology faculty (which includes senior instructors and research faculty). The structure of the thesis is largely determined by the University of Colorado Denver Graduate School Rules; i.e., a thesis must conform to the rules.

For the thesis, students must prepare a full research proposal which must be approved by their thesis chair before beginning their research. This proposal must be completed by the semester after the student has completed 18 credit hours. Sections of the proposal should include, at a minimum:

- Introduction and statement of the problem: Should include a one sentence statement of the problem on the first page, and a discussion of its significance (i.e., why is it important that this topic be researched).
- Literature review covering theoretical and topical material.
- Research design and methods including a data analysis plan.

Note: Wenner-Gren and National Science Foundation both provide good models and templates for the research proposal. Those in the medical anthropology track might want to consider following the NIH model, depending the nature of their research questions and career goals.

- All students proposing to work with humans or data on modern humans must apply for and receive approval from the Human Subjects Research Committee before they begin their research. Note: most of the material for the application will be drawn from the research proposal.
- The draft thesis must be reviewed and approved as "defensible" by the student's thesis committee faculty chair before a thesis defense date can be set. Defensible means the chair has reviewed the draft and suggested changes have been made.
    - The draft sent to the student's committee must be substantively complete: All references must be in the text and properly formatted in a references cited section; there should be no "track changes" comments in the text; the text should be formatted according to Graduate School requirements.
    - Given the complexity of faculty and student schedules, consultation on a defense date should be done as far in advance as possible.
    - There must be a minimum of three weeks between the agreed-upon date for the defense and distribution of the draft thesis defined as defensible by the student's chair. If you would like feedback from your committee members before the defense, you should plan to distribute the thesis at least 4 weeks before the defense date.

Note: If you intend to graduate the same semester you defend your thesis, you must schedule, successfully defend, and complete all recommended changes in accordance with CU Denver Thesis and Dissertation Guidelines. This effectively translates to having the thesis completed and "defensible" before the middle of the semester.

Non-Thesis Option

The non-thesis option allows students to pursue their own educational goals through the selection of additional courses that fit their interests. We strongly encourage students who choose this option to consider an internship position arranged around an area of expertise or the development of a skill-set. The internship may be in a governmental agency or non-governmental organization in Colorado, the U.S. or internationally. Successful completion of an internship will be acknowledged on the transcript of the MA program. The decision to pursue the non-thesis option should be made by the semester following the completion of 18 credit hours.

Additional Information

Students must maintain an overall GPA of 3.0 to remain in good standing and receive a grade of *B-* or better in a course to have it count toward graduation. The Graduate School on the Downtown Campus allows up to five years to complete a master's degree, but students are strongly discouraged from spending more than four years. While it is possible to finish the MA in two years, most of our students work part-time, which limits the time they can dedicate to the program; most finish within three years. Four

semesters must be taken in residence at CU Denver. All students are required to pass a written comprehensive examination, taken after core course work has been completed.

Some students may benefit from adding a specific skills-based certificate program onto their graduate program. For example: archaeology students may wish to gain expertise in Geographic Information Systems through the GIS certificate offered through the Department of Geography and Environmental Sciences, while medical anthropology students may benefit from the certificate in public health offered through the School of Public Health or the environmental health certificate through the Master of Science in Environmental Sciences program. Graduate-level courses in certificate programs can often fulfill elective requirements in the anthropology program.

One doctoral program at CU Denver campus that may be of particular interest to graduates of the anthropology MA program is the PhD in Health and Behavioral Sciences offered through the Department of Health and Behavioral Sciences. It is highly interdisciplinary and a natural extension of a master's degree in anthropology.

Course Requirements

Your graduate anthropology education begins by taking ANTH 5810, Integrating Anthropology, plus two core courses each from two subdisciplines of Anthropology. After completing this core, you will select from among the specialized elective courses in the research concentrations described in more detail below. You will work closely with an advisor in selecting the range of courses appropriate both to a problem orientation and to your career objectives.

Required core courses (18 semester hours)

Required in fall of first year:
ANTH 5810 - Integrating Anthropology **gtPATHWAYS:**

All students must complete or demonstrate competence in the following:
ANTH 5053 - Quantitative Methods in Anthropology **gtPATHWAYS:**

Choose two of the following three sets of core courses (Students are not required to take these courses sequentially)

Archaeology

ANTH 6307 - Contemporary Perspectives in Archaeology **gtPATHWAYS:**
ANTH 6317 - Archaeological Research Design and Analysis **gtPATHWAYS:**

Biological

ANTH 6503 - Biological Anthropology Core: The Fossil Record **gtPATHWAYS:**
ANTH 6513 - Biological Anthropology Core: Modern Human Variation **gtPATHWAYS:**

Cultural

ANTH 6063 - Qualitative Research Design and Methods **gtPATHWAYS:**
ANTH 6103 - Current Theory in Ethnography **gtPATHWAYS:**

Research Concentrations (8-18 semester hours)

You will round out your program by selecting from the diverse range of courses offered in the department according to your particular interests in anthropology, your career goals and your plans for future graduate study. You may take courses in one or more concentrations. The courses listed are suggestions only; you must work closely with your advisor in constructing your particular program of study.

MEDICAL ANTHROPOLOGY

Medical anthropology is a subdiscipline of anthropology that includes the study of all aspects of health, illness and disease in human communities and populations. It draws on all of the perspectives that distinguish anthropology as a unique discipline: the analysis of human evolution and adaptation; cultural development, expressions and variability; and historical change and continuity. Medical anthropology takes as its subject a broad range of specific topics, including the study of health care systems, factors that affect the distribution and determinants of disease in populations, maternal and child health, nutrition and food habits, human development, political ecology, health policy and language and communication in health care contexts. Faculty in the department emphasize the applied dimensions of medical anthropology, preparing students for careers in public health, health care and health sciences research. Courses in the department are complemented by electives in other departments (sociology, biology, psychology, history, geography), programs on the Denver campus (health administration, public affairs, education) and programs at the Anschutz Medical Campus (Schools of Medicine, Public Health, Dental Medicine, Pharmacy and Nursing).

Courses

ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
ANTH 5030 - Ethnobiology **gtPATHWAYS:**
ANTH 5040 - Anthropology of Food and Nutrition **gtPATHWAYS:**
ANTH 5060 - Evolutionary Medicine **gtPATHWAYS:**

ANTH 5090 - Political Economy of Drugs **gtPATHWAYS:**
ANTH 5150 - Human Biocultural Adaptability **gtPATHWAYS:**
ANTH 5230 - Anthropology and Community Based Participatory Research **gtPATHWAYS:**
ANTH 5260 - Human Reproductive Ecology **gtPATHWAYS:**
ANTH 5300 - Migrant Health **gtPATHWAYS:**
ANTH 5560 - Human Ecology **gtPATHWAYS:**
ANTH 5600 - Medical Anthropology **gtPATHWAYS:**
HBSC 7310 - Environmental Epidemiology **gtPATHWAYS:**

Note: Students are also strongly encouraged to take elective courses in public health, epidemiology and biostatistics, which are available in the Department of Biometrics and Preventive Medicine on the Anschutz Medical Campus. See the Health Professions chapter of this catalog for further information.

ARCHAEOLOGY

The archaeological studies program concentrates on the study of past human societies using archaeological data collected in field and museum settings. While a quantitative and scientific approach is emphasized, the theoretical perspectives employed also draw heavily from political economy and cultural ecology. The department offers a variety of theoretical, methodological and area courses, which may be supplemented by others in the geography and environmental sciences and history departments. Internships are available in local museums and historic preservation offices in the Denver metropolitan area.

Courses

ANTH 5210 - Archaeology of the American Southwest **gtPATHWAYS:**
ANTH 5320 - Archaeology of Mexico and Central America **gtPATHWAYS:**
ANTH 5330 - Lithic Analysis **gtPATHWAYS:**
ANTH 5380 - Archaeology of Hunters-Gatherers **gtPATHWAYS:**
ANTH 5400 - Archaeology of Power and Inequality **gtPATHWAYS:**
ANTH 5570 - Landscape Archaeology **gtPATHWAYS:**
ANTH 5580 - Neanderthals and the Origin of Modern Humans **gtPATHWAYS:**
ANTH 5910 - Field Experience in Archaeology **gtPATHWAYS:**
GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**
GEOG 5080 - Introduction to GIS **gtPATHWAYS:**
GEOG 5220 - Environmental Impact Assessment **gtPATHWAYS:**
HIST 5231 - History in Museums **gtPATHWAYS:**
HIST 5232 - Historic Preservation **gtPATHWAYS:**
HIST 5234 - Introduction to Public History **gtPATHWAYS:**

BIOLOGICAL ANTHROPOLOGY

The biological anthropology concentration is concerned with modern human biological diversity and the past evolutionary history that has led to such diversity. Students in this concentration develop a firm understanding of the evolutionary processes that lead to physical and behavioral variation in humans and nonhuman primates. The concentration also emphasizes the theoretical and quantitative methods used to explore and explain this variation. Students may take courses in diverse areas including evolutionary biology, genetics, ecology, ethnobiology, epidemiology, nutrition, medical anthropology, paleoanthropology, paleontology and primatology. Because biological anthropology is multidisciplinary in nature, students are encouraged to consider courses offered outside the department.

Courses

ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
ANTH 5030 - Ethnobiology **gtPATHWAYS:**
ANTH 5040 - Anthropology of Food and Nutrition **gtPATHWAYS:**
ANTH 5060 - Evolutionary Medicine **gtPATHWAYS:**
ANTH 5150 - Human Biocultural Adaptability **gtPATHWAYS:**
ANTH 5500 - Advanced Issues in Human Evolution **gtPATHWAYS:**
ANTH 5520 - Human Biological Variation **gtPATHWAYS:**
ANTH 5530 - Anthropological Genetics **gtPATHWAYS:**
ANTH 5550 - Primate Comparative Anatomy **gtPATHWAYS:**
ANTH 5560 - Human Ecology **gtPATHWAYS:**
ANTH 5580 - Neanderthals and the Origin of Modern Humans **gtPATHWAYS:**
ANTH 5640 - Darwinian Approach to Human Behavior **gtPATHWAYS:**
BIOL 5074 - Human Reproductive Biology **gtPATHWAYS:**
BIOL 5134 - Human Genetics **gtPATHWAYS:**
BIOL 5494 - Population and Evolutionary Genetics **gtPATHWAYS:**
HBSC 7031 - Human Ecology and Environmental Adaptation **gtPATHWAYS:**
HBSC 7310 - Environmental Epidemiology **gtPATHWAYS:**

SUSTAINABLE DEVELOPMENT AND POLITICAL ECOLOGY

This concentration provides a critical, multicultural and multidisciplinary perspective on issues of development and resource conservation, with a strong emphasis on the integration of theoretical knowledge with field-based training opportunities. Three major themes are addressed within this concentration:

the types of resource management systems present in the world and their relationship to particular ecosystems

the types of knowledge systems and ideas associated with this diverse array of resource management systems, environmental knowledge and theoretical perspectives

the culture of institutions—ranging from small-scale NGOs to the World Bank—that design and implement conservation and development

A central goal of this emphasis is to provide students with the information, opportunities and resources required for pursuing a wide variety of career options in conservation and/or development. In addition to offering the following courses, the department encourages students to develop a specialized skill in conjunction with other departments and schools, including areas such as GIS mapping (geography), ecology (biology/anthropology), legal and policy issues (political science, School of Public Affairs), land use (geography, School of Public Affairs) and research/evaluation methodologies (anthropology).

Courses

ANTH 5030 - Ethnobiology **gtPATHWAYS:**
ANTH 5070 - Culture of Development and Globalization **gtPATHWAYS:**
ANTH 5170 - Culture and the Environment **gtPATHWAYS:**
ANTH 5180 - The Nature of Power **gtPATHWAYS:**
ANTH 5220 - Community in Global Context **gtPATHWAYS:**
ANTH 5230 - Anthropology and Community Based Participatory Research **gtPATHWAYS:**
ANTH 5450 - Development and Conservation: Contemporary Issues **gtPATHWAYS:**
ANTH 5460 - Development and Conservation: Theory and Practice **gtPATHWAYS:**
ANTH 5570 - Landscape Archaeology **gtPATHWAYS:**
Other courses in consultation with faculty advisor.

DEGREE TOTAL HOURS

Thesis Option: 30 Hours (including 4-6 hours of thesis)

Non-Thesis Option: 36 Hours

Applied Mathematics, MS

► Graduate School Rules apply to this program.

Program Requirements

Students must present 30 hours of course work and maintain a 3.0 GPA or above for the MS degree. At least 24 of these hours must consist of graduate-level (numbered 5000 or higher) mathematics courses. The remaining 6 hours must be either mathematics courses numbered 5000 or above or approved courses outside the department numbered 4000 or above. Up to 9 semester hours may be transferred from other institutions.

A student may devote from 4 to 6 hours (of the 30 required hours) to the writing of a thesis. Following completion of course work, all candidates must make a one-hour oral presentation before a committee consisting of three graduate faculty members.

Students must take either applied analysis or real analysis and applied linear algebra. Additionally, students must fulfill specific course work requirements for one of the following areas of specialization:

Applied Probability
Applied Statistics
Computational Biology
Discrete Mathematics
Mathematics of Science and Engineering
Numerical Analysis
Operations Research

All master's degree students are encouraged to participate in the Math Clinic, a unique program in which students have an opportunity to work on real-world problems supplied by local businesses, research firms and government agencies.

For more detailed information about the applied mathematics MS, see the Mathematical & Statistical Sciences Graduate Handbook (July 2010).

Architecture MArch

The MArch is the college's accredited professional degree for students intending to seek licensure as architects. It is a three-and-one-half-year plan of study on the Denver campus that has been fully accredited by the National Architectural Accrediting Board (NAAB).

Prerequisites

Students must complete the prerequisites of college-level trigonometry and physics before enrolling in ARCH 5310, Introduction to Building Technology. Since this class should be taken in the first semester in order to stay on track for graduation, students are strongly encouraged to complete the trigonometry and physics requirements before beginning the MArch program.

ARCH 5000, Math and Physics for Architects, is offered in the summer on a pass/fail basis. This class meets the prerequisite requirements. This class does not count toward the number of credits required for the MArch degree.

A graphics workshop is recommended for students who do not have a background in architectural drawing and model building. This class is offered each year before the beginning of the fall semester.

Students are also expected to have achieved a basic level of computer literacy and should be familiar with PC or Mac operating systems.

Program Requirements

Students with a bachelor's or master's degree unrelated to architecture must complete a seven- or eight-semester sequence of course work and accumulate a minimum of 114 semester hours of credit. Students who have completed the University of Colorado at Boulder's BEnvd or other preprofessional NAAB-accredited architecture degree, or non-NAAB-accredited professional architecture degree in another country, will be evaluated individually for advanced standing. These students will be advised and provided with an individualized plan of study commensurate with their previous degrees and experience, and will have to complete at least 60 semester hours of credit in residence within the College of Architecture and Planning.

Course Sequence

The MArch program is divided into five major components:

studio design studies, 45 semester hours
cultural studies, 12 semester hours
technology studies, 18 semester hours
professional studies, 6 semester hours
electives, 33 semester hours

A wide array of electives in these areas allows students to tailor their graduate studies to their own interests.

First Year

Fall

ARCH 5110 - Design Studio I **gtPATHWAYS:**
ARCH 5111 - Introduction to Drawing **gtPATHWAYS:**
ARCH 5210 - Introduction to Architecture **gtPATHWAYS:**
ARCH 5310 - Introduction to Building Technology **gtPATHWAYS:**

Total: 15 Hours

Spring

ARCH 5120 - Design Studio II **gtPATHWAYS:**
ARCH 5121 - Design Seminar II **gtPATHWAYS:**
ARCH 5220 - History of Architecture I **gtPATHWAYS:**
ARCH 5320 - Building Construction and Methods **gtPATHWAYS:**
LDAR 6632 - Site Planning **gtPATHWAYS:**
Elective* (3 semester hours)

Total: 18 Hours

Second Year

Fall

ARCH 5130 - Design Studio III **gtPATHWAYS:**
ARCH 5131 - Design Seminar III **gtPATHWAYS:**
ARCH 5230 - History of Architecture II **gtPATHWAYS:**
ARCH 5240 - Human Factors in Design **gtPATHWAYS:**
ARCH 5330 - Environmental Control Systems I **gtPATHWAYS:**
Elective* (3 semester hours)

Total: 18 Hours

Spring

ARCH 5140 - Design Studio IV **gtPATHWAYS:**
ARCH 5141 - Design Seminar IV **gtPATHWAYS:**
ARCH 5340 - Environmental Control Systems II **gtPATHWAYS:**
ARCH 5350 - Structures I **gtPATHWAYS:**
Electives* (6 semester hours)

Total: 18 Hours

Summer

ARCH 6150 - Comprehensive Design Studio **gtPATHWAYS:**
ARCH 6151 - Comprehensive Design Seminar **gtPATHWAYS:**
Electives* (6 semester hours)

Total: 12 Hours

Third Year

Fall

ARCH 5360 - Structures II **gtPATHWAYS:**
ARCH 5410 - Professional Practice **gtPATHWAYS:**
ARCH 6170 - Advanced Design Studio **gtPATHWAYS:**
ARCH 6171 - Advanced Design Seminar **gtPATHWAYS:**
Electives* (9 semester hours) or
ARCH 6950 - Thesis Preparation **gtPATHWAYS:** and
Electives (3 semester hours)

Total: 18 Hours

Spring

ARCH 6170 - Advanced Design Studio **gtPATHWAYS:**
ARCH 6171 - Advanced Design Seminar **gtPATHWAYS:**
Electives* (9 semester hours) or
ARCH 6951 - Architecture Thesis **gtPATHWAYS:**
Electives* (9 semester hours)

Total: 15 Hours

* Students must take 9 elective semester hours in cultural studies, 9 elective semester hours in professional studies (3 semester hours of which must emphasize the computer), 6 elective semester hours in technology studies and 9 elective semester hours in any architecturally related electives on campus.

Bioengineering MS

Master of Science (MS) Degree Program

The master of science degree is offered to students with an undergraduate degree in the life sciences or engineering. Students complete the degree in 1-2 years with the choice of research thesis or industry internship.

Master of Science (MS) Dual Degree Program

For students already enrolled or accepted into another MS program in the University of Colorado system. Please contact us for advising.

Bioengineering PhD

MD/PhD Degree Program

For students already enrolled or accepted into the Medical Scientist Training Program in the School of Medicine at University of Colorado Anschutz Medical Campus. Please contact us for advising.

Doctor of Philosophy (PhD) Degree Program

Research areas include imaging and biophotonics; cardiovascular biomechanics and hemodynamics; orthopedic biomechanics, neuromuscular control and assistive technology; surgery and urological sciences; ophthalmology; and neuroscience engineering.

Biology MS

► Graduate School Rules apply to this program.

Associate Chair for Graduate Studies: Timberley Roane
Office: Science, 4096
Telephone: 303-556-6592
E-mail: timberley.roane@ucdenver.edu
Website: clas.ucdenver.edu/biology/grad.html

Requirements for Admission

Applicants must hold a baccalaureate degree from an accredited college or university, awarded within the preceding ten years. Students whose biology degree was awarded more than 10 years prior to entrance to the CU Denver program will be expected to retake or show competence in the biology core courses. Successful applicants generally have earned an overall GPA of 3.0 or better. Most applicants have an undergraduate major in biology or a related field. Students entering the master's program in biology must have completed the equivalent of a minor in biology. Although a deficit of one course is allowed, this must be completed within the first semester of entering the master's program and will not apply toward the degree. The general GRE is required of all applicants, with scores above the 50th percentile required on each of the three sections (verbal, quantitative and analytical writing).

The master's program has two tracks: research (thesis) and course work (non-thesis). For both tracks, applicants to the master's in biology program must have a declared area

of specialization that aligns with the research focus of a biology graduate faculty member. Faculty expertise can be found under Graduate Faculty Profiles on the Department of Integrative Biology website. Students must contact prospective faculty advisors to determine if openings are available within the faculty member's program.

Application deadlines are February 1 for domestic U.S. students and January 15 for international students. Applications submitted after the deadline date WILL NOT be considered. Before submitting an application, it is highly recommended that students meet with the associate chair for graduate studies to ensure this program meets individual needs and that students meet the program requirements. Application to the master's in biology program is through CU Denver Admissions. Application includes the University graduate application and the biology supplemental application.

Degree Requirements

All course work taken within the Department of Integrative Biology and applied toward the degree must be at the 5000 level or above. There is no core of required courses. A course plan is developed jointly by the student and faculty advisor and is approved by the student's graduate committee. In addition to regular meetings throughout the semester, all students must meet with their faculty advisor at the beginning of each semester to determine course schedules and upcoming deadlines. A pre-registration agreement form is signed by the student and advisor, and then filed with the associate chair for graduate studies in biology to ensure that degree requirements are met, and that selected courses will be applicable toward the MS degree.

With the advisor's and/or graduate committee's approval, a maximum of 6 semester hours of course work at the 4000 level taken outside the department may be applied toward the degree. At least 18 semester hours must be taken from faculty in the Department of Integrative Biology at CU Denver. Upon approval of the department, as many as 12 semester hours may be transferred into the program. Two types of degree tracks are offered:

Research (thesis) track

Students must form a three-person committee consisting of members of the graduate faculty, with at least two from the rostered CU Denver graduate faculty. Committee membership must be approved by the faculty advisor. The research track requires 30 semester hours, including a minimum of 4 and no more than 6 thesis hours. Students may also count a maximum of 7 hours (total) of graduate-level independent study and/or internship. Graduate internship or independent study projects must be research-based. In addition, two semesters of graduate seminar (BIOL 6655) are required.

BIOL 6655 - Seminar **gtPATHWAYS:**

Course work (non-thesis) track

This track is reserved primarily for teachers and career professionals requiring additional background for career advancement. The course work track requires 32 semester hours, including two semesters of graduate seminar (BIOL 6655).

BIOL 6655 - Seminar **gtPATHWAYS:**

Comprehensive Examination

All students in the master's in biology program are required to complete a series of biology comprehensive exams. The purpose of the exams is to demonstrate mastery of chosen biological concepts. The comprehensive exams include three written exams and an oral exam.

Financial Assistance

Financial aid for graduate students may be available from university and/or state fellowships, research assistantships sponsored by individual faculty members and teaching assistantships. Teaching assistantships are available on a competitive basis through application. Students should refer to the department web site for information on how to apply for a teaching assistantship.

Contact the Office of Financial Aid for information about fellowships, or the associate chair for graduate studies for information about research and teaching assistantships.

Business Administration MBA

Program Director: Elizabeth Cooperman
Telephone: 303-315-8422
E-mail: Elizabeth.Cooperman@ucdenver.edu

Faculty

Professors:

Marcelle Arak, PhD, Massachusetts Institute of Technology
Heidi Boerstler, PhD/JD, Yale University/University of Denver
Jean-Claude Bosch, PhD, University of Washington
Peter Bryant, PhD, Stanford University
Wayne Cascio, PhD, University of Rochester
Lawrence Cunningham, DBA, University of Tennessee

E. Woodrow Eckard, PhD, University of California-Los Angeles
Richard Foster, PhD, University of Chicago
James Gerlach, PhD, Purdue University
Jahangir Karimi, PhD, University of Arizona
Susan Keaveney, PhD, University of Colorado
Gary Kochenberger, PhD, University of Colorado
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
James Morris, PhD, University of California-Berkeley
Dennis Murray, PhD, University of Massachusetts-Amherst
Bruce Neumann, PhD, University of Illinois
Edward O'Connor, PhD, University of Akron
John Ruhnka, JD/LLM, Yale School of Law/Cambridge University
Dean Taylor, PhD, University of Chicago
Clifford Young, PhD, University of Utah

Associate Professors:

Ajeyo Banerjee, PhD, University of Massachusetts-Amherst
Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign
Kang Rae Cho, PhD, University of Washington
Gary Colbert, PhD, University of Oregon
Elizabeth Cooperman, PhD, University of Georgia
Murray Cote, PhD, Texas A & M University
Carol Dee, PhD, Louisiana State University
David Forlani, PhD, University of Minnesota
Blair Gifford, PhD, University of Chicago
Dawn Gregg, PhD, Arizona State University
Deborah Kellogg, PhD, University of Southern California
Sarah Koovor-Misra, PhD, University of Southern California
Vick Lane, PhD, University of Washington
Michael Mannino, PhD, University of Arizona
L. Ann Martin, PhD, University of Minnesota
Madhavan Parthasarathy, PhD, University of Nebraska
Michael Roberts, PhD, Georgia State University
Judy Scott, PhD, University of California-Irvine
Manuel Serapio, PhD, University of Illinois
Marlene Smith, PhD, University of Florida
Steven Walczak, PhD, University of Florida

Assistant Professors:

Vinit Desai, PhD, University of California at Berkeley
Stephanie Johnson, PhD, Rice University
George Kiersey, PhD, University of Southern California

Mary Malina, PhD, University of Colorado
Robert Nieschwietz, PhD, Arizona State University
Ronald Ramirez, PhD, University of California-Irvine
Zhiping Walter, PhD, University of Rochester

Senior Instructors:

John Byrd, PhD, University of Oregon
Elizabeth Connor, MS, Colorado State University
Chen Ji, MS, University of Colorado
Michael Harper, PhD, Rensselaer Polytechnic Institute
Robert Hockenbury, MS, University of Houston
Barbara Pelter, PhD, University of California-Davis
Mary Lee Stansifer, PhD, Northwestern University
Eric Thompson, MS, University of Colorado
John Turner, PhD, St. Louis University

Instructors:

Errol Biggs, PhD, Pennsylvania State University
John Daley, PhD, University of Washington
Cindy Fischer, MA, University of Colorado
Linda Fried, JD/LLM, University of Miami
Wendy Guild, PhD, Massachusetts Institute of Technology
Fredrick Hampel, MS, Kansas State University
Barry McConnell, MBA, University of Colorado
Peter Miller, MA, Farleigh Dickenson University
Jeffrey Nystrom, MS, University of Colorado
Ira Selkowitz, JD, University of Denver
Lori Seward, PhD, Virginia Tech
Mary Lee Stansifer, PhD, University of Florida
Cindy Sutfin, MS, University of Colorado
Emily Vera, MS, University of Colorado

The Master of Business Administration (MBA) program provides a general background in management and administration. This background enables the student to have the breadth of exposure and depth of knowledge required for an advanced-level management career. The program is devoted to developing the concepts, analytical tools and communication skills required for competent and responsible administration of an enterprise viewed in its entirety, within its social, political and economic environment.

The professional MBA program allows the scheduling of classes with maximum flexibility so students can progress through the program at their own pace, by taking as little as one class per semester or as many as five classes per semester, at times that are convenient with their work schedule. The program can be completed in as little as 16 months or as long as five years plus one semester.

Online courses add additional flexibility. Students may complete all degree requirements online, or combine online and campus courses to broaden the choice of electives or to fit a business travel schedule or personal learning style. Choice of online electives is limited.

The MBA program is also available in different configurations: 11-Month (full time, see relevant section), Health Administration and the Executive MBA (see relevant section). All MBAs have the same curriculum requirements; they differ only in their focus, the flexibility of course scheduling, and the time required to complete the program. The 11-Month and Executive MBAs are lockstep programs (no open electives, no specialized tracks), where students form a cohort and complete all program requirements together. No course transfers, waivers or substitutions are permitted.

Program Requirements

Core Requirements

BUSN 6520 - Managing Individuals and Teams **gtPATHWAYS:**
BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
BUSN 6560 - Marketing Management **gtPATHWAYS:**
BUSN 6610 - Information Systems Management and Strategy **gtPATHWAYS:**
BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
BUSN 6630 - Management of Operations **gtPATHWAYS:**
BUSN 6640 - Financial Management **gtPATHWAYS:**
BUSN 6710 - Strategic Management **gtPATHWAYS:**

Electives

International Business elective (3 semester hours)
Free electives (15 semester hours)

Total: 48 Hours

Notes and Restrictions:

Core Substitution. Students with extensive and comparable course work in a particular core subject area may petition to substitute a higher-level graduate course on the basis of prior undergraduate or graduate course work taken at a regionally accredited college or university for the corresponding core class. This does not waive the 48-hour requirement. If a core course is substituted, another graduate level course in the same functional area must be used as a substitute so that the student completes a total of 48 semester hours.

International Elective. One 3-hour course with an international focus must be completed. Contact a graduate advisor or refer to a current MBA degree plan for a complete list of options.

Electives. The professional MBA curriculum allows for 15 semester hours of elective credit, which can be chosen from graduate-level courses offered by the Business School, except BUSN courses numbered below 6800. Additional graduate-level course work completed at the Denver campus outside the Business School may be applied to the MBA degree, but only with prior written approval of the MBA program director.

Note: Electives for the 11-Month and Executive MBA programs are pre-selected for all students.

MBA Specializations

Graduate students will have an opportunity to take specialized tracks within the professional MBA program by completing a pre-specified program of elective courses. The following 19 tracks are available:

Business-to-Business Marketing
Business Intelligence
Business-to-Consumer Marketing
Business Strategy
Change Management
Corporate Financial Management
Decision Sciences
Enterprise Technology Management
Entrepreneurship
Finance
Financial Analysis
Human Resources Management
Information Systems
International Business
Investment Management
Managing for Sustainability
Marketing

Services Management
Sports and Entertainment Management

For additional information about the professional MBA program, contact a graduate advisor at 303-315-8200.

Business Administration: 11–Month MBA

Program Director: Gary Colbert
Administrative Director: Debbie Follenweider
E-mail: 11-monthMBA@ucdenver.edu
Telephone: 303-315.8800
Website: www.business.ucdenver.edu/11-MonthMBA

The 11-month MBA is an accelerated full-time program that brings academically superior students together with select research and teaching faculty. The program enables students to focus their energies in a concentrated, total-immersion program of study earning a nationally accredited, 48-semester-hour MBA degree in just under a year.

The 11-month MBA consists of five eight-week terms, three courses per term, plus a two-week international business course abroad. In addition to a minimum of 18 hours of class time each week, the 11-month MBA students spend an average of 30 hours a week on homework. Students should expect a minimum time commitment of 48 hours per week to successfully complete this program.

Admission and Application Process

The admissions committee considers each candidate’s entire record of achievement demonstrated through academic transcripts, GMAT scores, essays, letters of recommendation, personal interviews (if needed, will be scheduled at the discretion of the admission committee), work experience and extracurricular and community activities.

Previous Education

Applicants’ complete academic records, including GPAs and previous course work are considered. Undergraduate degrees do not have to be in business, but they must be from regionally accredited colleges or universities.

Testing

The GMAT is a requirement for application to the 11-month MBA program and cannot be substituted with other standardized examinations. If you take the GMAT more than once, we will evaluate your application using the highest GMAT score. The GMAT score for students admitted into the 11-month MBA program has averaged around 600. Students must score a minimum 500 to be considered for admission to the 11-month MBA program.The GMAT website is www.mba.com.

The 11-month MBA also requires a highly developed proficiency in written and oral English. International applicants whose first language is not English must take the TOEFL or IELTS exam and earn a minimum score of 575/232TOEFL or 7 IELTS to be considered for admission to the 11-month MBA program. Information on taking the TOEFL or IELTS can be obtained by visiting www.ets.org and www.ielts.org.

Work Experience

Students in the 11-month MBA program have an average of six years of work experience. However, experience ranges from the recently graduated to more than 30 years in business. Professional experience strengthens the application, since it adds relevance and depth to the learning process and enables candidates to contribute to and benefit from the knowledge of fellow classmates in the accelerated time frame of the program.

Applications

The following are required for consideration of admission to the program.

- completed application for graduate admission, parts I and II, submitted by published deadlines and fee (domestic or international as appropriate)
- two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence
- GMAT scores taken in the last five years sent directly to the graduate admissions office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-65
- two (2) official transcripts from each school, college or university previously attended past high school, sent directly to the graduate admissions office. A minimum baccalaureate degree is required
- include answers to the four essay questions demonstrating commitment to an accelerated MBA program
- a resumé outlining work experience
- for international students, a minimum official score of 575/232 TOEFL or 7 IELTS is required to apply -- test scores are valid for two years after test date

The priority date for domestic applications is June 15 (May 15 for international students). Applications (for domestic students) and current fee information are available at www.ucdenver.edu/business/11-monthMBA.

All of the required admission materials should be sent to:

University of Colorado Denver
The Business School
Graduate Admissions
Campus Box 165, P.O. Box 173364
Denver, CO 80127-3364

For further information, brochures and application materials, contact the 11-month MBA program at 303-315-8800 or 11-monthMBA@ucdenver.edu.

The 11-month MBA uses a rolling admission system. The committee reviews applications when they are complete in all respects, including transcripts, GMAT scores and letters of recommendation. Candidates are encouraged to submit their application as early in the process as possible. Completed applications are reviewed until early August; applications received after June 15 will be reviewed on a space-available basis. International applicants should have their completed applications in by May 15, to leave them sufficient time for visa and travel arrangements if they are admitted.

A personal interview may also be required for admission to the 11-month MBA.

11-month MBA Scholarships/Loans

General financial assistance is available for qualified students. Students should apply directly to the Denver campus Office of Financial Aid. Call 303-556-2886 for information and forms. In addition, 11-month MBA merit-based scholarships are available only to students in the 11-month MBA. Other Business School scholarships are also available to all MBA students.

Degree Requirements

Students in the 11-month MBA complete 10 MBA core courses, one international business course (conducted abroad) and five special topics courses. All courses require that students work in teams. Due to the program's cohort structure, individual elective options are not available to 11-month MBA students. **No courses may be waived, substituted or transferred into the program.** If a student finds it necessary to leave the accelerated program, credits already earned may be transferred to the professional MBA program on campus.

MBA Core Courses

BUSN 6520 - Managing Individuals and Teams **gtPATHWAYS:**
BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**

BUSN 6560 - Marketing Management **gtPATHWAYS:**
BUSN 6610 - Information Systems Management and Strategy **gtPATHWAYS:**
BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
BUSN 6630 - Management of Operations **gtPATHWAYS:**
BUSN 6640 - Financial Management **gtPATHWAYS:**
BUSN 6710 - Strategic Management **gtPATHWAYS:**

Total: 30 Hours

International Course Abroad

The international course, which involves travel abroad, is completed as an all-day, two-week intensive course.

Special Topics Courses

The special topics courses, revised each year, are selected to create a broad understanding of the most current business issues. These requirements are subject to change.

Business Administration—Health Administration MBA

Program Director: Errol L. Biggs
Telephone: 303-315-8851
E-mail: errol.biggs@ucdenver.edu

Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver
Peter Bryant, PhD, Stanford University
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
Richard Foster, PhD, University of Chicago
Bruce Neumann, PhD, University of Illinois
Edward O'Connor, PhD, University of Akron

Associate Professors:

Deborah Kellogg, PhD, University of Southern California
Stephen Ross, MD, University of North Carolina

Instructors:

Errol Biggs, PhD, Pennsylvania State University

Admission Process

Requirements for Admission

Selection of students is a multi-step process. When making application to the program for the MBA-HA, candidates should send their applications to:

Graduate Admissions
Graduate School of Business Administration
University of Colorado Denver
Campus Box 165, P.O. Box 173364
Denver, CO 80217-3364

Application Requirements

- complete the application for graduate admission, parts I and II, and submit by published deadlines
- send two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence
- send required GMAT scores directly to the graduate office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-78. GRE scores will also be considered.
- pay the appropriate application fee
- send two (2) official transcripts directly from each school, college or university previously attended past high school. A minimum baccalaureate degree is required.
- include answers to the four essay questions
- document any experience in the field of health services administration (preferred but not required)
- complete a personal interview with the health administration committee

Admission to the MBA-HA degree program is on a competitive basis. Therefore, these admission criteria represent minimum entrance qualifications expected of all students.

For further information, brochures and application materials, contact the Business School's Graduate Program in Health Administration, University of Colorado Denver, 303-315-8200.

Graduate Program in Health Administration

The graduate program in health administration is consistently ranked as a top program in the United States and attracts students with a variety of backgrounds and experience levels, which further enriches the classroom experience. The HA program is accredited by the Commission on Accreditation of Healthcare Management Education. The program is the only such program in the Rocky Mountain region and was started in 1968. Full-time faculty with distinguished research records and a select group of practicing managers provide students with the latest thinking on the most important health issues.

Degree Requirements

The curriculum of the MBA with an emphasis in Health Administration is a synthesis of management concepts and techniques that are applicable to any economic organization, and tools that can be specifically applied to health services systems. The program emphasizes skills that strengthen basic analytic and decision-making processes used by top level managers in selecting broad strategies and by junior managers in administering sub-units in healthcare organizations.

Students enrolled in the Master of Business Administration with an emphasis in Health Administration must complete a minimum of 51 semester hours of graduate-level course work to receive their degree. The curriculum is based on a series of structured learning sequences. Most of the courses are available in the evening to enable working students to pursue the degree on a part-time basis. The specific course requirements are as follows (recommended sequence):

Year One

BUSN 6521 - Managing Individuals and Teams (Health Section) **gtPATHWAYS:**
BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
HLTH 6010 - Health Care Systems **gtPATHWAYS:**
BUSN 6640 - Financial Management **gtPATHWAYS:**
BUSN 6541 - Legal and Ethical Environment of Business (Health Section) **gtPATHWAYS:**
BUSN 6621 - Applied Economics for Managers (Health Section) **gtPATHWAYS:**
HLTH____ - Health Elective (3 semester hours)
BUSN 6560 - Marketing Management **gtPATHWAYS:**
Total: 27 Hours

Year Two

HLTH 6040 - Health Care Financial Management **gtPATHWAYS:**
HLTH 6070 - International Health Policy and Management **gtPATHWAYS:**
HLTH____ - Health Elective (3 semester hours)
DSCI 6440 - Quality and Process Improvement **gtPATHWAYS:**
BUSN 6630 - Management of Operations **gtPATHWAYS:**
BUSN 6711 - Strategic Management (Health Section) **gtPATHWAYS:**
HLTH 6911 - Health Field Studies **gtPATHWAYS:**
HLTH____ - Health Information Technology Elective (3 semester hours)
Total: 24 Hours

Notes and Restrictions

Students admitted into the MBA with an emphasis in Health Administration must meet with a graduate advisor before they register for their first semester. Call 303-315-8200 to schedule an appointment.

Administrative Residency. An administrative residency is optional but recommended for students with limited healthcare experience. The program faculty provide assistance to students in securing the residency, as well as regular consultation during the residency period. The program has been very successful in placing graduates in administrative residencies.

Length of program. A maximum of five years and one semester is allowed to complete the Health Administration program.

Specialized Tracks in the MBA with an Emphasis in Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools at CU Denver, and other University of Colorado campuses.

International Health Management and Policy Track
Financial Management Track
Health Information Technology Management Track

Chemistry MS

► Graduate School Rules apply to this program

Requirements for Admission

Students must meet the Downtown Campus Graduate School admission requirements with specific chemistry requirements as follows:

- Undergraduate GPA of at least 3.0.
- Undergraduate major in chemistry essentially equivalent to the one offered at UC Denver (see the undergraduate requirements), including two semesters of organic, analytical and physical chemistry with laboratories and one semester of inorganic chemistry. No student will be admitted to the graduate program who is not within two classes of meeting the undergraduate requirements.
- GRE examination is recommended, as is the advanced chemistry GRE examination.
- International students have additional admission requirements concerning immigration status, proof of financial responsibility and acceptable TOEFL scores.
- Failure to meet the full admission standards may lead to provisional admission.

Prospective students are encouraged to contact the graduate program director or visit the chemistry department website for additional details concerning the chemistry program, admission procedures, financial assistance and faculty research interests.

General Program Requirements

At the heart of the graduate program is a set of four core graduate courses in the fields of analytical, inorganic, organic and physical chemistry. A student must qualify in order to register for any core graduate class, either by passing a qualifying examination in that field or by passing the equivalent undergraduate class in that area at UC Denver with a grade of *B* (3.0) or better. All entering students are required to qualify in all four core fields. The qualifying requirements must be completed during the first year in the graduate program. Individual core classes may have additional prerequisites.

Depending on the program option that she/he selects, a student will be required to pass either three (Plan I) or all four (Plan II) of the graduate core courses with no grade in a core course below *B*- (2.7).

The remaining course work for the degree will consist of regular graduate offerings in chemistry, a limited number of which may be substituted by approved classes in related fields. In particular, students interested in interdisciplinary areas, such as biochemistry or environmental chemistry, are encouraged to take cognate courses outside the chemistry department. The chemistry graduate program director must approve in advance any graduate class taken outside the department that is to count toward the degree. All students are required to annually submit an updated program plan for approval and to have their progress evaluated by the graduate program director.

Specific Degree Requirements

There are two options for obtaining a master's degree from the Department of Chemistry: Plan I, the thesis option, and Plan II, the course work emphasis option. All students must complete at least 3 semester hours of master's report (CHEM 6960). A student is allowed to participate in the thesis option only after the successful completion of the master's report with the proposed advisor, and upon the mutual agreement of both the student and advisor that the student is prepared to work on a master's thesis. Students who select the course work emphasis option may petition to have up to 3 additional semester hours of master's report research substitute for an equivalent number of course work hours.

Plan I. Thesis Option

Plan I is a research-oriented program involving a minimum of 30 semester hours with the following requirements:

- 21-23 semester hours of formal course work, including three of the four graduate core courses
- 4-6 semester hours of CHEM 6950, Master's Thesis research; successful completion of the thesis research includes the presentation of the results at a departmental seminar
- 3 semester hours of CHEM 6960, Master's Report research
- a grade of *B*- (2.7) or better in all courses completed: *B*- (2.7) or better in all core courses
- a cumulative GPA of 3.0 or better in all courses taken as a graduate student
- an acceptable formal thesis consistent with the guidelines of the Graduate School
- successful oral defense of the master's thesis before a committee of at least three graduate faculty members, two of whom must be tenure track faculty members in the chemistry department
- compliance with all Graduate School Rules
- all work must be completed within five years of completion of the first graduate class in the department

Plan I thesis research must be conducted under the direct supervision of a tenure-track faculty member of the Downtown Campus Department of Chemistry. Plan I students must take a minimum of 15 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take one or two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

Plan II. Course Work Emphasis Option

Plan II is a course work-oriented program involving a minimum of 33 semester hours with the following requirements:

- 27-30 semester hours of formal course work, including all four graduate core courses
- at least 3 (but not more than 6) semester hours of CHEM 6960, Master's Report, research

a grade of *B*- (2.7 or better in all courses completed; *B*- (2.7) or better in all core courses
a cumulative GPA of 3.0 or better in all courses taken as a graduate student
a final research report
presentation of the research project in a final seminar
successful defense of the project before a committee of at least three graduate faculty members, one of whom must be a tenure-track faculty member in the chemistry department
compliance with all Graduate School Rules
all work must be completed within five years of completion of the first graduate class in the department

A Plan II student may petition the graduate program director to substitute up to 3 semester hours of master's report (CHEM 6960) research, beyond the required minimum, for an equivalent number of semester hours of formal course work. Approval will be perfunctory for research performed with the support and under the direct supervision of a faculty member in the Department of Chemistry. Plan II students must take a minimum of 24 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take up to two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

Civil Engineering MS and MEng

► Graduate School Rules apply to these programs

Graduate

Degree Programs

The civil engineering graduate program is designed for both full-time and part-time students who want to advance their academic and professional skills in civil engineering and related areas. Many students are full time, while many also work full-time jobs and complete evening classes. Depending on a student's pace, the master's program takes 2-4 years to complete (on average). All graduate courses are offered in the afternoons, evenings or on Saturdays. Some courses, including all GIS classes, are offered online.

Specialty Areas:

Master of Science(MS)

Environmental and Sustainability Engineering
Geographic Information Systems (GIS)
Geotechnical Engineering

Hydrologic and Hydraulic Engineering
Structural Engineering
Transportation Engineering

Master of Engineering (MEng)

Geographic Information Systems (GIS)
Sustainable Infrastructure
Transportation Systems

Degree Requirements

Two MS degree programs are available.

Plan I - Master's Thesis: This plan requires 24 semester hours of graduate-level course work and 6 semester hours of master's thesis credit.

Plan II - Master's Report: This plan requires 27 semester hours of graduate-level course work and 3 semester hours master's report credits.

Master of engineering students must follow Plan 2 above. Additionally, of those 30 semester hours, at least 15 hours must be completed with CE classes, including the master's report. The remaining hours may be completed in related disciplines that supplement the chosen area of study. Both the MS and MEng degrees require satisfactory completion of a written comprehensive exam and an oral defense of the master’s thesis or master’s report to a committee of at least three graduate faculty. Every graduate student must also satisfy the degree requirements of the Graduate School on the Denver campus, specified in the Information for Graduate Students chapter of this catalog. Both the MS and the MEng degree programs must be completed within seven years of the date the student begins the degree program.

Courses for both the MS and MEng degree programs are selected by mutual agreement of the student and his/her faculty advisor after admission to the degree program. The advisor may also specify undergraduate courses that must be completed before starting graduate course work, but these will not count toward the semester hour requirements for the degree. The student’s thesis or report topic must also be approved by the faculty advisor.

Requirements for Admission

GPA and GRE

Students with GPA's between 3.0 and 2.75 may be admitted provisionally, but are encouraged to submit official GRE scores to support their applications. Non-international applicants not wishing to take the GRE may gain admittance by registering as a nondegree student and completing three classes with a GPA of 3.25.

Transfer Credit:

Master's students may transfer up to 9 semester hours from another institution toward their master's degree, if approved by their advisor.

Program Prerequisites:

Prerequisite classes are in addition to the 30 semester hours needed to complete a master's degree, as they are necessary background information that is usually included in an engineering bachelor's program.

Students may complete prerequisite classes either before or after being admitted to a degree program. However, applicants with too many prerequisites may not gain admission. For applicants completing prerequisites after admission, all prerequisite courses must be completed before 12 of the 30 master's semester hours are complete.

Requests for applications for graduate study in civil engineering should be addressed to

CU Denver Department of Civil Engineering
Campus Box 113
P.O. Box 173364
Denver, CO 80217-3364.

Applicants who are not citizens or permanent residents of the United States must apply through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Communication MA

► Graduate School rules apply to this program

The master of arts in communication is a generalist degree designed to enhance students' intellectual and professional growth through the understanding and practice of effective communication. The degree is structured both to build a solid foundation and to allow students to specialize in one of two areas:

The Professional Track – Communication Management
The Academic Track – Doctoral Preparation

Both areas blend research, theory and practice to prepare students to meet the challenges of the twenty-first century.

Degree Requirements

Students have two options for completing the MA degree in communication: the professional track and the academic track.

Professional Track

The professional track requires the completion of 33 hours of graduate course work (5000 level or above). As explained below, students have the option of taking 6 hours of 4000-level courses. In this situation, a student will take 27 hours of graduate credit and 6 hours of 4000-level (undergraduate) course work. The requirements for course work are as follows:

Required Course

COMM 6013 - Introduction to Graduate Work in Communication **gtPATHWAYS:** (recommended to be taken the first semester of graduate course work; offered only in the fall semester)

Total: 3 Hours

Methods Courses

Most methods courses are offered every other year. The second methods course may be taken outside of the communication department with the approval of the student's advisor.

Choose two:

COMM 5011 - Research Methods: Quantitative **gtPATHWAYS:**
COMM 5022 - Critical Analysis of Communication **gtPATHWAYS:**
COMM 5221 - Research Methods: Qualitative **gtPATHWAYS:**
COMM 5205 - Empirical Research Methods for Communication **gtPATHWAYS:**

Total: 6 Hours

Graduate Seminars

In addition to the above core requirements, students must take four graduate seminars from the Department of Communication. Graduate seminars are 5000- or 6000-level courses.

Total: 12 Hours

Electives

Students must complete four electives. A minimum of two of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least two of the four electives must be communication courses; the remaining two electives may be taken from outside of the Department of Communication.

Total: 12 Hours

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

Track Total: 33 Hours

Academic Track

The academic track is distinguished from the professional track in that it requires the completion of a substantial academic writing project or projects. The academic track requires the completion of 33-34 hours of graduate course work. At least 27 of these hours must be at the 5000 or 6000 level; 6 hours (two courses) may be at the 4000 level. The requirements for course work are as follows:

COMM 6013 - Introduction to Graduate Work in Communication **gtPATHWAYS:**
(recommended to be taken the first semester of graduate course work; offered only in the fall semester)

Total: 3 Hours

Methods Courses

Most methods courses are offered every other year.

Choose two:

COMM 5011 - Research Methods: Quantitative **gtPATHWAYS:**
COMM 5022 - Critical Analysis of Communication **gtPATHWAYS:**
COMM 5221 - Research Methods: Qualitative **gtPATHWAYS:**
COMM 5205 - Empirical Research Methods for Communication **gtPATHWAYS:**

Total: 6 Hours

Graduate Seminars

In addition to the above core requirements, students must take four graduate seminars from the communication department. Graduate seminars are 5000- or 6000-level courses. The four courses must be approved by the student's advisor.

Total: 12 Hours

Electives

Students must complete four electives. A minimum of two of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least two of the electives must be communication courses; the remaining two may be taken from outside of the communication department. If a thesis is presented, the thesis credits will substitute for one elective course requirement.

Total: 9-12 Hours

(9 hours for thesis students; 12 for non-thesis)

Thesis

Students either must present a major paper for publication (no additional course credit) or complete a thesis for 4 semester hours. Credit for a thesis may substitute for one elective course requirement.

Total: 4 Hours

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

Track Total: 33-34 Hours

Computer Science MS

► Graduate School Rules apply to this program

General MS Degree Requirements

In addition to the basic requirements of the university, the Department of Computer Science and Engineering requires master's degree candidates to complete an approved program of study consisting of at least 30 semester hours of graduate-level computer

science courses and a thesis or project while maintaining a GPA of at least 3.0. With prior approval of the graduate committee, a student may substitute up to 9 semester hours of graduate-level mathematics or other engineering courses. All courses must be taught by University of Colorado graduate faculty.

A student must submit an approved plan of study to the department during the first semester of his/her admission. An academic advisor will consult with each student to develop a plan of study.

Adequate Progress toward MS in Computer Science Degree

Students are expected to finish the MS degree program within five years. Candidates for the MS degree may not get credit for a course taken longer than five years before the date on which the degree is to be granted.

Students who do not enroll for any course work relevant to computer science in a given semester (summer semesters excluded) must supply the Department of Computer Science and Engineering with a written statement describing the reason for the inactivity. Students who are inactive for three consecutive semesters (summer semesters excluded) will be removed from the program, and must re-apply for admission.

Students may choose either Plan I (thesis) or Plan II (MS project).

For up-to-date information, please refer to the current graduate handbook from CSE department website under degree programs at http://engineering.ucdenver.edu/cse

Plan I—Thesis

Students choosing Plan I take 24 semester hours of graduate course work and conclude their program with 6 semester hours of thesis work. A minimum of three courses must be chosen from among five “core” courses and must be passed with a grade of B or better. Three additional courses must be chosen from among more than a dozen “breadth” courses. Plan I students must also write a thesis and defend it before a thesis committee. The students in Plan I may take one independent study course for a maximum of 3 hours.

Plan II—MS Project

Students choosing Plan II take 27 semester hours of graduate course work and conclude their program with 3 semester hours of MS project work. A minimum of three courses must be chosen from among five “core” courses and must be passed with a grade of B or better. Three additional courses must be chosen from among more than a dozen “breadth” courses. Plan II students must also write an MS project report and

defend it before an MS project committee. The students in Plan II may take one independent study course for a maximum of 3 semester hours.

Note: Students can take only graduate engineering (21 semester hours must be CS courses) and graduate mathematics courses. No more than 6 semester hours can be taken in the form of online courses.

Counseling Psychology and Counselor Education MA

Program Leader: Marsha Wiggins
Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/counseling

Faculty

Information about faculty in the counseling psychology and counselor education program is available online at www.ucdenver.edu/education.

Degree

The master of arts degree in counseling psychology and counselor education prepares professionals for community/mental health agencies, private practice and public schools. Students should obtain faculty advising regarding professional requirements.

All programs consist of 63 semester hours (66 for the multicultural/diversity strand). Core requirements that are common to all areas of study are followed by courses specific to each program. All programs require a practicum (150 clock hours) and an internship (600 clock hours). For most students, the master's degree is a three-year program with course work for two years followed by a year of practicum and internship. All beginning students enroll in CPCE 5010 and CPCE 5810.

The clinical mental health counseling, school counseling and couple and family therapy programs are nationally accredited by CACREP, the Council for the Accreditation of Counseling and Related Educational Programs.

All students are expected to have online computer capability for communication and instructional purposes. For students in off-campus programs, some courses may be offered via computer technology.

Admission Requirements

Successful applicants to the counseling psychology and counselor education (CPCE) program will have obtained a minimum 2.75 undergraduate GPA and will score at least 900 on the verbal and quantitative sections of the Graduate Record Exam (GRE) or at least 396 on the Miller Analogy Test (MAT). Also, applicants will submit a current resume, a statement of goals and three letters of recommendation (at least 2 academic letters are strongly advised). Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, small group interviews, a writing assignment and a group exercise.

A prerequisite course in basic statistics (undergraduate level) is required prior to enrollment in the program.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline: September 15 for spring semester; January 15 for summer and fall semesters. Application materials include the following:

- part I of the application for admission
- tuition classification form
- $50 application fee (make checks payable to the University of Colorado Denver)
- letter of intent
- three letters of recommendation - at least 2 academic letters strongly advised (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in original sealed envelope)
- official GRE or MAT scores sent directly to the University of Colorado Denver (if you do not already hold a graduate degree; see CPCE application checklist)
- oath and consent
- fingerprint affidavit

Matriculation Requirements

CPCE students must earn at least a B in skills-oriented courses (CPCE 5100, 5160, 6140, 7100, 5910, 5930) or must repeat these courses until they do so. In addition, all students must make a formal case presentation in CPCE 5930 (internship) to demonstrate their clinical knowledge. Students must also take a national comprehensive examination (after 30 semester hours). Students may choose to conduct research and submit a thesis (research conducted under faculty advisement) instead of taking the national written examination.

Program Areas

Students accepted into the CPCE program follow one of three programs offered counseling psychology and counselor education. The clinical mental health counseling program follows state licensure requirements for licensed professional counselor; the couple and family therapy program follows licensure requirements designated by the state of Colorado of licensure as a marriage and family therapist; and the school program follows both the licensed professional counselor licensure and state department of education certificate as a school counselor requirements.

Program Areas

Counseling Psychology and Counselor Education Core

(required in all program areas)

CPCE 5010 - Counseling Theories **gtPATHWAYS:**
CPCE 5100 - Techniques of Counseling **gtPATHWAYS:**
CPCE 5110 - Group Counseling **gtPATHWAYS:**
CPCE 5150 - Family Therapy Theory **gtPATHWAYS:**
CPCE 5330 - Counseling Issues and Ethics **gtPATHWAYS:**
CPCE 5400 - Career Development **gtPATHWAYS:**
CPCE 5810 - Multicultural Counseling Issues for Individuals and Families **gtPATHWAYS:**
CPCE 5910 - Practicum in CPCE **gtPATHWAYS:**
CPCE 5930 - Internship in Counseling **gtPATHWAYS:**
EPSY 6200 - Human Development Over the Life Span **gtPATHWAYS:**
RSEM 5200 - Introduction to Research Methods **gtPATHWAYS:**
RSEM 5300 - Introduction to Measurement **gtPATHWAYS:**
National Comprehensive Exam to be taken after the CPCE core classes are completed.

Total: 42 Hours

Additional Requirements for Program Area One: Clinical Mental Health Counseling (MA)

CPCE 5160 - Techniques in Family Therapy **gtPATHWAYS:**
CPCE 5280 - Addictions Counseling **gtPATHWAYS:**
CPCE 5820 - Strategies of Agency Counseling **gtPATHWAYS:**
CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**
CPCE 7100 - Advanced Theories and Techniques in Psychotherapy **gtPATHWAYS:**

Two Additional Electives (6 semester hours)

Total: 21 Hours

Additional Requirements for Multicultural/Diversity Strand in Clinical Mental Health Counseling

CPCE 5160 - Techniques in Family Therapy **gtPATHWAYS:**
CPCE 5280 - Addictions Counseling **gtPATHWAYS:**
CPCE 5820 - Strategies of Agency Counseling **gtPATHWAYS:**
CPCE 5830 - Special Topics **gtPATHWAYS:** Gender & Sexual Orientation
CPCE 6100 - Spiritual Dimensions of Counseling **gtPATHWAYS:**
CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**
CPCE 6810 - Advanced Multicultural Counseling **gtPATHWAYS:**
CPCE 7100 - Advanced Theories and Techniques in Psychotherapy **gtPATHWAYS:**

Total: 24 Hours

Additional Requirements for Program Area Two: Public School Counseling Certificate (MA)*

CPCE 5280 - Addictions Counseling **gtPATHWAYS:**
CPCE 5425 - Developing & Implementing a School Counseling Program: ASCA **gtPATHWAYS:**
CPCE 5815 - Introduction to School Counseling **gtPATHWAYS:**
CPCE 5915 - Practicum in School Counseling **gtPATHWAYS:**
CPCE 6140 - Counseling Children, Adolescents and Their Parents **gtPATHWAYS:**
CPCE 6220 - Youth Challenges and Resiliency **gtPATHWAYS: Or** CPCE 6230 - Developmental Counseling in Schools: Prevention & Intervention
CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**
Place Test is required for the Colorado Department of Education Certification for school counselors.

Total: 21 Hours

* 100 hour practicum is required in the schools (CPCE 5915). Three hundred of the 600 hours of internship must be in a concentrated environment. Full time experience consisting of at least a four-hour block of time each day is required. Students may not do their internship in their primary employment (agency or school setting). For school counseling, three hundred (300) hours of internship are needed at the middle and secondary level for a K–12 program. CPCE 5150, 6140 and 7100 are necessary for

students to work with school-related family issues, individual counseling and children's counseling in practicum and internship. CPCE 5160 is necessary prior to internship in couple and family therapy; this course requires 10 hours of laboratory experiences working with youth.

Additional Requirements for Program Area Three: Couple and Family Therapy (MA)

CPCE 5160 - Techniques in Family Therapy **gtPATHWAYS:**
CPCE 5170 - Issues In Family Studies **gtPATHWAYS:**
CPCE 5180 - Counseling Couples **gtPATHWAYS:**
CPCE 6000 - Introduction to Sex Therapy **gtPATHWAYS:**
CPCE 6140 - Counseling Children, Adolescents and Their Parents **gtPATHWAYS:**
CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems **gtPATHWAYS:**
CPCE 6250 - Mental Health Diagnosis **gtPATHWAYS:**

Total: 21 Hours

Criminal Justice MCJ

► Graduate School Rules apply to this program

Program Director: Mary Dodge, PhD

Faculty

Professors:

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

Associate Professors:

Mary Dodge, PhD, University of California, Irvine
Angela Gover, PhD, University of Maryland
Callie Rennison, PhD University of Houston

Paul Stretesky, PhD Florida State University

Assistant Professor:

Deanna Perez, PhD, University of Maryland

Associate Research Professor:

Jerry Williams, DPA, University of Colorado Denver

The master of criminal justice (MCJ) program is designed for students interested in comprehensive professional graduate education in the field of criminal justice. It is intended to develop in the student an in-depth understanding of the fields within criminal justice and of background material from supporting disciplines, which enables the student to adapt to many operational specializations.

As an academic and professional field of study, this program is dedicated to preparing men and women not only to administer the system as it presently exists—but also to evaluate, to analyze and to change—to become pioneers in accelerating the shaping of a rational and responsive criminal justice system.

To deal with this system effectively, research design capability must be developed along with the skills required for the ordering and analysis of empirical data. This course of study prepares the student to be an innovator in crime control and prevention through course work dealing with strategies and skills for promoting individual, organizational and social change.

MPA AND MCJ—General Information

Admission Requirements

- A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.
- Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.
- Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant*

professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.

A current resume highlighting professional accomplishments and community involvement.

International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

Semester	*Preferred Application Deadline*	*Final Deadline**
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: PUAD 5001 , 5003 or 5004 . They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a**

nondegree student may be applied to the master's degree programs with approval of an advisor. Nondegree student application forms are available in the Office of Admissions or online.

Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the CU Denver Office of Financial Aid and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western

Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

Time Limit for Master's Degree

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

Degree Requirements

1. Graduate Study

The program leading to the MCJ degree requires a minimum of 36 semester hours of appropriate graduate study with an average of B or better. No grade below C will be accepted for graduate credit. No more than 6 semester hours of independent study can be applied toward the degree.

2. Core Courses

The completion of the following core courses is required with a grade of B- or better:

CRJU 5000 - Law and Social Control **gtPATHWAYS:**
CRJU 5100 - Administration of Criminal Justice **gtPATHWAYS:**
CRJU 5120 - Nature and Causes of Crime **gtPATHWAYS:**
CRJU 5321 - Research Methods **gtPATHWAYS:**

Total: 12 Hours

3. Course Work

Students must complete a minimum of 27 semester hours of course work in criminal justice.

4. Criminal Justice Experience

Students who have not had criminal justice experience are required to complete CRJU 6910 (field study). A minimum of 240 hours of supervised work is required to earn 3 hours of credit. All required core courses must be completed before taking CRJU 6910.

5. Advanced Seminar

All MCJ students, except those pursing the thesis option, must complete the advanced seminar during the last semester of their degree program. All core classes must be completed before taking the advanced seminar. Students admitted before spring 2009 may opt to take a written comprehensive exam in lieu of CRJU 5561.

CRJU 5561 - Capstone Seminar **gtPATHWAYS:**

Students must receive the approval of both a faculty advisor and the director of the criminal justice program to complete a thesis for 3–6 semester hours in lieu of the advanced seminar.

Elective Courses

The courses listed below may be taken as electives for the MCJ degree:

CRJU 5200 - Wrongful Convictions **gtPATHWAYS:**
CRJU 5210 - Prisoner Reentry **gtPATHWAYS:**
CRJU 5220 - The American Jury System **gtPATHWAYS:**
CRJU 5250 - Criminal Offenders **gtPATHWAYS:**
CRJU 5260 - Crime and Literature **gtPATHWAYS:**
CRJU 5325 - Qualitative Methods for Criminal Justice **gtPATHWAYS:** or
CRJU 7325 - Qualitative Methods for Criminal Justice **gtPATHWAYS:**
CRJU 5410 - Victimology **gtPATHWAYS:**
CRJU 5430 - Drugs, Alcohol and Crime **gtPATHWAYS:**
CRJU 5510 - Contemporary Issues in Law Enforcement **gtPATHWAYS:** or
CRJU 7510 - Seminar: Contemporary Issues in Law Enforcement **gtPATHWAYS:**
CRJU 5520 - Corrections **gtPATHWAYS:** or
CRJU 7520 - Seminar: Corrections **gtPATHWAYS:**
CRJU 5530 - Community Corrections **gtPATHWAYS:** or
CRJU 7530 - Seminar: Community Corrections **gtPATHWAYS:**
CRJU 5540 - Juvenile Justice Administration **gtPATHWAYS:** or
CRJU 7540 - Seminar: Juvenile Justice Administration **gtPATHWAYS:**
CRJU 5552 - Criminal Justice Ethics **gtPATHWAYS:** or
CRJU 7552 - Seminar: Criminal Justice Ethics **gtPATHWAYS:**
CRJU 5553 - Women and Crime **gtPATHWAYS:** or
CRJU 7553 - Seminar: Women and Criminal Justice **gtPATHWAYS:**
CRJU 5554 - Criminal Justice Reform **gtPATHWAYS:** or
CRJU 7554 - Seminar: Criminal Justice Reform **gtPATHWAYS:**
CRJU 5571 - The Social Organization of Crime **gtPATHWAYS:** or
CRJU 7571 - Advanced Seminar: The Social Organization of Crime **gtPATHWAYS:**
CRJU 5572 - Race, Crime and Justice **gtPATHWAYS:** or
CRJU 7572 - Advanced Seminar: Race, Crime and Justice **gtPATHWAYS:**

CRJU 5574 - White Collar Crime **gtPATHWAYS:** or
CRJU 7574 - Advanced Seminar: White Collar Crime **gtPATHWAYS:**
CRJU 5575 - The Mentally Disordered Offender **gtPATHWAYS:** or
CRJU 7575 - Advanced Seminar: The Mentally Disordered Offender **gtPATHWAYS:**

MCJ Options

Concentration in Domestic Violence

A student may choose to complete a concentration in domestic violence as part of the MCJ degree. The concentration provides an interdisciplinary perspective on crime, the formulation of laws and codes, the criminal legal system and its intersection with women and violence. Students seeking a domestic violence concentration must complete 15 semester hours related to domestic violence, which are completed via intensive workshops that meet periodically throughout a two-year period.

PUAD 5910 - Women and Violence: A Sociological Perspective **gtPATHWAYS:**
PUAD 5920 - Psychology of Violence Against Women **gtPATHWAYS:**
PUAD 5930 - Battered Women and the Legal System **gtPATHWAYS:**
PUAD 5940 - Domestic Violence Social Change and Advocacy **gtPATHWAYS:**
Elective (1) (3 semester hours)

Total: 15 Hours

Online Option

SPA launched an online option for the master of criminal justice degree in 2010.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others. For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom.

Curriculum and Pedagogy MA

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311

E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education

Faculty

Information about faculty is available online at www.ucdenver.edu/education/c&p.

Areas of Study

Curriculum and Pedagogy
Master of Arts for Practicing Teachers
Science-Math-Social Studies

The curriculum and pedagogy (C&P) studies lead to an advanced master's degree in curriculum and instruction. All programs require 36 semester hours, including the C&P core or its equivalent. The core courses provide a sound basis in curriculum theory, teacher inquiry, appreciation of diversity and philosophical foundations. The various specializations allow teachers to focus in an area of interest.

Elementary teachers take the math and science concentration. Secondary teachers may choose mathematics, science or social studies.

Each of these programs is designed to prepare teachers to qualify for master certification from the National Board of Professional Teaching Standards, as well as prepare for licensure renewal with the Colorado Department of Education.

Core (Required in Elementary Math and Science, Secondary Science, Secondary Math and Secondary Social Studies)

ELED 6110 - Curriculum Development and School Improvement **gtPATHWAYS:** Or
SECE 6110 - Curriculum in Urban Studies **gtPATHWAYS:**
FNDS 5050 - Critical Issues in American Education **gtPATHWAYS:**
RSEM 5XXX - One 5000-level course in research and evaluation methodology. **Semester Hours:** 3

Total: 9 Hours

Elementary Math and Science

24 semester hours of electives, chosen with advisor's approval (24 semester hours)

Elementary emphasis required course

SECE 5500 - The Nature of Science **gtPATHWAYS:**

Total: 36 Hours

Science (Secondary)

SECE 5340 - Multicultural Science Education **gtPATHWAYS:**
SECE 5350 - Issues and Problems in Science Education **gtPATHWAYS:**
SECE 5500 - The Nature of Science **gtPATHWAYS:**
SECE 5650 - Environmental Education **gtPATHWAYS:**
15 hours of electives in science or education chosen with advisor's approval

Total: 36 Hours

Mathematics (Secondary)

SECE 5400 - Curriculum in Secondary Mathematics **gtPATHWAYS:** or
SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics **gtPATHWAYS:**
SECE 5401 - Assessment in Mathematics Education **gtPATHWAYS:**

Choose three:

ELED 5416 - Math-Science Connections: Outdoor **gtPATHWAYS:**
SECE 5417 - Structure of Rational Numbers **gtPATHWAYS:**
SECE 5418 - Mathematical Modeling **gtPATHWAYS:**
SECE 5419 - Exploring the Structure of Geometry Using Technology **gtPATHWAYS:**
SECE 5420 - Teaching Mathematics to Low Achievers **gtPATHWAYS:**
SECE 5440 - Topics in Mathematics Education **gtPATHWAYS:**
12 hours of electives from the School of Education & Human Development or the mathematics department, chosen with an advisor's approval

Total: 36 Hours

Social Studies (Secondary)

Please refer to the School of Education & Human Development Web site for the advising plan at www.ucdenver.edu/education/c&p.

Total: 36 Hours

Comprehensive Exam

C&P programs requires a master's comprehensive exam that consists of a project or a comprehensive portfolio for the program completion requirement. Details may be obtained from your faculty advisor and from the "C&P Handbook" available at www.ucdenver.edu/education/c&p.

Decision Sciences MS

Program Director: Marlene A. Smith
Telephone: 303-315-8421
E-mail: Marlene.Smith@ucdenver.edu

Faculty

Professors:
Peter Bryant, PhD, Stanford University
Gary A. Kochenberger, PhD, University of Colorado Boulder

Associate Professors:
Deborah L. Kellogg, PhD, University of Southern California
Marlene A. Smith, PhD, University of Florida

Senior Instructor:
Michael D. Harper, PhD, Rensselaer Polytechnic Institute

Instructor:
Emily Roberts, MA, University of Southern Maine

The MS in Decision Sciences focuses on modeling and applications which prepares you for a career as a decision science specialist in industry or government. Today, companies in every conceivable industry are reaping the benefits of using formal mathematical models to assist them in addressing complex business problems. Decision Science graduates hold positions that bridge the gap between operations research/statistics specialists and management.

Learn to apply quantitative methods to real-world problems using modern methodologies adopted from statistics, operations research, and management science. Although the MS in Decision Sciences is founded in operations research methods, it focuses on applications of these methods in the workplace rather than the development of new operations research techniques. The managerial emphasis of our degree is accomplished through a comprehensive set of elective and required coursework such as

data analysis, operations management, forecasting, project management, simulation and supply chain management. A required practicum course provides students with the opportunity (under the direction of faculty) to solve a real, complex workplace problem for a local Denver organization.

Requirements for the MS degree in Decision Sciences are met by the following courses and options:

Prerequisite course work:

Accounting: completion of BUSN 6550 or undergraduate accounting courses in financial and managerial accounting with a grade of B- or better along with useable knowledge of spreadsheets.

Required Courses

BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
BUSN 6630 - Management of Operations **gtPATHWAYS:**
DSCI 6820 - Project Management **gtPATHWAYS:**
DSCI 6230 - Business Forecasting **gtPATHWAYS:**
DSCI 6460 - Decision Analysis **gtPATHWAYS:**
DSCI 6910 - Decision Sciences Practicum **gtPATHWAYS:**
DSCI Electives (12 semester hours)

Total: 30 Hours

Notes and Restrictions

Decision Sciences electives must include at least two DSCI courses numbered 6000 or higher. Remaining Decision Sciences electives may be any of the following courses: DSCI 6000 or higher; MKTG 6050, Marketing Research; or FNCE 6480, Financial Modeling.

Students are not required to take a comprehensive examination or complete a thesis in the major field.

Early Childhood Education MA

Early Childhood Education

Office: Lawrence Street Center, 701
Telephone: 303-315-6300

Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education

Faculty

More information about faculty in this division is available online at www.ucdenver.edu/education.

Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

- MA in early childhood education
- ECSE specialist license (initial or added endorsement)
- MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

- literacy development and disorders
- child growth and development, differences and disorders
- learning approaches with young children
- measurement and evaluation
- basic statistics/research methods
- multicultural education
- research and current issues
- early childhood curriculum and program development for inclusive classrooms
- working collaboratively with parents and families
- program administration/leadership

The early childhood special education program provides specialized preparation in:

screening and assessment of young children
intervention strategies with infants and preschoolers
behavior management
working as a member of the transdisciplinary team
cognitive and socio-emotional development and disorders
treatment of children who have neurological impairment and chronic illness
challenging behaviors and autism

Program Requirements

Semester Hour Requirements

Master's degree in ECE: 40 semester hours
ECSE specialist license: 40 semester hours
Master's degree plus ECSE specialist license: 49 semester hours
Master's degree plus ECSE specialist added endorsement: 40 semester hours
ECSE specialist added endorsement: 25 semester hours

Fieldwork and Practicum Requirements

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

ECE Program Options Plans of Study	MA in ECE	ECSE Specialist License	MA in ECE and ECSE Specialist License	ECSE Specialist Endorsement for those holding Elementary or ECE License	MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License	ECSE Specialist Endorsement for those holding Special Education License	MA in ECE and ECSE Specialist Endorsement for those holding Special Education license
Course							
EPSY 5100 - Advanced Child Growth and Development	Required	Required	Required				
RSEM 5100 - Basic Statistics	Required		Required		Required		Required
ECED 5000 - The Early Childhood Profession	Required	Required	Required	Required	Required	Required	Required
ECED 6100 - Medical and Physiological Aspects of Developmental Disabilities	Required	Required	Required	Required	Required	Required	Required
ECED 5020 - Approaches to Young Children's Learning	Required	Required	Required		Required **	Required *	Required **

ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children **or** ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives		Required	Required	Required	Required	Required *	Required *
ECED 5080 - Language and Literacy in Young Children	Required	Required	Required	Required	Required	Required *	Required*
ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required
ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence, and	Required				Required **		Required **

Behavior Challenges in Young Children's Lives							
ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education	Required		Required		Required		Required
ECED 5140 - Measurement and Evaluation in Early Childhood Education	Required		Required		Required		Required
ECED 6010 - Literacy and Mathematics K-2	Required	Required	Required	Required*	Required*		
ECED 5200 - Screening and Assessment of Young Children		Required	Required	Required	Required	Required	Required
ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
ECED 6911 - Practicum in Early	Required						

Childhood Education							
ECED 6910 - Infant/Toddler Practicum in ECSE		Required	Required	Required	Required	Required	Required
ECED 6912 - Preschool Practicum in ECSE Preschool Practicum		Required	Required	Required	Required	Required	Required
ECED 6914 - Primary Practicum in ECSE		Required	Required	Required	Required	Required	Required
Total Semester Hours	**40**	**40**	**49**	**25**	**40**	**25**	**40**
Comprehensive Exam	Required		Required		Required		Required
PLACE Exam #27		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

Economics MA

► Graduate School Rules apply to this program

Admissions Advisor: Brian Duncan (brian.duncan@ucdenver.edu)
Schedule Advisor: Dan Rees (daniel.rees@ucdenver.edu)

Requirements for Admission

general requirements of the Graduate School (including a 3.0 undergraduate cumulative GPA)
three letters of recommendation
15 semester hours of undergraduate economics (including theory and quantitative methods); variations to be discussed with graduate advisor
acceptable GRE scores
two official transcripts from all colleges attended
international students must submit TOEFL scores

Degree Requirements

The MA degree requires the completion of 30 semester hours of course work, of which 21 hours are core requirements. Each student's plan will be worked out in conjunction with the graduate advisor.

Core Courses

All courses must be completed with a grade of B- or better.

ECON 5073 - Microeconomic Theory **gtPATHWAYS:**
ECON 5083 - Macroeconomic Theory **gtPATHWAYS:**
ECON 5803 - Mathematical Economics **gtPATHWAYS:**
ECON 5813 - Econometrics I **gtPATHWAYS:**
ECON 5823 - Econometrics II **gtPATHWAYS:**
ECON 6053 - Seminar In Applied Economics **gtPATHWAYS:**
ECON 6073 - Research Seminar **gtPATHWAYS:**

Total: 21 Hours

Electives

Three elective courses

Total: 9 Hours

Degree Total: 30 Hours

Educational Psychology MA

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education

Faculty

Information about educational psychology faculty is available online at www.ucdenver.edu/education.

Master's Degree

The MA program in educational psychology prepares students to facilitate the teaching/learning process. Thus, many students pursue the degree to enhance their skills as professional classroom teachers. The degree also provides skills necessary for a variety of roles where knowledge of learning, development, motivation, and research is essential; examples would include teaching at the community college level, teaching adults and conducting program evaluation. Other students seek the MA as preparation for advanced study in educational psychology.

Note, too, that many students in the school's initial professional teacher education program—as well as interns in the alternative teacher licensure programs conducted by the Stanley British Primary School, the Boulder Journey School and Friends' School—also seek the MA degree in the Division of Educational Psychology.

Areas of Study

Four major areas of concentration are available—human learning, child growth and development, research and evaluation and individualized programs (such as adult learning). Regardless of the concentration area selected, all students must:

- take 9 semester hours of core courses required by the School of Education & Human Development
- demonstrate competence in educational psychology by successfully completing a minimum of 36 semester hours of relevant course work (9 of which are the core)
- complete either a master's thesis (4 semester hours, MA Plan I) or an independent study project (3 to 4 semester hours, MA Plan II), the latter involving the

collection of data bearing on a given problem and its analysis and interpretation in writing

perform satisfactorily on a written comprehensive examination (typically during the last term enrolled in regular courses)

complete the degree on a timely basis, usually within three years

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2011-2012 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Handbook 2010-11

Research and Evaluation Methodology

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax:303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education

Faculty

To find information about faculty in this program visit www.ucdenver.edu/education.

Emphasis Track

There is a REM emphasis track within the educational psychology master's degree program; students can select either an evaluation/data analysis focus or an assessment focus. This area also provides classes to all education graduate programs, offering courses in research methods, evaluation, statistics, analysis, assessment and measurement.

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2011-2012 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Handbook 2010-11

Electrical Engineering MEng

► Graduate School Rules apply to this program

The master of engineering (MEng) degree program is broad based and is designed especially for that person who wants to further his/her education in more than just electrical engineering. A minimum of 30 semester hours of academic work is required for the MEng degree. At least 15 of these hours must be in electrical engineering courses at the 5000-level or above. At least 15 semester hours must be taken in the Department of Electrical Engineering at CU Denver. As many as 15 semester hours may be taken outside of engineering. The student who wishes to enter the master of engineering program should apply to the electrical engineering department in the same manner as a master of science applicant.

Electrical Engineering MS

► Graduate School Rules apply to this program

The master of science (MS) program offers two plans, thesis (Plan I) and master's project (Plan II). In each, the student must complete 30 graduate semester hours. To satisfy the breadth requirement, two courses outside the area of specialization are required and two mathematics courses are recommended. Plan I requires a minimum of 24 semester hours of graduate course work and 6 semester hours of MS thesis work. Plan II requires a minimum of 27 semester hours of graduate course work and 3 semester hours of MS project. A minimum of 21 graduate semester hours must be earned through the electrical engineering department at CU Denver. Candidates with a BS degree from CU Denver can count 6 electrical engineering UC Denver graduate credits toward both undergraduate and graduate degrees if their undergraduate GPA is at least 3.0. Double counting applies only to credits earned with a B or better grade.

English MA

► Graduate School Rules apply to this program

Program Director: Michelle Comstock
Telephone: 303-556-8479
E-mail: Michelle.Comstock@ucdenver.edu

The department offers three programs in the English MA degree: 1) the literature program increases students' knowledge of English and American literature and also their familiarity with a variety of critical methodologies; 2) the rhetoric and teaching of writing program introduces students to the theory, research and pedagogy underlying contemporary instruction in secondary and college composition; 3) the applied linguistics program introduces students to the principles, practices and concerns of teaching English to adults whose first language is not English.

Students concurrently pursuing a master's in education can count up to 6 hours of education courses toward their MA in English with their English advisor's permission.

Contact the graduate program director for more information on these programs.

Requirements for Admission

Applicants for any of the programs described above must submit all application materials by either the spring, summer or fall deadline. The deadline for summer or fall admission is April 1; the deadline for spring is October 1. Complete applications for all three programs must include the following:

- a completed University of Colorado graduate application
- two copies of all graduate and undergraduate transcripts, and for any nondegree courses previously taken
- three letters of recommendation in which the recommender specifically addresses the candidate's ability to pursue successfully the program chosen
- recent scores on the GRE, including the analytical, verbal and quantitative portions. GRE score average should be 600 or higher. Analytical writing score should be 4 or higher.
- evidence of a 3.0 GPA in previous courses
- a one-page statement of purpose
- 10-page critical writing sample

In addition to these requirements, applicants for the literature program must have successfully completed 24 semester hours in English courses (graduate or undergraduate), excluding courses in composition, creative writing or speech. At least 15 of these semester hours must be at the upper-division level.

Transfer of Credits from Other CU Campuses

Students admitted to graduate study in English may complete all of their course requirements for the MA degree at UC Denver. Up to 9 semester hours (total) may be transferred from the University of Colorado Boulder, University of Colorado Colorado Springs or other graduate program; however, such transfer requires the written approval of the specific program coordinator. Only 9 semester hours of courses taken at CU Denver before acceptance into the program can be counted toward the degree. Further, work already applied toward a graduate degree received at the University of Colorado or at another institution cannot be transferred toward another graduate degree of the same level at CU Denver. (For other rules concerning transfer of graduate credits, see the Graduate School Rules.) For more information, contact the graduate program director at 303-556-8479.

Degree Requirements

The literature program requires 33-34 semester hours; the rhetoric and teaching of writing program requires 31 hours; the applied linguistics program requires 30-31 hours. Students must receive a *B-* or above in all courses counted toward the MA degree.

Literature Program

This program provides a general knowledge of English and American literature, a familiarity with the range of theoretical approaches and critical methodologies, and an opportunity to take courses in film studies and ethnic and world literature.

GENERAL REQUIREMENTS

- Satisfactory completion of all required course work
- Satisfactory completion of the MA comprehensive exam OR thesis submission and defense
- Demonstrated fourth-semester proficiency in a foreign language. Old English or Latin will also satisfy this requirement
- Compliance with all graduate school policies and requirements

COURSE REQUIREMENTS (33 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted. A minimum of 9 semester hours must be taken at the 6000 level.

REQUIRED COURSES

ENGL 5100 - Literary Research and Writing **gtPATHWAYS:**
ENGL 6001 - Critical Theory in Literature and Film **gtPATHWAYS:**

Total: 6 Hours

AREA REQUIREMENTS

Choose seven courses at the 5000/6000 level which fulfill seven <u>different</u> areas from the following 9 areas:

Classics
Medieval literature
Renaissance literature
Restoration and 18th-century literature
Romanticism
American literature, pre-1900

Victorian literature
American literature or film, post-1900
British modernism/ 20th-century British literature or film

Any graduate literature/film course will fulfill at least one of these areas. Each area can be satisfied by several different courses periodically offered. Historical surveys count within the most appropriate area based on the syllabus. Courses in film, world literature, ethnic literature and women's literature generally fulfill one of the 20th-century areas.

Total: 21 Hours

ELECTIVES

Choose one of the following:

ENGL 5093 - Teaching of Writing **gtPATHWAYS:**
ENGL 5913 - Practicum in Language and Rhetoric **gtPATHWAYS:**
An ENGL 5000- or 6000-level literature or film course

Total: 3 Hours

THESIS OR NON-THESIS OPTIONS

Non-Thesis Option

Students not writing a thesis must take the MA comprehensive exam. Prior to the exam, students may take ENGL 6920. Directed Readings

for 1-3 semester hours to help them prepare for the exam, but this is not required. However, the 33-hour course requirement must be met through electives if directed readings or project/independent study credits are not taken.

Students must be registered during the semester in which they take the MA comprehensive exam, which can be met by signing up for candidate for degree (CAND 5940-900) if all course work is completed.

Thesis Option

Students must submit a proposal for a thesis to the graduate program director for permission to proceed to the thesis.

ENGL 6950 - Master's Thesis **gtPATHWAYS:** (4-6 hours)
For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 3-6 Hours

LANGUAGE REQUIREMENT

Students must demonstrate fourth-semester proficiency in a foreign language. Old English or Latin also satisfies this requirement.

Literature Program Total: 33-34 Hours

Rhetoric and Teaching of Writing Program

In this program, you'll study rhetorical and language traditions and apply that knowledge to the teaching of writing. Knowledge of multicultural dimensions of literacy will help you understand the rich cultural complexity of the modern classroom. This program also focuses on developing your own writing and editing skills to fulfill your professional role as a teacher-writer.

COURSE REQUIREMENTS (31 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted.

REQUIRED COURSES

ENGL 5080 - History of the English Language **gtPATHWAYS:**
-OR- ENGL 5171 - Language Theory **gtPATHWAYS:**
ENGL 5093 - Teaching of Writing **gtPATHWAYS:**
ENGL 5150 - Research Methods **gtPATHWAYS:**
ENGL 5190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:**
ENGL 5651 - Second Language Writing **gtPATHWAYS:**
ENGL 6002 - Rhetorical Theory **gtPATHWAYS:**

Total: 18 Hours

AREA OF CONCENTRATION

Chosen by the student and approved by the student's advisor, three courses are taken in an area of concentration which may be in virtually any field that complements the required core and that meets the student's goals in the program. Representative areas include but are not limited to literature, technical communication, reading, English as a second language and communication. ENGL 5913. Practicum in Language and Rhetoric may be included among these nine hours.

Total: 9 Hours

THESIS

ENGL 6950. Master's Thesis
For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 4-6 Hours

Rhetoric and Teaching of Writing Total: 31 Hours

Applied Linguistics Program

If you want a thorough grounding in the principles and practice of teaching English to non-native adult users of English with a special focus on the discourses of the classroom and on teaching second-language writers, this program is a good choice.

GENERAL REQUIREMENTS

Foreign Language: Students must demonstrate fourth semester proficiency in a foreign language prior to graduation; assessment of proficiency depends on the language to be demonstrated.

Internship: Those students who are not teaching adult ESL students at the time of their course work will be required to take a 3–6 credit internship in an area language school, workplace or high school/college ESL program, either through the Experiential Learning Center or by arrangement with the program coordinator.

COURSE REQUIREMENTS (30 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted.

REQUIRED CORE COURSES

ENGL 5093 - Teaching of Writing **gtPATHWAYS:**
ENGL 5150 - Research Methods **gtPATHWAYS:**
ENGL 5171 - Language Theory **gtPATHWAYS:**
ENGL 5601 - Principles and Practices of Second Language Acquisition **gtPATHWAYS:**
ENGL 5651 - Second Language Writing **gtPATHWAYS:**
ENGL 5913 - Practicum in Language and Rhetoric **gtPATHWAYS:**
-OR- an ENGL elective approved by the student's advisor

Total: 18 Hours

ELECTIVES: LANGUAGE OR RHETORIC COURSES

Choose two:

ENGL 5080 - History of the English Language **gtPATHWAYS:**
ENGL 5190 - Special Topics in Rhetoric and Writing **gtPATHWAYS:**
ENGL 6002 - Rhetorical Theory **gtPATHWAYS:**

Total: 6 Hours

SYNTHESIS OPTIONS

Students may choose from the following two options:

Comprehensive Exam or Portfolio Exam

Students will take a comprehensive exam or portfolio exam in their last semester. Students selecting this option must take two elective courses (6 hours) approved by their advisor.

Thesis

ENGL 6840. Independent Study (3 hours)

ENGL 6950. Master's Thesis (4-6 hours)

For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 6-7 Hours

Applied Linguistics Total: 30-31 Hours

Additional Information

Candidate for Degree: Graduate students must be registered for at least one credit hour during the semester in which they graduate. Those who have completed all required courses and requirements may register for candidate for degree: CAND 5940, section 900. CAND 5940 carries no course credit, but you are billed for one credit of tuition and $10 in fees.

Teaching Assistantships: Graduate students who receive a teaching assistantship must take the following course in the fall during their first semester as a teaching assistant.

ENGL 5913. Practicum in Language and Rhetoric

Dual Degrees: Students concurrently pursuing a MA in education can count up to six hours of education courses toward their MA in English, with their English graduate advisor's permission.

Environmental Sciences MS

► Graduate School Rules apply to this program

Program Director: John Wyckoff
Associate Program Director: Jon Barbour
Office: North Classroom, 3622
Telephone: 303-556-4520
Fax: 303-556-6197
E-mail: Jon.Barbour@ucdenver.edu
Web site: clas.ucdenver.edu/ges/mses.html

Faculty Affiliates to the M.S. in Environmental Sciences Program

Professors:

Larry Anderson, chemistry
Lloyd Burton, School of Public Affairs
N. Y. Chang, civil engineering
James C. Y. Guo, civil engineering
Lynn Johnson, civil engineering
John A. Lanning, chemistry
Anu Ramaswami, civil engineering
Diana F. Tomback, integrative biology

Associate Professors:

Leo P. Bruederle, integrative biology
Frederick B. Chambers, geography and environmental science
Greg Cronin, integrative biology

Glenn T. Morris, political science
Timberly M. Roane, integrative biology
Deborah S. K. Thomas, geography and environmental science
John W. Wyckoff, geography and environmental science

Assistant Professors:

Casey Allen, geography and environmental science
Michael J. Green, integrative biology
Rafael Moreno-Sanchez, geography and environmental science
Bryan S. Wee, geography and environmental science

Instructors/Adjunct Faculty:

Jon Barbour, geography and environmental science
James Tindall, U. S. Geological Survey

Environmental sciences is a multidisciplinary study of the environment, housed in the Department of Geography and Environmental Sciences. Academic fields involved in environmental sciences include chemistry, biology and ecology, physics, geology, geography, anthropology, engineering, political science, law, economics and the health sciences. Students planning to pursue the MS in environmental sciences must either have earned a bachelor's degree or have taken significant course work in the natural/physical sciences or engineering and completed several other prerequisites (see the following graduate information). Graduate-level certificates in environmental sciences are also offered. The certificates may be earned stand-alone or as options in the MS in environmental sciences.

Environmental careers encompass a broad range of professions, from those with a strong foundation in the natural/physical sciences or engineering to those based in the social sciences and/or humanities. Students interested in environmental issues and careers should investigate the whole field before deciding which course to follow. At CU Denver, the MS in environmental sciences emphasizes the natural/physical sciences and engineering with the addition of the social sciences and humanities.

The MS in environmental sciences degree is designed to provide training in engineering, natural/physical sciences and socioeconomic analysis. The goals of the program are to (1) enhance the interdisciplinary communication and analytical skills of the student, and (2) provide a multidisciplinary approach for more intensive study of a particular environmental issue. Students will receive instruction in the physical and biological dynamics of various ecosystems, environmental engineering and socioeconomic issues associated with environmental analysis.

Graduates of the environmental sciences program are involved in many different areas, such as reviewing environmental impact statements, monitoring groundwater quality and

communicating with the public. Many students have found employment in various agencies (U.S. Environmental Protection Agency, U.S. Geological Survey, Colorado State Department of Public Health and Environment) and private-sector environmental and engineering firms.

Requirements for Admission

The program is for students who either have baccalaureate degrees or significant background in one of the natural/physical sciences or engineering. In addition, minimum undergraduate science and math requirements are:

- one semester of calculus and one semester of upper-division statistics *(if applicant is missing the statistics course, he/she can be admitted but must take ENVS 5600, Applied Statistics, or an approved statistics course as an elective before receiving the MS in environmental sciences degree)*
- two semesters general chemistry with lab
- one semester physics
- two semesters general biology with lab

If only two semesters of the six prerequisite courses are lacking, students may be admitted, but must take them in the first year in the program. Applicants who have fulfilled all prerequisites have a better chance of acceptance. Applicants may be required to take additional prerequisite courses (necessary for completing particular core or elective courses). The prerequisite courses will not count toward the MS in environmental sciences degree. As part of the admission review process, applicants are required to submit a graduate application, a minimum of three letters of recommendation and transcripts from all institutions previously attended. UC Denver has a minimum requirement of a 3.0 undergraduate GPA for applicants to the Graduate School. The program admits new students for the fall semester only, and the number of students admitted to the program depends, in part, on space availability. **Applicants must submit all materials by the March 1 deadline.**

Financial Aid

There are three types of financial aid available: tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office on the Denver campus. Incoming students will be automatically considered for program-distributed tuition assistance at the time of admission to the program. Continuing students will be regularly apprised of available aid and positions. Students interested in research assistantships should consult individual faculty with whom they wish to work regarding potential assistantship positions. All other aid should be requested through the CU

Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

Internships

Students in the MS in environmental sciences program are strongly encouraged to contact the Experiential Learning Center for internships and paid positions related to environmental sciences. The Experiential Learning Center is located in the Tivoli Student Union, Suite 260. Telephone: 303-556-2250. Many students have had internships in federal agencies, such as the U.S. Environmental Protection Agency and the U.S. Geological Survey.

Program Requirements

The MS in environmental sciences is a 39-hour program that provides students with two alternate plans: Plan I requires a thesis, while Plan II is a nonthesis program. General requirements for the program include: a set of core courses (18 semester hours), the MS in environmental sciences seminar course (ENVS 6002, 3 semester hours), and elective courses (12 semester hours minimum). Students choosing Plan I must also complete 6 hours of thesis, while those choosing Plan II must complete 6 hours of additional elective course work. Students opting for Plan II are encouraged to enroll in 3 hours of independent study (ENVS 6840) as one of their electives.

The degree is offered through the College of Liberal Arts and Sciences with the cooperation of the College of Engineering and Applied Science. In addition, some courses offered by the College of Architecture and Planning, the School of Public Affairs and the Business School are relevant and applicable to the program.

Required Core Courses

Fall

CVEN 5401 - Introduction to Environmental Engineering **gtPATHWAYS:**
ENVS 5030 - Environmental Geology **gtPATHWAYS:**
ENVS 6200 - Risk Assessment **gtPATHWAYS:**

Spring

BIOL 5445 - Applied Environmental Biology **gtPATHWAYS:**
CHEM 5700 - Environmental Chemistry **gtPATHWAYS:**
GEOG 5440 - Science, Policy and the Environment **gtPATHWAYS:**

Total: 18 Hours

The core courses are to be taken first upon entry into the program. They are the foundation for other courses in environmental sciences.

Seminar Course

Students are required to register for ENVS 6002, Environmental Sciences Seminar, in the first fall semester they are enrolled in the MS in environmental sciences program. The seminar serves as an introduction to the program and helps students to develop research skills and further their professional development.

ENVS 6002 - Environmental Sciences Seminar **gtPATHWAYS:**

Elective Courses

(See the MS in Environmental Sciences website for a complete list of elective courses for the MS in environmental sciences program.)

Students, with the coordinator and/or an advisor, will complete a program plan that will include 12-18 semester hours of elective requirements that will meet their interests. Students may choose to use four of the electives to fulfill one of the following options offered in environmental sciences: air quality, ecosystems, environmental health, environmental science education, geospatial analysis, hazardous waste and water quality. Students must have the prerequisites for each course and must meet the requirements listed in the notes below. Contact the option advisor for the particular option of interest before starting. Upon graduation, the option will be noted on the student's transcript.

Following are the requirements for each environmental sciences option:

AIR QUALITY OPTION

Option Advisor: Jon Barbour
Telephone: 303-556-4520
E-mail: Jon.Barbour@ucdenver.edu

Required Courses

CHEM 5710 - Air Pollution Chemistry **gtPATHWAYS:**
ENVS 5730 - Air Quality Modeling and Analysis **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two:

CHEM 5720 - Atmospheric Sampling and Analysis **gtPATHWAYS:**
CVEN 5800 - Special Topics **gtPATHWAYS:**
(when Air Pollution Control is the topic)
URPL 6686 - Special Topics: Urban and Regional Planning **gtPATHWAYS:**
(when Air Quality Planning and Policy is the topic)

Total: 6 Hours

Option Total: 12 Hours

ECOSYSTEMS OPTION*

Option Advisor: Casey Allen
Telephone: 303-556-6007
E-mail: Casey.Allen@ucdenver.edu

Required Courses

BIOL 5415 - Microbial Ecology **gtPATHWAYS:**
ENVS 5010 - Landscape Geochemistry **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two:

BIOL 5050 - Advanced Biology Topics **gtPATHWAYS:**
(when Seminar in Aquatic Ecology is the topic)
BIOL 5154 - Conservation Biology **gtPATHWAYS:**
ENVS 5500 - Topics in Environmental Sciences **gtPATHWAYS:**
(when Ecological Risk Assessment is the topic) (See Note 2)
ENVS 6220 - Toxicology **gtPATHWAYS:**
(see Note 2)
GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

* BIOL 5445, Applied Environmental Biology, is required as a prerequisite for the ecosystems option.

ENVIRONMENTAL HEALTH OPTION*

Option Advisor: Deborah Thomas
Telephone: 303-556-5292
E-mail: Deborah.Thomas@ucdenver.edu

Required Courses

ENVS 6220 - Toxicology **gtPATHWAYS:**
(see Note 2) (fall, even years)
ENVS 6230 - Environmental Epidemiology **gtPATHWAYS:**
(spring, even years)

Total: 6 Hours

Electives

Choose two:

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health **gtPATHWAYS:**
ENVS 5500 - Topics in Environmental Sciences **gtPATHWAYS:**
(when Ecological Risk Assessment is the topic) (See Note 2)
ENVS 6210 - Human Health and Environmental Pollution **gtPATHWAYS:**
(spring, odd years)
PUAD 5633 - Seminar in Natural Resource and Environmental Health Law **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

* ENVS 6200, Risk Assessment, is required as a prerequisite for the environmental health option.

ENVIRONMENTAL SCIENCE EDUCATION OPTION

Option Advisor: Bryan Wee
Telephone: 303-315-4992
E-mail: bryan.wee@ucdenver.edu

Required Courses

ENVS 5500 - Topics in Environmental Sciences **gtPATHWAYS:**
(when Survey of Field Methods is the topic)
Choose one from the following:
ELED 5340 - Multicultural Science Education **gtPATHWAYS:**
ENVS 5340 - Multicultural Science Education **gtPATHWAYS:**
SECE 5340 - Multicultural Science Education **gtPATHWAYS:**

Total: 6 Hours

Electives:

Choose two:

ANTH 5170 - Culture and the Environment **gtPATHWAYS:**
BIOL 5154 - Conservation Biology **gtPATHWAYS:**
COMM 5282 - Environmental Communication **gtPATHWAYS:**
GEOG 5335 - Contemporary Environmental Issues **gtPATHWAYS:**
GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
Or another elective approved by the option advisor

Total: 6 Hours

Option Total: 12 Hours

GEOSPATIAL ANALYSIS OPTION*

Option Advisor: Rafael Moreno
Telephone: 303-556-3762
E-mail: Rafael.Moreno@ucdenver.edu

Required Courses

GEOG 5080 - Introduction to GIS **gtPATHWAYS:**
GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two:

CVEN 5382 - GIS Spatial Database Development **gtPATHWAYS:**
CVEN 5385 - GIS Relational Database Systems **gtPATHWAYS:**
CVEN 5386 - GIS Laboratory **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

* GEOG 3080, Introduction to Mapping and Map Analysis, is required as a prerequisite of the geospatial analysis option.

For more information, contact the option advisor or Jon Barbour at 303-556-4520, Jon.Barbour@ucdenver.edu.

HAZARDOUS WASTE OPTION*

Option Advisor: Anu Ramaswami
Telephone: 303-556-4734
E-mail: Anu.Ramaswami@ucdenver.edu

Required Courses

CVEN 5480 - Hazardous Wastes and Site Remediation **gtPATHWAYS:**
CVEN 5800 - Special Topics **gtPATHWAYS:**
(when Hazardous Waste Regulations is the topic)

Total: 6 Hours

Electives

Choose two:

BIOL 5051 - Advanced Topics In Microbiology **gtPATHWAYS:**
CVEN 5402 - Integrated Environmental Modeling **gtPATHWAYS:**
ENVS 5403 - Unsaturated Zone Hydrology **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

*CVEN 5401, Introduction to Environmental Engineering, is required as a prerequisite for the hazardous waste option.

WATER QUALITY OPTION*

Option Advisor: John Wyckoff
Telephone: 303-556-2590
E-mail: John.Wyckoff@ucdenver.edu

Required Courses

Choose two:

BIOL 5416 - Aquatic Ecology **gtPATHWAYS:**
ENVS 5280 - Environmental Hydrology **gtPATHWAYS:**
ENVS 5410 - Aquatic Chemistry **gtPATHWAYS:**

Total: 6 Hours

Electives

Choose two:

CVEN 5333 - Applied Hydrology **gtPATHWAYS:**
CVEN 5334 - Groundwater Hydrology **gtPATHWAYS:**
CVEN 5343 - Open Channel Hydraulics **gtPATHWAYS:**
CVEN 5393 - Water Resources Development and Management **gtPATHWAYS:**
ENVS 5280 - Environmental Hydrology **gtPATHWAYS:** (if not selected as one of the required courses)
ENVS 5403 - Unsaturated Zone Hydrology **gtPATHWAYS:**

Total: 6 Hours

Option Total: 12 Hours

*CHEM 5700, Environmental Chemistry, or appropriate chemistry background is required as a prerequisite of the water quality option.

Notes:

Many of the courses have prerequisites; student must check the catalog for prerequisite requirements for these courses. Some options have a prerequisite course requirement.
One course may not be used for more than one option, even if it is listed in several options. Other courses may be offered that will be acceptable as electives with approval of the option advisor and the director of the program.
No more than three courses may be from any one discipline (excluding ENVS); i.e., chemistry, biology, civil engineering.

Courses used by the student to fulfill a core requirement may not be used to fulfill the options.

All work submitted for the environmental sciences options must have a grade of *B* (3.0) or better.

All courses for the environmental sciences options must be completed at the Denver campus.

Courses applied to either a certificate* or an MS degree may later be applied toward the other if all pertinent course work is completed within a five-year time period.

* The above options of the program may be taken to earn a corresponding environmental sciences certificate. However, certificates may be earned without entrance into the MS in environmental sciences program. (See the Environmental Sciences Graduate Certificate description).

Executive MBA in Health Administration

Distinctive Features of the Executive Program in Health Administration

Drawing on the expertise represented by the faculties of a consortium of western universities, the program offers high-quality courses taught by instructors that are typically not available from a single university.

The executive program facilitates learning for professionals who have continuing career and family responsibilities. The program is especially tailored for working individuals, allowing students to remain on their jobs while completing their educational program.

The program employs innovation in the technology of educational delivery. Learning methods include:

computer-assisted instruction and self-paced learning packages
computer conferencing and electronic case analyses
on-campus sessions

For application and additional information, write to:

Executive Program in Health Administration
The Business School
University of Colorado Denver
P.O. Box 480006
Denver, CO 80248-0006
www.colorado.edu/execed

Finance MS

Program Director: Ajeyo Banerjee
Telephone: 303.315.8456

Faculty

Professors:
Marcelle Arak, PhD, Massachusetts Institute of Technology
Jean-Claude Bosch, PhD, University of Washington
Elizabeth Cooperman, PhD, University of Georgia
E. Woodrow Eckard, PhD, University of California-Los Angeles
Richard Foster, PhD, University of Chicago
James Morris, PhD, University of California-Berkeley
Dean Taylor, PhD, University of Chicago

Associate Professors:
Ajeyo Banerjee, PhD,University of Massachusetts-Amherst
Jian Yang, PhD, Texas A&M University

Assistant Professors:

Takeshi Nishikawa, PhD, Texas Tech University

Senior Instructors:
John Byrd, PhD, University of Oregon
Chen Ji, MS, University of Colorado
Barbara Pelter, MA, University of Colorado
John Turner, PhD, St. Louis University

Instructors:
John Daley, PhD, University of Washington
Cindy Sutfin, MS, University of Colorado

The master of science in finance provides the necessary depth and specialized expertise to meet the needs of businesses for financial managers, investment analysts and other finance specialists.

The program emphasizes a familiarity with the institutions in our financial system, an understanding of financial markets and instruments, and the analytical skills and tools necessary to make informed decisions about investment and financing.

The program is suited to students from a wide variety of undergraduate backgrounds and is particularly appropriate to students with strong technical and analytical backgrounds. Admission standards for the MS finance program are unique to the program. Therefore, admission to other graduate business programs does not guarantee admission into the MS Finance program.

The MS in finance offers flexibility with on-campus and online courses. The MS finance degree requirements are met by the following courses and options:

Required Courses

FNCE 6290 - Quantitative Methods for Finance **gtPATHWAYS:**
BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
BUSN 6640 - Financial Management **gtPATHWAYS:**
FNCE 6300 - Macroeconomics and Financial Markets **gtPATHWAYS:**
FNCE 6330 - Investment Management Analysis **gtPATHWAYS:**
FNCE 6380 - Futures and Options **gtPATHWAYS:** or
FNCE 6382 - Survey of Financial Derivatives: Futures, Options and Swaps **gtPATHWAYS:**

FNCE Electives (12 semester hours)
Must include at least three FNCE courses numbered 6000 or higher. Remaining Finance Elective may be any of the following courses: FNCE 6000 or higher, ACCT 6340 Financial Statement Analysis, ENTP 6824 Entrepreneurial Financial Management (cannot receive credit for both ENTP 6824 and FNCE 6460 Small Firm Financial Management), ECON 5803 Mathematical Economics, ECON 5813 Econometrics I, or ECON 5823 Econometrics II. ECON courses are recommended for students wishing to later pursue a PhD in finance.

Total: 30 Hours

Prerequisites: BUSN 6550, Analyzing and Interpreting Accounting Information, or the equivalent accounting background. Students are also expected to be knowledgeable in spreadsheet software.

Notes and Restrictions

Finance Electives. Choose three courses in finance from the list of regularly scheduled graduate classes in consultation with an advisor.

Free Elective. Students complete 3 semester hours of graduate business course work (excluding BUSN courses numbered below 6800). Modern finance is heavily mathematical and draws extensively on economics and accounting. Courses in these

areas are especially useful. Petitions may be submitted to the program director for special courses that fit a student's individual needs.

Global Energy Management MS

Program Advisor: Sarah Dushame
Telephone: 303-605-6212
E-mail: Sarah.Dushame@ucdenver.edu

Faculty

Professors/Instructors

Timothy Antoniuk, MDes, University of Alberta
William Ascher, PhD, Yale University
Stephen Brown, PhD, University of Maryland
Matthew Clarke, PhD, University of Calgary
William Fox, JD, Catholic University of America
Mean Husein, PhD, McGill University
Merrily Kaut, PhD, University of Colorado Denver
L. Ann Martin, PhD, University of Minnesota

The master of science in global energy management (GEM) prepares individuals for leadership careers in the energy industry. This degree is particularly appropriate for individuals seeking to advance their existing careers in the energy field. Prior work experience within the field is preferred, but not required. The program consists of two components: the core curriculum and the more advanced and specialized elective courses. The MS GEM program requires the completion of the following core classes as well as four elective courses from the selection listed below.

Required Courses

GEMM 6000 - 21st Century Global Energy Issues and Realities **gtPATHWAYS:**
GEMM 6100 - Global Energy Economics **gtPATHWAYS:**
GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry **gtPATHWAYS:**

GEMM 6300 - Renewable and Alternative Energy: Opportunities & Challenges **gtPATHWAYS:**
GEMM 6400 - Leadership and Decision Making in the Global Energy Environment **gtPATHWAYS:**
GEMM 6500 - Financial Accounting in the Global Energy Markets **gtPATHWAYS:**
GEMM 6600 - Introduction To Financial Management In The Energy Industry **gtPATHWAYS:**
GEMM 6410 - People Management in the Global Energy Environment **gtPATHWAYS:**

Choose four

Choose four of the following courses. These courses are taken during the last two terms of the program and are offered based on enrollment.

GEMM 6210 - Land Management and Energy Contracts **gtPATHWAYS:**
GEMM 6430 - Organizational Behavior in the Energy Industry **gtPATHWAYS:**
GEMM 6450 - Strategic Management of the Energy Industry **gtPATHWAYS:**
GEMM 6460 - Integrated Information Management for Energy Firms **gtPATHWAYS:**
GEMM 6470 - Energy Marketing **gtPATHWAYS:**
GEMM 6610 - Advanced Financial Management in the Energy Industry **gtPATHWAYS:**
GEMM 6620 - Energy Assest & Production Management for the Energy Industry **gtPATHWAYS:**
GEMM 6630 - Renewable Energy Management **gtPATHWAYS:**

Prerequisites

Applicants that do not have a science- or energy-related field undergraduate degree or three-plus years experience in the industry are required to take two prerequisite courses as well as the GMAT.

The prerequisite courses include physical geology and introduction to physical engineering. These courses can be taken at any accredited university, but must be approved by a GEM team staff member before registering. Also the prerequisites may be taken prior or concurrently with GEMM 6000 and GEMM 6100.

Notes and Restrictions

The program is a cohort group, hybrid online, 18-month master of science degree program. As a cohort program, all students start together, progress together and graduate together. Students cannot take time out from the program once it starts and need to plan on remaining in the program for the full 18 months. If it becomes necessary to take a term off, students may not re-enroll until the next cohort group catches up to

the point where the student originally dropped out, which is 6 months later. As a hybrid online program, professors and students meet in class face to face for four days (Fridays through Mondays) at the start of each 3-month term with the rest of the term completed online. Please note that the GEM degree program runs on a completely separate schedule from the normal semester terms of the Business School. Please check the Business School Web site for deadlines and dates of each GEM term. All GEMM courses are restricted to those students who have been admitted to the MS GEM program.

Dual Degrees

In order to participate in the dual degree options offered by the Business School, students in the GEM program must first complete their entire GEM degree before they can begin their second degree.

Health Administration MS

Program Director: Errol L. Biggs
Telephone: 303-315-8851
E-mail: errol.biggs@ucdenver.edu

Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Peter Bryant, PhD, Stanford University

C.Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Richard Foster, PhD, University of Chicago

Bruce Neumann, PhD, University of Illinois

Edward O'Connor, PhD, University of Akron

Associate Professors:

Murray Cote, PhD, Texas A & M University

Blair Gifford, PhD, University of Chicago

Deborah Kellogg, PhD, University of Southern California

Stephen Ross, MD, Universtiy of North Carolina

Instructor:

Errol Biggs, PhD, Pennsylvania State University

The goal of the master of science in health administration degree is to prepare men and women who, after appropriate practical experience in responsible managerial positions, are capable of assuming positions as chief executive officers or senior administrators in complex, multi-service healthcare organizations or in organizations' purchasing health services.

The curriculum is a synthesis of management concepts and techniques that are applicable to any economic organization and tools that can be specifically applied to health and health services systems. The program emphasizes skills that heighten basic analytical and decision-making processes used by top-level managers in selecting broad strategies for the institutions and by junior managers in administering subunits of health care organizations. The faculty guide the students in their mastery of theoretical, conceptual and quantitative topics.

The program has enjoyed continuous accreditation by the Commission on Accreditation of Healthcare Management Education since 1970.

A. Common Body of Knowledge (CBK)

BUSN 6521 - Managing Individuals and Teams (Health Section) **gtPATHWAYS:**
BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
BUSN 6560 - Marketing Management **gtPATHWAYS:**
BUSN 6630 - Management of Operations **gtPATHWAYS:**
BUSN 6640 - Financial Management **gtPATHWAYS:**

Total: 18 Hours

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree or MBA from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

B. Graduate Core in Health Administration

HLTH 6010 - Health Care Systems **gtPATHWAYS:**
HLTH 6040 - Health Care Financial Management **gtPATHWAYS:**
HLTH 6911 - Health Field Studies **gtPATHWAYS:**
BUSN 6541 - Legal and Ethical Environment of Business (Health Section) **gtPATHWAYS:**
BUSN 6621 - Applied Economics for Managers (Health Section) **gtPATHWAYS:**
DSCI 6440 - Quality and Process Improvement **gtPATHWAYS:**
BUSN 6711 - Strategic Management (Health Section) **gtPATHWAYS:**
HLTH Electives (9 semester hours)
HIT elective (3 semester hours)

Total: 33 Hours

Notes and Restrictions

Health Administration electives. Choose three of the following: HLTH 6055, Transformation Leadership; HLTH 6740, Profiles in Healthcare; MGMT 6803, Visonary Leadership; HLTH 6075, Travel Study; HLTH 6070, International Health Policy & Management.

Health Information Technology elective. Choose one of the following: HLTH 6071, Introduction to Health Information Technology or HLTH 6027, Fundamentals of Helath Information Techology.

Management Residency. A management residency is optional, but recommended for all students, especially those with limited health care experience. The faculty of the program provide assistance to students in securing the residency, as well as regular consultation during the residency period. Information on the full range of local, regional, and national residencies is available in the program office.

Length of Program. The didactic portion of the degree will take at least two academic years, since most HA courses are offered only once each year and many have prerequisites. Part-time study is facilitated by courses being scheduled for late afternoon and evening hours.

Specialized Tracks in MS Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools on the Denver campus, and other University of Colorado campuses.

International Health Management and Policy track
Financial Management track
Health Information Technology Management track

Institute for International Business

The International Health track is affiliated with the Institute for International Business at UC Denver. The Institute for International Business is one of a few university programs to have received the prestigious CIBER grant from U.S. Department of Education. The grant is being used by the institute to provide effective internationally oriented education, research, and outreach activities. Also, the institute is a participant in an international consortium of universities for faculty and student program and course exchanges. Students in the International Health Management and Policy track will have access to the institute's exchange networks.

International Health Travel/Study Course

Program Director: Blair Gifford
Telephone: 303-315-8400
E-mail: Global-Health@ucdenver.edu

A unique feature of our International Health Management and Policy track is its emphasis on making sure students gain international experience during their education. The travel study course requirement can be met by taking a University of Colorado health travel/study course, or a student can take a course at a partnering university. An example of a health travel/study was a three-week trip to Thailand and Vietnam to visit numerous cultural- and health-related facilities.

Historic Preservation MS

► Graduate School Rules 11-12 apply to this program

Program Director: Christopher Koziol
Office: CU Denver Building, 320O
Telephone: 303-556-6516
E-mail: christopher.koziol@ucdenver.edu

In a rapidly changing cultural, economic and professional environment, it is valuable to have an understanding of what is worth saving of the built environment. However, appreciation for the past alone is insufficient for making the informed and creative decisions expected and required of cutting-edge professionals. The desire to know can become the opportunity to lead. There is an increasingly urgent need in our professional community and in our society for the skills and knowledge that this effort requires and this degree offers.

As global economies change fewer resources are available for new buildings and we must adaptively reuse our existing structures. This trend will continue beyond short-term economic conditions, because it will always be a more sustainable practice to reuse existing buildings than to tear them down and harvest or manufacture new materials.

The College of Architecture and Planning, and the professional community that it serves, foresee a significant and permanent shift towards more adaptive reuse of existing buildings. The master of science in historic preservation is a program designed to prepare students for a true 21st Century career.

Historic preservationists come from a variety of backgrounds. Some are well-educated in the humanities and desire to increase their technical understanding. Those familiar with the social sciences might be seeking “real world” applications for their expertise. Many already with “first professional degrees” in design and planning disciplines, as well as the law and business, seek to deepen their competence in the vibrant and interesting professional niche of historic preservation.

Prerequisites

Accepted students are expected to show basic competence or demonstrated potential in:

Manual technical drawing, and
CAD graphics, as well as having had exposure to
The study and/or practice of historic preservation.

These competencies can be demonstrated by previous course work or by portfolio/resume submission. Should any of these competencies for an admitted student be judged insufficient by the faculty, the program director may require the student to gain supplemental instruction prior to, or upon matriculation to, the MS in historical preservation degree program. Any credit awarded for such supplemental work will not be counted toward the required number of credit hours for the degree.

Admissions

Application to the master of science in historic preservation program is open to all students holding the bachelor's (undergraduate) degree from an accredited college (or its equivalent from a foreign institution). You make application through the CU Denver Graduate School.

Materials required

A brief statement of interest (500 word max.)
A compact portfolio (max. 20 pages 8.5" X 11") of writing samples, and optionally, graphic work and professional resume is strongly recommended.
Submission of Graduate Record Exam (GRE) scores is recommended for applicants without evidence of prior successful graduate level accomplishment. [There is an expedited application procedure for current CU Denver students in another CAP masters program. Please inquire to the MS in historical preservation program director.]

Transfer Credit

Transfer credit of up to 12 credit hours (up to 15 credit hours for those seeking/holding a related master's degree from CU Denver) may be awarded for equivalent graduate (post-bachelor's) course work at the discretion of the program director and in keeping with CU Denver Graduate School rules.

Undergraduate Course Work

Undergraduate course work substantively equivalent to a MSHP required course may be accepted as a substitution for that course at the program director's discretion, but such substitution will not reduce the total number of credit hours required for the degree.

Program Requirements

The course of study is designed to accommodate the background and needs of both those students with substantial experience, and those new to the field. The curriculum is flexible but rigorous, requiring:

Twenty-seven (27) semester hours of core courses
Nine (9) hour capstone requirement
Nine (9) electives

Students enrolling full-time in the 45 credit-hour curriculum typically complete the program in 3 or 4 semesters, or 18 months. However, course work other than the completion of the capstone requirement may be accomplished in a period of residency as short as 15 months. Students receiving significant transfer credit and those with a related degree may further reduce the time required for the MS in historical preservation degree.

Our program is compliant with National Council of Preservation Education Standards.

Required Core Courses

URPL 6634 - Preservation Theory and Practice **gtPATHWAYS:** (new prefix is HIPR 6010)
HIPR 6110 - Regionalisms & the Vernacular
HIPR 6210 - Survey, Significance & Recognition
HIPR 6310 - Documentation, Analysis & Representation
HIPR 6410 - Urban Conservation: Context for Reuse
HIPR 6510 - Building Conservation: Evidence & Intervention
HIPR 6170 - Preservation Design Studio
HIPR 6171 - Preservation Design Seminar
Choose one of the following 3-semester-hour courses:
ARCH 6210 - History of American Architecture **gtPATHWAYS:**
or
ARCH 6212 - History of Modern Architecture **gtPATHWAYS:**
or
LDAR 5521 - History of Landscape Architecture **gtPATHWAYS:**
or
URBN 6640 - History of the City **gtPATHWAYS:**

Total: 27 Hours

Capstone Work

Choose either Professional Project and additional requirements, or Thesis and additional requirements.

HIPR 6851 - Professional Project
Preceded by **one** of the following:

Additional (2nd) Studio + Seminar (HIPR 6170-71)
or
3 semester hours of Internship credit (HIPR 6930) and an additional directed elective
or
ARCH 6450 - Pre-Design and an additional directed elective
or
Maymester course, either
HIPR 6170 - Working Landscapes Field School and a related elective
or
HIPR 6610 - Reading the City Field School and a related elective

2. HIPR 6951 - Thesis

With LDAR 6949 - Research Tools, Strategies, Methods

Total: 9 hours

Electives

Choose 9 semester hours total, at least 6 semester hours from the same group. Each course listed is 3 semester hours.

Group One: Project Development
URPL 6660 - Real Estate Development Process **gtPATHWAYS:**
URPL 6661 - Real Estate Development Finance **gtPATHWAYS:**
URPL 6665 - Urban Market Analysis **gtPATHWAYS:**
URPL 6651 - Environmental Impact Assessment **gtPATHWAYS:**
PUAD 5110 - Seminar in Nonprofit Management **gtPATHWAYS:**
PUAD 5115 - Effective Grant Writing for Nonprofit and Public Sector Managers **gtPATHWAYS:**
Group Two: Context of Planning & Design
URBN 6642 - Design Policy/Regulation **gtPATHWAYS:**
URBN 6641 - Design Process/Practice **gtPATHWAYS:**
URPL 5530 - Planning Law **gtPATHWAYS:**
URPL 6640 - Community Development Process **gtPATHWAYS:**
URPL 6676 - Urban Housing **gtPATHWAYS:**
PUAD 5625 - Local Government Management **gtPATHWAYS:**
PUAD 5626 - Local Government Politics and Policy **gtPATHWAYS:**
Group Three: History
GEOG 5350 - Environment and Society in the American Past **gtPATHWAYS:**
HIST 5240 - National Parks History **gtPATHWAYS:**
HIST 5229 - Colorado Historic Places **gtPATHWAYS:**
HIST 5228 - Western Art and Architecture **gtPATHWAYS:**
HIST 5231 - History in Museums **gtPATHWAYS:**
HIST 5234 - Introduction to Public History **gtPATHWAYS:**
HIST 5236 - Colorado Mining and Railroads **gtPATHWAYS:**
HIST 5242 - Oral History **gtPATHWAYS:**
HIST 5243 - Public History Administration **gtPATHWAYS:**
HIST 5244 - Interpretation of History in Museums: Exhibits and Education **gtPATHWAYS:**
HIST 5810 - Special Topics **gtPATHWAYS:** Heritage Tourism
Group Four: Preservation Design
Additional studio (4) + seminar (2) AND/OR additional built environment history/practice courses

Total: 9 hours

History MA

► Graduate School Rules apply to this program

The master of arts in history requires 36 semester hours (12 courses). Students applying for admission to the program should have some background in history, though not necessarily a BA in the subject. The department encourages applications from individuals of any age interested in resuming their education. Graduate students in history develop skills in critical thinking, writing and independent research. Our program prepares students for a wide variety of professions, including teaching, government service, museum and archive management and historic preservation, as well as further degree work in history, law, librarianship and business. The department expects that students graduating with an MA in history will master the following general skills for their degrees:

- The ability to pursue independent historical research projects
- The ability to analyze historiographical arguments
- The ability to analyze primary documents and develop arguments from them
- The ability to create bibliographies using archival, library and Internet resources
- The ability to write in a variety of formats, including historiographical essays, book reviews and research papers

Students will also master knowledge of the basic historical content of both their major and minor fields, and an understanding of the historiographies and historical methods in their major and minor fields.

Admission Requirements

- In addition to the general admission requirements of the Graduate School, the Department of History requires an undergraduate GPA of at least 3.25.
- All applicants to the history program must take the GRE. GRE scores form a part of the department's consideration of students' qualifications.
- Applicants are required to submit a sample of written work, usually a term paper or project of similar length.
- All applications must include three letters of recommendation, preferably from college or university faculty.
- Applicants should address any gaps, weaknesses or special circumstances in their academic records in the statement of purpose portion of the application. In special circumstances, the department may modify its admission standards.

APPLICATION DEADLINES

April 1 Fall admission
October 1 Spring admission

Admission decisions are made by a graduate committee composed of the graduate advisor and faculty representing fields in U.S., European, global and public history.

Graduate School Policies

All history MA students are subject to Graduate School policies related to graduate study, as well as to all relevant university policies. These policies cover such topics as time limits on degree completion, changing degree programs, incomplete grades, and more. Further information on these policies can be found in the Graduate School section of this online catalog.

Transfer Credits

With approval from the graduate advisor and the appropriate faculty, students may transfer nine graduate-level credits accrued before enrollment in the UC Denver MA history degree program, provided that they earned a grade of *B*+ or better in these courses. Students must submit a syllabus for each course they wish to transfer, and faculty may require students to complete additional assignments to meet the expectations of the department. The department will not accept transfer of courses comparable to HIST 6013, Introduction to the Professional Study of History.

Grade Requirements

A minimum grade of *B*- (2.7) is required in all CU Denver history courses applied toward the degree. Students who earn less than a *B*- in HIST 6013 must retake the class.

Residency Requirements

The history department requires a residency of at least one academic year for the degree.

Graduate Advising

Upon admission, students will sign a check list indicating their understanding and acceptance of the department's expectations. Early in their first semester, students should contact the history department graduate advisor to discuss their path through the program and to receive advice regarding the selection of major and minor fields.

Degree Tracking Responsibility

Although faculty will provide reasonable guidance, it is up to students to monitor their own progress through the program in consultation with the graduate advisor and their

major advisor; this includes knowledge and understanding of application and graduate deadlines, degree requirements, thesis guidelines, etc.

Choosing Advisors and Fields of Study

All history MA candidates choose a major and minor field. Students will take courses in these fields (see Degree Requirements below) and will be tested in these fields (see Comprehensive Examinations). As soon as possible after consulting with the graduate advisor, students are responsible for securing two field advisors, one to oversee their progress in the major field, the other to oversee their minor field. All students should have chosen a major field and major advisor by the time they have completed 12 credit hours.

Major Fields, Minor Fields and Concentrations

The MA in history seeks to provide students with a balance of breadth and depth in the study of history. Major fields are broad areas of study within which students gain a general picture of historical processes. Concentrations provide focus for developing expertise within the major, either regionally or thematically. Minor fields provide a complementary or comparative area and must be from outside the major field.

Advisors and students together will work out Plans of Study, which indicate the courses students intend to take to meet their requirements, based on their selection of major and minor fields. *Students should make every effort to enroll in courses which best fit their major field, major concentration and minor field.*

Students can choose to major in one of the following four fields:

European History
Global History
Public History
U.S. History

Students will draw on core lists for their comprehensive exams. Core lists contain a number of themes with bibliographies for each theme. In consultation with their major advisor, students choose at least two books from each theme; for some themes, students will read more than two books.

Major Field Concentrations

Students work with advisors to select one of the major field concentrations listed above. Concentrations provide thematic or regional focus to a broad geographical major (e.g. for the global history major, students could concentrate on trade, borders, imperialism, etc. or any of the areas of regional expertise of our faculty). Readings for the major field concentration are in addition to the core reading list.

Minor Fields

Students choose minor fields from the list of major fields or the list of major field concentrations. They choose their minor field list in consultation with the minor field advisor.

Degree Requirements

All history MA students must have a major field and a minor field, and they must complete half of their course work at the 6000 level.

Required Introductory Course

HIST 6013 - Introduction to the Professional Study of History **gtPATHWAYS:**

Total: 3 Hours

Major Field

Core course in Major Field (3 semester hours)

European, public, and U.S. history major fields each have a required core course covering major approaches and themes. The core courses familiarize students with the field in a broad sense.

Research Seminars (3-6 semester hours)

Research seminars focus on students' development of an original, primary research paper. One 3-semester-hour research seminar is required of all students. A second research seminar is required for students not pursuing an extended research option; the second 3 semester hours can be taken within the major or minor field.

Major Electives (9-12 semester **hours**)

Electives are made up of courses in the major and concentration, including readings courses, which address specific field historiographies, and optional extended research credits. Students who choose to do a thesis may apply 6 thesis semester hours (HIST 6950) toward the major electives requirement.

Total: 18 Hours

Minor Field

Minor Electives

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

Total: 12 Semester Hours

Open Elective

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

Total: 3 Hours

Degree Total: 36 Hours

PUBLIC HISTORY MA MAJOR PROGRAM

INDEPENDENT STUDY AND/OR INTERNSHIP

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Students will not be allowed to fulfill the research requirement with an independent study or internship. Any independent study or internship at the 6000-level needs the permission of the graduate advisor. Students interested in pursuing an independent study or internship must find a faculty member willing to oversee their work, and they should expect the workload to equal or exceed that required for other courses at the same level.

HIST 5840 - Independent Study: History **gtPATHWAYS:**
HIST 6840 - Independent Study: HIST **gtPATHWAYS:**
HIST 6939 - Internship **gtPATHWAYS:**

COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. The exam consists of a take-home written section, with broad essay questions in both the major and minor fields; this is followed by an oral exam with the student's faculty committee. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated

by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)
Students majoring in public history must complete either a thesis (6 semester hours) or a project (usually 3 semester hours).

OPTIONAL THESIS FOR STUDENTS IN U.S., GLOBAL AND EUROPEAN HISTORY (HIST 6950)
Students majoring in U.S., global or European history can choose to write a thesis (6 semester hours in their major field).
OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)
Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

HIST 6950 - Master's Thesis **gtPATHWAYS:**
HIST 6951 - Masters Project: Advanced History Curriculum Development **gtPATHWAYS:**
HIST 6952 - Master's Project: Public History **gtPATHWAYS:**

Thesis Requirements

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students will enroll for six credit hours in HIST 6950 to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

Project Requirements

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey or similar activities. Students are required to prepare a paper describing the process and results of their project.

Opportunities for Teachers and Teachers-in-Training

Curriculum Projects

Licensed teachers and teachers-in-training enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the hours from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document Advanced History Curriculum Development Projects.

HIST 6951 - Masters Project: Advanced History Curriculum Development
gtPATHWAYS:
(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure.

We strongly encourage students to complete the School of Education & Human Development's teacher licensure program before enrolling in the history MA program; the history graduate program and the teacher licensure program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the teacher licensure program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in

curriculum and methods course work, which apply both to the teacher licensure program and the MA in history:

HIST 5464 - Problems and Methods in Teaching History and Social Studies I
gtPATHWAYS:
-and-
HIST 5465 - Problems and Methods in Teaching History and Social Studies II
gtPATHWAYS:

Humanities MH

► Graduate School Rules apply to this program

Requirements for Admission

In addition to the general requirements of the Graduate School governing acceptance to a master's degree program, applicants must submit the following:

evidence of a bachelor's degree
two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0
a writing sample
three letters of recommendation (at least two from academic sources)
appropriate undergraduate training or professional background, or indicators that supply evidence of ability to pursue the MH degree
a typed statement specifying the goal of advanced study in the humanities expressed in clear, correct and effective English
standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

Provisional admission:

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

Nondegree students:

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program

-or-

Wish to start courses in the program prior to completing their application.

Up to 12 semester hours of graduate-level work taken as a nondegree student may be accepted by the program once a student has been admitted to the program (the 12-hour limit also includes graduate work from another university). For further information on nondegree graduate student status, see the Information for Graduate Students section of this catalog.

International Students:

International students must also meet CU Denver requirements for international admission. See the Information for International Students section of this catalog or call 303-315-2230 for further information.

Degree Requirements

The master of humanities offers two general plans of study: Track I (individualized program) and Track II (cultural studies in interdisciplinary cluster areas).

Thirty-six semester hours are required for Track I and 39 semester hours are required for Track II. All courses credited toward the MH degree must be taken at CU Denver over a period not exceeding five years (a maximum of 12 graduate semester hours may be transferred from other institutions subject to the MH director's approval). At least a *B* average (3.0) must be maintained in all graduate-level course work for the degree. A grade of *C*+ or below will not be counted toward the degree. Each student's program is supervised by a faculty advisor. All independent study, project and thesis contracts must be approved in advance by one of the program directors. A total of two independent study courses and two 4000-level undergraduate courses may count toward the degree. Only one graduate-level online course (up to 3 hours) may be taken toward the degree. The rest must be 5000-level or above courses offered through various departments. All students must pass an oral comprehensive exam in order to graduate.

TRACK I (Individualized Program) Requirements—Thesis or Project Option

Students in Track I have the opportunity to fashion a course of study based on their individual interests and goals. In consultation with a faculty advisor, students choose two or three academic disciplines as areas of concentration. Students who select a thesis (6 semester hours) will submit a thesis proposal after completing 30 hours of course work. In the case of a project (3 semester hours), students will submit a project proposal after 33 hours.

TRACK I REQUIREMENTS:

Three interdisciplinary seminars

HUMN 5025 - Methods and Texts of the Humanities **gtPATHWAYS:**
(Must be taken during the first year of entrance into the program. **Offered fall only.**)

Mid-Program Seminar, an interdisciplinary seminar which is approved for the student's program by the program director (note that the Mid-Program Seminar **must** have a HUMN prefix).

HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities **gtPATHWAYS:**
(A final seminar that provides background reading, theory and research approaches for students to develop a thesis or project; student must have completed at least 24 hours of course work and must register for the course via a schedule adjustment form with instructor approval. **Offered spring only.**)
Total: 9 Hours

Electives

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-structured portion of the program must be selected with the approval of the MH program director.

A total of two independent study courses and two 4000-level undergraduate courses taken when enrolled in the program may count toward the degree. All independent study contracts must be approved by the program director. The remaining course work must be 5000-level or above courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

Total: 21-24 Hours

Thesis or Project

A thesis (6 semester hours) or a final project (3 semester hours), which must include a substantial scholarly paper and may include a creative exercise involving at least two disciplines. In order to proceed with a thesis or project, all students must submit to the program a proposal to be approved by three faculty members of the committee and the program director.

HUMN 5950 - Master's Thesis **gtPATHWAYS:**
HUMN 5960 - Master's Project **gtPATHWAYS:**

Total: 3-6 Hours

Oral Exam

An oral exam before a committee of three faculty members in order to graduate.

Track I Total: 36 Hours

TRACK II (Cultural Studies)—Non-thesis or Project Option

This track is somewhat more structured than Track I, but does not require a thesis or a project. In consultation with a faculty advisor, students choose from courses organized into one of eight interdisciplinary clusters:

classics
identity and gender
meaning and values
philosophy and theory
self, society and community
social and political thought
technology and culture
understanding America/understanding the world

TRACK II REQUIREMENTS:

Three required interdisciplinary seminars

HUMN 5025 - Methods and Texts of the Humanities **gtPATHWAYS:**
(Must be taken during the first year of entrance into the program. **Offered fall only.**)

Mid-Program Seminar, an interdisciplinary seminar which is approved for the student's program by the program director (note that the Mid-Program Seminar **must** have a HUMN prefix).

HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities **gtPATHWAYS:**
(A final seminar that provides background reading, theory and research approaches for students to develop a thesis or project; student must have

completed at least 24 hours of course work and must register for the course via a schedule adjustment form with instructor approval. **Offered spring only.**)
Total: 9 Hours

Core cluster courses

Complete 15 semester hours in one of the eight interdisciplinary clusters listed above.

Total: 15 Hours

Electives

15 additional elective semester hours (students retain considerable flexibility in selecting these hours).

Total: 15 Hours

Comprehensive Exam

A comprehensive oral exam and a brief paper (15-20 pages) presented before a committee of three faculty members in order to graduate.

Track II Total: 39 Hours

Information and Learning Technologies MA

Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education

Faculty

Information about Information ILT faculty is available online at www.ucdenver.edu/education.

Master's Degree

The ILT master's program helps people design and use various resources and technologies for learning. Applying sound principles of instructional design, graduates

can integrate a variety of learning technologies into their teaching including multimedia presentations, social-networking tools and tools for authoring, production, assessment and participation. Program graduates learn to implement learning technologies in specific professional settings—either K–12 schools or adult learning settings such as business or higher education.

Students are assigned to tracks according to their professional goals:

- The instructional design track prepares students to work in adult learning settings such as business, higher education, health care, nonprofits or government.
- The eLearning track prepares educators to develop online courses and learning materials and to teach and facilitate learning in those eLearning environments.
- The K–12 teaching track helps teachers integrate technologies into schools and classrooms with a focus on improving teaching practices. Teachers may earn a state endorsement in instructional technology.

Once admitted, students begin a plan of study that typically takes about 1-1/2 years to complete. Some students are organized into a cohort to complete courses together at a fixed sequence. Other students select courses at a more flexible pace. Consult the ILT website for more information about specific plans of study, course offerings and expectations of cohort groups.

ILT faculty members also participate in the school's doctoral program. Students interested in a PhD may participate in a technology-focused doctoral lab with a number of ILT faculty members. The program also delivers an online certificate on eLearning design.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the ILT program website for complete admission procedures and requirements.

Professional Expectations

All students in the ILT program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The ILT program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, ILT students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

Instructional Design

Students complete at least 30 graduate semester hours of course work from a set of core courses and approved electives within and outside the ILT program. The plan of study is nationally accredited by NCATE and AECT and is consistent with standards for instructional designers.

Sample plan for Instructional Design Track			
	Fall	Spring	Summer
Year 1	INTE 6750 - Current Trends and Issues in Instructional Technology EPSY 5220 Adult Learning and Education	INTE 5600 - Multimedia Authoring INTE 6710 Creative Designs for Instructional Materials	INTE 5680 - Integrating Media in eLearning Environments INTE 5830 Information and Learning Technologies Workshop
Year 2	INTE 6930 - Internship in Information and Learning Technologies INTE 6720 - Research in Information and Learning Technologies	INTE 5160 - Managing Information and Learning Technology Programs Elective	

eLearning Design and Implementation

Students may complete a 30 semester hours online master’s degree with an eLearning emphasis. The focus of this master’s track is on the planning, design, development, delivery, facilitation and evaluation of online learning resources and programs. A

certificate is also available in this area, constituting the first-year requirements of the master's program.

Sample plan for eLearning Track			
	Fall	Spring	Summer
Year 1	INTE 5660 - Designing and Teaching in eLearning Environments	INTE 5670 - Developing eLearning Instruction	INTE 5680 - Integrating Media in eLearning Environments INTE 5650 - Policies and Planning for eLearning Programs
Year 2	INTE 6720 - Research in Information and Learning Technologies INTE 6710 Creative Designs for Instructional Materials	INTE 5160 - Managing Information and Learning Technology Programs Elective	

K–12 Teaching

Students may select a master’s program or an endorsement program in instructional technology. For the full master of arts degree, students complete at least 30 graduate semester hours of course work consisting of a core set of courses and approved electives. The plan of study is accredited by NCATE and AECT and is designed in line with standards of the Colorado Department of Education. Students may also complete an endorsement-only program in instructional technology consisting of 24 graduate semester hours.

Sample Plan for K-12 Teaching Track			
	Fall	Spring	Summer
Year 1	INTE 6750 - Current Trends and Issues in Instructional Technology INTE 5830 Information and Learning Technologies Workshop	INTE 5600 - Multimedia Authoring INTE 6710 Creative Designs for	INTE 6515 - Leadership for Learning Technologies Integration

		Instructional Materials	INTE 5710 - Telecommunications and Networking in Education
Year 2	INTE 6930 - Internship in Information and Learning Technologies INTE 6720 - Research in Information and Learning Technologies	INTE 6999 - Leadership and Practice in Information and Learning Technologies Elective	

Information Systems MS

Program Director: Jahangir Karimi
Telephone: 303-315-8430
E-mail: Jahangir.Karimi@ucdenver.edu
Web site: http://business.ucdenver.edu/Disciplines/InfoSystems/InfoSystemsMS.htm

Faculty

Professors:
James Gerlach, PhD, Purdue University
Jahangir Karimi, PhD, University of Arizona

Associate Professors:
Dawn Gregg, PhD, Arizona State University
Michael Mannino, PhD, University of Arizona
Ronald Ramirez, PhD, University of California-Irvine
Judy Scott, PhD, University of California-Irvine
Steven Walczak, PhD, University of Florida

Assistant Professors:
Zhiping Walter, PhD, University of Rochester

Senior Instructors:
Eric Thompson, MS, University of Colorado

Instructor:
Linda Fried, JD/LLM, University of Miami

The Master of Science in Information Systems (MSIS) program at the Business School meets industry needs by providing specializations. The program prepares students for career paths in systems development and management services, enterprise application services, business intelligence, health information technology, information security audit and control, business consulting and development and consumer products and services. Whether students aim to be systems analysts or designers, software engineers, applications programmers, database administrators, Web developers, systems integrators, project managers, LAN administrators or application and technology consultants, the MSIS program provides the necessary knowledge and skills. This entire MS in Information Systems can be completed online.

The MSIS program offers a wide choice of courses. The course work consists of common body of knowledge courses plus 30 semester hours, which includes a choice of a specialization. Each specialization includes two required courses, 6 courses from a list specific to your chosen specialization and two elective courses. Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

A. Common Body of Knowledge (CBK)

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree or MBA from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

Four of the following courses are required if you do not meet the above waiver policy.

BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
BUSN 6560 - Marketing Management **gtPATHWAYS:**
BUSN 6630 - Management of Operations **gtPATHWAYS:**
BUSN 6640 - Financial Management **gtPATHWAYS:**

Total: 12 Hours for Common Body of Knowledge (CBK)

B. Information Systems Specializations

The five specializations that accompany the MS in Information Systems are designed to provide the fundamental knowledge necessary for a career as an IS professional. Up to 9 semester hours may be transferred from an AACSB international accredited graduate school and applied to the information systems specializations upon approval. The IS specializations provide students with a set of related courses necessary to acquire skills and expertise within a specific area in the development, management and use of information technology applications. Students are required to choose one specialization upon admission to the MSIS.

Accounting and Information Systems Audit and Control (AISAAC) Specialization

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

Prerequisite

ACCT 6030 - Financial Accounting **gtPATHWAYS:**

Required Courses

ACCT 6020 - Auditing **gtPATHWAYS:**
ISMG 6040 - Business Process Management **gtPATHWAYS:**
ISMG 6060 - Analysis, Modeling and Design **gtPATHWAYS:**
ISMG 6080 - Database Management Systems **gtPATHWAYS:**
ISMG 6180 - Information Systems Management and Strategy **gtPATHWAYS:**
ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**
ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**
Either
ACCT 6510 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**
OR

ISMG 6510 - Accounting and Information Systems Processes and Controls **gtPATHWAYS:**

Choose two:

ACCT 6620 - Advanced Auditing **gtPATHWAYS:**
ACCT 6470 - Internal Auditing **gtPATHWAYS:**
ACCT 6340 - Financial Statement Analysis **gtPATHWAYS:**
ACCT 6360 - Fraud Examination **gtPATHWAYS:**
ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**
ISMG 6450 - IT Project Management **gtPATHWAYS:**

Business Intelligence Specialization

Business Intelligence (BI) systems combine operational data with analytical tools to present complex and competitive information to planners and decision makers. The objective is to improve the timeliness and quality of inputs to the decision process. BI is used to understand the capabilities available in the firm; the state-of-the-art, trends, and future directions in the markets, the technologies, and the regulatory environment in which the firm competes; and the actions of competitors and the implications of these actions. With this specialization, you get the necessary skills and knowledge in real-time data warehousing, data visualization, data mining, online analytical processing, customer relationships management, dashboards and scorecards, corporate performance management, expert and advanced intelligent systems, and hands-on experience with leading BI tools.

Required Courses

ISMG 6080 - Database Management Systems **gtPATHWAYS:**
ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**

Choose six:

DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**
ISMG 6180 - Information Systems Management and Strategy **gtPATHWAYS:**
ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**
ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**
ISMG 6480 - Data Warehouse and Administration **gtPATHWAYS:**
ISMG 6810 - Business Intelligence in Healthcare **gtPATHWAYS: OR**
ISMG 6820 - Business Intelligence and Financial Modeling **gtPATHWAYS:**
MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**

Enterprise Technology Management (ETM) Specialization

This specialization focuses on information technology as the prime driver of business strategy. It focuses on the strategic, technological, financial and organizational issues involved with the effective management of information technology within an enterprise. The courses in this specialization cover the emerging technologies and the evolving roles and importance of IT in modern organizations; IT-enabled organizational processes and knowledge management; methods to develop, acquire and implement information systems; implementing and managing complex IT projects; security and privacy issues associated with IT.

Required Courses

ISMG 6040 - Business Process Management **gtPATHWAYS:**
ISMG 6180 - Information Systems Management and Strategy **gtPATHWAYS:**

Choose six:

ISMG 6080 - Database Management Systems **gtPATHWAYS:**
ISMG 6120 - Internet and Mobile Technologies **gtPATHWAYS:**
ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**
ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**
ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**
ISMG 6450 - IT Project Management **gtPATHWAYS:**
ISMG 6460 - Emerging Technologies **gtPATHWAYS:**

Health Information Technology Management Specialization

Recently, the health care industry has shifted its focus from using proprietary and expensive IT solutions to more innovative IT applications in electronic health records (EHR) and other health information technology (HIT) innovations for sharing information effectively to help manage health care crisis. The courses within this specialization cover the evolving roles and importance of IT in the health care industry; the innovative IT applications for delivering health care with reduced cost and increased quality; the management of health care using effective IT systems; and the security and privacy issues associated with health information. These courses will focus on how IT-enabled health care organizations can integrate information from various resources in order to deliver innovative IT solutions to meet unique requirements of health care industry.

Required Courses

ISMG 6060 - Analysis, Modeling and Design **gtPATHWAYS:**
ISMG 6080 - Database Management Systems **gtPATHWAYS:**

Choose six:

HLTH 6071 - Introduction To Health Information Technology **gtPATHWAYS:**
HLTH 6072 - Fundamentals of Health Information Technology Management **gtPATHWAYS:**
ISMG 6220 - Business Intelligence Systems **gtPATHWAYS:**
ISMG 6280 - Service Oriented Architecture **gtPATHWAYS:**
ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**
ISMG 6460 - Emerging Technologies **gtPATHWAYS:**
ISMG 6810 - Business Intelligence in Healthcare **gtPATHWAYS:**

Web and Mobile Computing Specialization

This specialization focuses on building and managing large systems using platforms for website development, mobile and wireless applications, and web services and service oriented architectures. The courses provide expertise in .Net programming, business process management, internet and mobile technologies, website development technologies, data warehousing and administration, and service oriented architecture. Project management coursework enables graduates to successfully handle highly, complex systems development projects in the business world.

Required Courses

ISMG 6060 - Analysis, Modeling and Design **gtPATHWAYS:**
ISMG 6080 - Database Management Systems **gtPATHWAYS:**

Choose six:

ISMG 6020 - .Net Programming Fundamentals **gtPATHWAYS:**
ISMG 6040 - Business Process Management **gtPATHWAYS:**
ISMG 6120 - Internet and Mobile Technologies **gtPATHWAYS:**
ISMG 6240 - Website Development Practice and Technologies **gtPATHWAYS:**
ISMG 6280 - Service Oriented Architecture **gtPATHWAYS:**
ISMG 6450 - IT Project Management **gtPATHWAYS:**
ISMG 6480 - Data Warehouse and Administration **gtPATHWAYS:**

Electives

Students fulfill an additional 6 semester hours by completing the following:

Note: If you are pursuing the Accounting and Information Systems Audit and Control specialization, you do not complete these electives. All other students will complete the following electives.

an elective course from any of the ISMG graduate courses OR an internship **AND**
a free elective selected from any graduate course offered by the Business School, except BUSN courses numbered below 6800.

Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

Total: 30 hours for MS in Information Systems

Geographic Information Systems (GIS) Option

The Geographic Information Systems option expands upon system development skills through the understanding of geographic information systems workflows, analysis processes, and data models. This option for the Web and Mobile Computing specialization and Business Intelligence specialization addresses how map representations can be abstracted in geo-databases to develop intelligent GIS systems. Learn how GIS can improve efficiencies, decision making, planning, geographic accountability, science-based plans and communication. The GIS option is offered in conjunction with the College of Engineering and Applied Science and a certificate in GIS is awarded by the College of Engineering and Applied Science.

Students must complete all requirements for the MS in Information Systems, as well as the requirements below.

CVEN 5381 - Introduction to Geographic Information Systems **gtPATHWAYS:**

Choose three:

CVEN 5382 - GIS Spatial Database Development **gtPATHWAYS:**
CVEN 5383 - GIS Analysis -- Theory and Practice **gtPATHWAYS:**
CVEN 5384 - GIS Management and Policies **gtPATHWAYS:**
CVEN 5385 - GIS Relational Database Systems **gtPATHWAYS:**
CVEN 5386 - GIS Laboratory **gtPATHWAYS:**

Total: 12 Hours

GIS courses are offered online and can be completed concurrently with the Information Systems courses.

Students will be able to register for the classes on the web. There are no special registration requirements.

Students need to notify the graduate advising office at the Business School, 303-315-8200, prior to graduation if they are planning to complete the GIS option. Students also need to indicate the completion of the coursework when they submit their application for diploma card.

Integrated Sciences MIS

► Graduate School Rules apply to this program

Degree Requirements

Minimum Hours

Students must complete a minimum of 30 semester hours at the 4000+ level, of which 1-4 must be project hours or 4-6 must be thesis hours. In accordance with Graduate School rules , a minimum of 18 hours must be at the 5000+ level.

Breadth Requirement

Students are required to take classes in a minimum of two (2) areas and maximum of three (3) areas within the disciplines of computer science, math, chemistry, biology, physics or geology. With approval, students may take a maximum of three (3) hours at the 4000+ level in one other school or college. All classes counted toward the degree must be related to the student's stated program goal and be approved as part of a program of study by the program director. The student is responsible for insuring that all prerequisite requirements for the classes they take have been met.

Depth Requirement

The student must designate a primary area (either within a department or as an interdisciplinary concentration including, but not limited to, biophysics, biochemistry and computational biology). The student must take a minimum of nine (9) semester hours in the chosen area of concentration.

Project or Thesis

All students must conduct independent research that results in either a thesis or project, which is presented to their committee in written form and is subject to an oral defense.

Graduate Advisor and Project Committee

All candidates for the master of integrated sciences degree must select a faculty advisor and two other faculty members to serve with the advisor as the candidate's graduate committee. The committee members must be part of the graduate faculty and approved by the program director. The name of the faculty advisor must be submitted to the MIS director no later than two semesters following full admission to the program.

DEGREE TOTAL: 30 HOURS

International Business MS

Advisor: Manuel G. Serapio, Jr.
Telephone: 303-315-8436
E-mail: Manuel.Serapio@ucdenver.edu

Faculty

Professors:
Wayne Cascio, PhD, University of Rochester
Lawrence Cunningham, DBA, University of Tennessee
John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

Associate Professors:
L. Ann Martin, PhD, University of Minnesota
Kang RaeCho, PhD, University of Washington
Manuel Serapio, PhD, University of Illinois

Senior Instructors:
John Byrd, PhD, University of Oregon
John Turner, PhD, St. Louis University

Instructors:
Chen Ji, MS, University of Colorado
Mary Lee Stansifer, PhD, Northwestern University

The Master of Science in International Business prepares individuals for careers in international business or with international organizations.

The MS program in International Business requires the completion of the following:

A. Common Body of Knowledge (CBK)

Required CBK

BUSN 6520 - Managing Individuals and Teams **gtPATHWAYS:**
BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**
BUSN 6560 - Marketing Management **gtPATHWAYS:**
BUSN 6620 - Applied Economics for Managers **gtPATHWAYS:**
BUSN 6640 - Financial Management **gtPATHWAYS:**

Total: 21 Hours

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree or MBA from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

B. Foreign Language Competency

Prior to graduation, students must demonstrate proficiency in a foreign language (other than English). This is accomplished through completion of three semesters of college-level course work in a single foreign language with a grade of C or better in all three terms or by passing a proficiency exam.

C. Graduate Core in International Business

Required Courses

INTB 6000 - Introduction to International Business **gtPATHWAYS:**
INTB 6020 - Cross-Cultural Management **gtPATHWAYS:**
INTB 6200 - International Business Policy **gtPATHWAYS:**
International Electives (12 semester hours)
Free Elective (3 semester hours)
Advanced Study Requirements in International Business (6 semester hours)

Total: 30 Hours

Notes and Restrictions

International Topics Electives. Choose four courses (12 semester hours) from any INTB 6000-level course or higher or any approved international course.

Free Elective. One graduate-level class may be selected from any functional area of business, including international business topics classes, except BUSN courses numbered below 6800. International business majors can petition for transfer of 3 semester hours of relevant nonbusiness graduate courses offered at UC Denver's Downtown Campus.

Advanced Study Requirements. This 6-semester-hour requirement may be fulfilled by a master's thesis, research internship, international field study/study abroad or any INTB 6000-level course or higher or any approved international course.

Landscape Architecture MLA

Prerequisites

Students are expected to have achieved a basic level of computer literacy and are required to have their own computer.

Program Requirements

The landscape architecture program offers professional and advanced professional graduate degree curricula leading to the degree master of landscape architecture (MLA).

- The first-professional degree program, requiring a six-semester sequence of course work totaling 90 semester hours, is fully accredited by the Landscape Architecture Accreditation Board (LAAB) and recognized by the Council of Educators in Landscape Architecture (CELA).
- Students completing the college's bachelor of environmental design on the Boulder campus—or completing an undergraduate design degree at another institution—may be given advanced standing in the three-year program. Advanced standing will be based on prior academic accomplishment.
- The advanced professional degree program for qualified students having already earned a first professional degree in landscape architecture (BLA) or related discipline requires 48 semester hours. Advanced standing will be based on prior academic accomplishment.

Course Sequence

(90-semester-hour MLA for students without a professional degree in landscape architecture or related profession)

The curriculum consists of core and elective course work. Core courses are grouped into five components:

	Semester hours
Design Studios	36
History and Theory	12
Site Works	15
Media	6
Ethics	3
Total core courses	72
Electives	18
Total courses	90

Typical 90-semester-hour program of study in required courses for the first professional MLA degree

First Year

Fall

LDAR 5501 - Landscape Architecture Design Studio 1 **gtPATHWAYS:**
LDAR 5510 - Graphic Media in Landscape Architecture **gtPATHWAYS:**
LDAR 5521 - History of Landscape Architecture **gtPATHWAYS:**
LDAR 5572 - Landscape Ecology **gtPATHWAYS:**

Total: 15 Hours

Spring

LDAR 5502 - Landscape Architecture Design Studio 2 **gtPATHWAYS:**
LDAR 5532 - Landform Manipulation **gtPATHWAYS:**
LDAR 6632 - Site Planning **gtPATHWAYS:**
LDAR 6641 - Computer Applications in Landscape Architecture **gtPATHWAYS:**

Total: 15 Hours

Second Year

Fall

LDAR 5503 - Landscape Architecture Design Studio 3 **gtPATHWAYS:**
LDAR 6631 - Landscape Construction Materials and Methods **gtPATHWAYS:**
LDAR 6670 - Plants in Design **gtPATHWAYS:**
One Elective. **Semester hours**: 3

Total: 15 Hours

Spring

LDAR 6604 - Landscape Architecture Design Studio 4 **gtPATHWAYS:**
LDAR 6605 - Landscape Architecture Design Studio 5 **gtPATHWAYS:**
LDAR 6620 - Landscape Architecture Theory and Criticism **gtPATHWAYS:**
LDAR 6721 - Regionalism **gtPATHWAYS:** or alternative approved by chair
One Elective. **Semester hours**: 3

Total: 15 Hours

Third Year

Fall

LDAR 6606 - Landscape Architecture Design Studio 6 **gtPATHWAYS:**
Three Electives. **Semester hours**: 9

Total: 15 Hours

Spring

LDAR 6607 - Landscape Architecture Design Studio 7 **gtPATHWAYS:**
LDAR 6608 - Landscape Architecture Design Studio 8 **gtPATHWAYS:**
LDAR 6750 - Professional Practice **gtPATHWAYS:**
Two Electives. **Semester hours**: 6

Total: 15 Hours

Course Sequence

(48-semester-hour MLA for students with a professional degree in landscape architecture or related disciplines)

This route requires 48 semester hours and typically two years of full-time study. The core curriculum consists of two groups:

	Semester Hours
Design	24
History and Theory	12
Total core courses	36
Electives	12
Total courses	48

The department chair will advise each student engaged in this program of study.

Thesis

The graduate thesis in landscape architecture provides an opportunity for students to conduct independent research and design investigations that demonstrate their capacity for rigorous original thinking. The thesis is not required for graduation and not all students are approved to write a thesis. Choosing to pursue a thesis project constitutes a significant commitment to the endeavor; the topic must be chosen with care and thoughtfully and critically developed. Topics can explore material that has been previously unstudied, reinterpret existing material in a new light, or engage research and design practices in ways that strengthen and define the final project. For all theses, the research and products must meet the highest standards of academic excellence and contribute significantly to the discipline and/or profession.

Pursuing a thesis requires students to enroll in a three-course sequence for a maximum total of 12 semester hours. Students are required to formulate their research proposals

two full semesters prior to their enrollment for the 6-semester-hour thesis, typically taken in lieu of the final studio. To proceed through the sequence, students must have completed and passed the research tools and methods class (LA6940) and have secured departmental approval of the thesis proposal. The completion of the thesis is dependent on acceptance of the student's work by the faculty member acting as the thesis chair and by the committee. For work to be accepted it must meet the standards established by the University of Colorado Denver for graduate thesis projects.

Dual Degree Options

Students may enroll in a dual degree program with architecture (MArch), with urban design (MUD) or with urban and regional planning (MURP).

Linguistically Diverse Education, MA Curriculum and Instruction

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second

language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to

their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate*	**TESOL Certificate**

				teacher education licensure program)	
CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English	Required	Required	Required	Required	Required

as a Second Language					
CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second Language Learners	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Management and Organization MS

Program Director: Kenneth L. Bettenhausen
Telephone: 303-315-8425
E-mail: Kenneth.Bettenhausen@ucdenver.edu

Faculty

Professors:
Heidi Boerstler, PhD/JD, Yale University/University of Denver
Wayne Cascio, PhD, University of Rochester
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
Edward O'Connor, PhD, University of Akron
John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

Associate Professors:
Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign
Blair Gifford, PhD, University of Chicago
Sarah Koovor-Misra, PhD, University of Southern California

Assistant Professors:
Vinit Desai, PhD, University of California at Berkeley
Stephanie Johnson, PhD, Rice University
Traci Sitzmann, PhD, University of Tulsa

Instructors:
Linda Fried, JD/LLM, University of Miami
Barry McConnell, MBA, University of Colorado
Jeffrey Nystrom, MS, University of Colorado
Ira Selkowitz, JD, University of Denver

The MS Management program prepares students for significant managerial responsibilities in the private and public sectors. Core course requirements provide students with an advanced understanding of how to manage interpersonal dynamics, effectively design organizations, implement planned change and organizational transformations and develop human resources. Students build on this foundation with any four electives in MGMT, ENTP or INTB, or with the courses that comprise one of 12 career-focused specializations.

The specializations include: business strategy, change and innovation, communications management, enterprise technology management, entrepreneurship and innovation, human resources management, global management, leadership, strategic management, managing for sustainability, quantitative decision methods and sports and entertainment management. These

specializations will help students master the tools and knowledge to be successful in each focused competency.

The MS management and organization degree requirements are met by the following:

Management MS Core

Required Management Courses

BUSN 6520 - Managing Individuals and Teams **gtPATHWAYS:**
MGMT 6320 - Organizational Development **gtPATHWAYS:**
MGMT 6360 - Designing Effective Organizations **gtPATHWAYS:**
MGMT 6380 - Managing People for Competitive Advantage **gtPATHWAYS:**

Total: 12 Hours

Management Emphasis (or elective) courses (12-18 semester hours)

A student may choose to complete the program by taking any four MGMT, INTB or ENTP elective courses.

Choose from one of the following emphasis areas:

communications management
enterprise technology management
entrepreneurship and innovation
global management
human resources management
leadership
quantitative decision methods
sports and entertainment management
strategic management
sustainability management

Communications Management

For the communications management specialization you must complete six courses from the Business School, five of which must be within the MGMT course curriculum. You are allowed no more than four communications courses (three required and one free elective).

Required Courses

COMM 5240 - Organizational Communication **gtPATHWAYS:**
COMM 5250 - Difference Matters and Organizational Communication **gtPATHWAYS:**
COMM 5405 - Technical Communication: Writing **gtPATHWAYS:**

Choose one:

MGMT 6800 - Special Topics in Management **gtPATHWAYS:**
MGMT 6803 - Visionary Leadership **gtPATHWAYS:**
MGMT 6804 - Bargaining and Negotiation **gtPATHWAYS:**

Total: 12 Hours

Approved COMM Elective Courses

Choose one:

The following is a list of communication courses that my be used to fulfill a free elective on your degree plan.
For the communications specialization you must complete six courses from the Business School, of which five must be within the MGMT course curriculum. You are allowed no more than four communications courses.

COMM 5151 - Group Communication **gtPATHWAYS:**
COMM 5222 - Professional Communication **gtPATHWAYS:**
COMM 5245 - Advanced Organizational Communication **gtPATHWAYS:**
COMM 5260 - Communication and Conflict **gtPATHWAYS:**
COMM 5262 - Mediation **gtPATHWAYS:**
COMM 5270 - Intercultural Communication **gtPATHWAYS:**
COMM 5280 - Communication and Change **gtPATHWAYS:**
COMM 5500 - Health Communication **gtPATHWAYS:**
COMM 5505 - Technical Communication: Editing **gtPATHWAYS:**
COMM 5640 - Advanced Public Relations **gtPATHWAYS:**
COMM 5760 - Computer-Mediated Communication **gtPATHWAYS:**
COMM 5830 - Visual Principles in Technical Communication **gtPATHWAYS:**

Enterprise Technology Management

Required Courses

Choose four:

ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**

ISMG 6450 - IT Project Management **gtPATHWAYS:**
ISMG 6460 - Emerging Technologies **gtPATHWAYS:**
ISMG 6420 - Global Enterprise Systems **gtPATHWAYS:**

Total: 12 Hours

Entrepreneurship and Innovation

ENTP 6000 - Fundamentals of Entrepreneurship **gtPATHWAYS:**
ENTP 6020 - The Business Plan **gtPATHWAYS:** and
6000-level ENTP courses (2) or
6000-level ENTP course (1) and 6000-level MGMT course (1) (6 semester hours)

Total: 12 Hours

Global Management

Required Courses

INTB 6000 - Introduction to International Business **gtPATHWAYS:**
INTB 6020 - Cross-Cultural Management **gtPATHWAYS:**
MGMT 6040 - Managing Global Talent **gtPATHWAYS:** or
INTB 6040 - Managing Global Talent **gtPATHWAYS:**
Any travel-study program or
6000-level INTB course (3 semester hours)

Total: 12 Hours

Leadership

Prerequisite

BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**

Required Courses

INTB 6000 - Introduction to International Business **gtPATHWAYS:** or
ENTP 6000 - Fundamentals of Entrepreneurship **gtPATHWAYS:**
MGMT 6803 - Visionary Leadership **gtPATHWAYS:**
MGMT 6804 - Bargaining and Negotiation **gtPATHWAYS:**
MGMT 6800 - Special Topics in Management **gtPATHWAYS:**

Total: 12 Hours

Management of Change

Required Courses

Choose four:

BUSN 6811 - IT and New Business Paradigms **gtPATHWAYS:**
BUSN 6830 - Business and the Natural Environment **gtPATHWAYS:**
ENTP 6820 - Business Consulting **gtPATHWAYS:**
MGMT 6020 - Leadership in Difficult Times **gtPATHWAYS:**
MGMT 6730 - Human Resources Management: Performance Management **gtPATHWAYS:**
MGMT 6803 - Visionary Leadership **gtPATHWAYS:**
MGMT 6804 - Bargaining and Negotiation **gtPATHWAYS:**
MGMT 6821 - Managing for Sustainability **gtPATHWAYS:**

Total: 12 Hours

Managing Human Resources

Prerequisites

BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
MGMT 6380 - Managing People for Competitive Advantage **gtPATHWAYS:**
HR emphasis prerequisite courses are in addition to the 30-hour MS core.

Required Courses

Choose four:

BUSN 6540 - Legal and Ethical Environment of Business **gtPATHWAYS:**
MGMT 6040 - Managing Global Talent **gtPATHWAYS:** or
INTB 6040 - Managing Global Talent **gtPATHWAYS:**
MGMT 6710 - Human Resources Management: Staffing **gtPATHWAYS:**
MGMT 6720 - Human Resources Management: Training **gtPATHWAYS:**
MGMT 6730 - Human Resources Management: Performance Management **gtPATHWAYS:**
MGMT 6740 - Human Resources Management: Compensation **gtPATHWAYS:**

Total: 12 Hours

Managing for Sustainability

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

Quantitative Decision Methods

Prerequisite

(completion of prerequisite is in addition to the 30-hour MS in management and organization)

BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**

Required Courses

Choose four:

BUSN 6630 - Management of Operations **gtPATHWAYS:**
BUSN 6820 - Project Management **gtPATHWAYS:**
or
DSCI 6820 - Project Management **gtPATHWAYS:**
BUSN 6822 - Services Operations **gtPATHWAYS:**
or
DSCI 6822 - Services Operations **gtPATHWAYS:**
BUSN 6824 - Business Forecasting **gtPATHWAYS:**
or
DSCI 6230 - Business Forecasting **gtPATHWAYS:**
BUSN 6826 - Supply Chain Management **gtPATHWAYS:**
BUSN 6828 - Business Applications of Data Mining **gtPATHWAYS:**
or
DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**
DSCI 6440 - Quality and Process Improvement **gtPATHWAYS:**

Total: 12 Hours

Note: One of two free electives must be aMGMT, ENTP or INTB course.

Sports and Entertainment Management

Required Courses

Choose four:

BUSN 6860 - Finance in the Sports Entertainment Industries **gtPATHWAYS:**

MGMT 5939 - Internship **gtPATHWAYS:**
MGMT 6830 - Sports and Entertainment Management **gtPATHWAYS:**
MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries **gtPATHWAYS:**
MKTG 6820 - Sports & Entertainment Marketing **gtPATHWAYS:**

Total: 12 Hours

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

Strategic Management

Students pursuing a dual MBA/MS in organization and management are not eligible for this emphasis.

Prerequisites

BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**

Required Courses

BUSN 6560 - Marketing Management **gtPATHWAYS:**
BUSN 6640 - Financial Management **gtPATHWAYS:**
BUSN 6710 - Strategic Management **gtPATHWAYS:**
MGMT 6803 - Visionary Leadership **gtPATHWAYS:**

Total: 12 Hours

Free Electives (6 semester hours)

Free electives can be anything in the Business School (graduate level), except BUSN prefix courses below 6800. Any 6000-level or higher ACCT, FNCE, ENTP, MKTG, MGMT, ISMG, INTB or HLTH course can count as your free elective requirement.

*For the **communications emphasis**, the student is allowed to use an approved COMM course as the free elective.

Marketing MS

Program Director: David Forlani
Telephone: 303-315-8420
E-mail: David.Forlani@ucdenver.edu

Faculty

Professors:
Lawrence Cunningham, DBA, University of Tennessee
Susan Keaveney, PhD, University of Colorado
Clifford Young, PhD, University of Utah

Assistant Professors:
David Forlani, PhD, University of Minnesota
Vick Lane, PhD, University of Washington
Madhavan Parthasarathy, PhD, University of Nebraska

Senior Instructor:
Mary Lee Stansifer, PhD, Northwestern University

Instructors:
Peter Miller, MA, Farleigh Dickenson University

The MS in Marketing degree is designed to provide the skill sets necessary for you to succeed in middle (e.g., brand manager, advertising account executive) and upper level (e.g., CMO) positions in marketing and for those who interface with an organization's markets (e.g., customer service or operations).

Your MS in Marketing degree from the University of Colorado Denver consists of 30 hours:

- 18 semester hours of marketing core courses
- 12 semester hours of graduate electives

We highly recommend that one of the electives include a marketing-related internship, especially for those making a career change or without prior experience in marketing. Further, as has been our policy, if you feel that you would benefit by substituting a one or two graduate electives for a marketing elective, the marketing program director will help to work out a plan designed to meet your specific career needs. You must complete the following 18 hours of marketing core courses and then you can choose from two paths to complete the remaining 12 hours. You can select the “build your own MS marketing degree” option or one of the eight specializations.

Graduate Core in Marketing

Required Courses

BUSN 6560 - Marketing Management **gtPATHWAYS:**
MKTG 6010 - Marketing Strategy, Evaluation and Development **gtPATHWAYS:**
MKTG 6020 - International Marketing **gtPATHWAYS:**
MKTG 6050 - Marketing Research **gtPATHWAYS:**
MKTG 6060 - Buyer Behavior **gtPATHWAYS:**
MKTG 6200 - Marketing Dashboard Metrics **gtPATHWAYS:**

Marketing Electives

Build Your Own MS Marketing Degree with 12 semester hours of MKTG electives

Choose any four MKTG electives, such as:
MKTG 5939 - Internship **gtPATHWAYS:**
MKTG 6030 - Sales and Sales Force Management **gtPATHWAYS:**
MKTG 6040 - Services Marketing **gtPATHWAYS:**
MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**
MKTG 6080 - Marketing in Emerging Markets **gtPATHWAYS:**
MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**
MKTG 6091 - Strategic Product Marketing **gtPATHWAYS:**
MKTG 6092 - Internet Marketing **gtPATHWAYS:**
MKTG 6094 - Marketing Issues in the Chinese Environment **gtPATHWAYS:**
MKTG 6120 - Non-Profit and Social Marketing **gtPATHWAYS:**
MKTG 6700 - Marketing Travel Study **gtPATHWAYS:**

Total: 30 Hours

...or complete one of the following marketing specializations (listed alphabetically).

Marketing Specializations

The specializations are areas of focus that will appeal to those who have specific interests or are looking to apply their marketing acumen in particular contexts (e.g., interface with engineering or work in a multinational or nonprofit environment). A 3-semester-hour internship can be substituted for an elective in any area of specialization with the approval of the marketing program director.

Brand Management and Marketing Communications

Are you interested in a career in advertising, promotions or public relations? How about furthering your career in marketing management? Advertising, promotion and public relations managers are creative, highly-motivated individuals who are flexible yet can meet a deadline. They need good verbal and written communication skills and the ability to work well with people. Similar talents are needed by those involved with brand management. This task is central to all marketers, especially those involved with perceptual positioning and the deliverance of positions in a target market (e.g., those working in any phase of market communication and R&D) The U.S. Bureau of Labor Statistics reports that, because of the high visibility of these positions, these managers are often prime candidates for top C-level positions. The job outlook remains promising but competition will be keen, and the best opportunities will go to those with an MS in marketing or an MS marketing /MBA dual degree. (Don't take our word for it, see http://www.bls.gov/oco/ocos020.htm).

Required:

MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

Choose three of the following courses:

MKTG 6030 - Sales and Sales Force Management **gtPATHWAYS:**
MKTG 6040 - Services Marketing **gtPATHWAYS:**
MKTG 6091 - Strategic Product Marketing **gtPATHWAYS:**
MKTG 6092 - Internet Marketing **gtPATHWAYS:**
BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**
COMM 5635 - Principles of Public Relations **gtPATHWAYS:**
COMM 5640 - Advanced Public Relations **gtPATHWAYS:**
ISMG 6240 - Website Development Practice and Technologies **gtPATHWAYS:**

Global Marketing

One of the growing themes of the 21st century economy is the growth of world trade. There is continuing demand for individuals who understand the how to conduct marketing across many different international environments as well as rapidly growing areas such as China and the emerging markets. This specialization prepares you to effectively compete and succeed in this environment.

Required (select one of the following courses):

MKTG 6080 - Marketing in Emerging Markets **gtPATHWAYS:**

OR

MKTG 6094 - Marketing Issues in the Chinese Environment **gtPATHWAYS:**

Choose three of the following courses:

ENTP 6826 - International Entrepreneurship **gtPATHWAYS:**

INTB 6020 - Cross-Cultural Management **gtPATHWAYS:**

INTB 6022 - International Business Negotiations **gtPATHWAYS:**

INTB 6080 - Global Competition **gtPATHWAYS:**

INTB 6200 - International Business Policy **gtPATHWAYS:**

MKTG 6700 - Marketing Travel Study **gtPATHWAYS:**

High-Tech/Entrepreneurial Marketing

The American economy was built on a spirit of innovation, hard work and entrepreneurship, and this is surely going to be the path that assures continued American dominance in the technology and business development fields. Most smart innovators know that, in addition to the financial and managerial aspects of a business, it is the marketing function that often makes the difference between success and failure. Whether your interest is in corporate intrapreneurship and the development of high-technology oriented innovations or individual entrepreneurship and the development of a small business with minimal funds, knowing how to create and implement appropriate marketing strategies is fundamental to achieving your goals. This specialization allows you to focus on the type of new business creation path that best suits your aspirations while greatly enhancing your endeavor's probability of success. If you aspire to be the next Bill Gates, this is a "must take" degree path for you.

Required:

MKTG 6091 - Strategic Product Marketing **gtPATHWAYS:**

ENTP 6842 - New Concept Development **gtPATHWAYS:**

Choose two of the following courses:

MKTG 6030 - Sales and Sales Force Management **gtPATHWAYS:**

MKTG 6040 - Services Marketing **gtPATHWAYS:**

MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

MKTG 6092 - Internet Marketing **gtPATHWAYS:**

COMM 5285 - Communication Processes in Technology Transfer **gtPATHWAYS:**

ENTP 6000 - Fundamentals of Entrepreneurship **gtPATHWAYS:**

ENTP 6020 - The Business Plan **gtPATHWAYS:**

ENTP 6826 - International Entrepreneurship **gtPATHWAYS:**

ENTP 6860 - Business Planning for Social Entrepreneurs **gtPATHWAYS:**

Internet Marketing

Are you interested in a degree that blends Web development and application strategies with marketing? This, then, is the specialization for you. This specialization covers all aspects of Internet marketing including the functions associated with Web sites for marketing communication and customer support, one-to-one communication to many different receiving devices, marketing via social networks, consumer behavior insights based on offline and online data combination, inventory optimization through CRM-SCM integration, and a focus on ROI and associated performance metrics. With Internet marketing poised to take off globally, especially in developing countries where consumers may not have access to the latest products in local stores, this is indeed the wave of the future.

Required:

MKTG 6040 - Services Marketing **gtPATHWAYS:**

MKTG 6092 - Internet Marketing **gtPATHWAYS:**

Choose two of the following courses:

MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**

BUSN 6828 - Business Applications of Data Mining **gtPATHWAYS:**

or

DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**

ISMG 6080 - Database Management Systems **gtPATHWAYS:**

ISMG 6240 - Website Development Practice and Technologies **gtPATHWAYS:**

ISMG 6430 - Information Systems Security and Privacy **gtPATHWAYS:**

Marketing and Business Intelligence

A great increase in ERP, CRM, HRMS and SCM applications over the last decade has created a need for specialists who can manage the many sources of information critical for business growth. Further, increased competition due to globalization has made it critical to have effective and faster decision making across all functions, especially the marketing function, where smart analysis and interpretation of enterprise data is often

paramount in the formulation of competitive marketing strategy. If you are seeking a fast-growing and fast-paced area of specialization, this may well be the degree path for you.

Required:

MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**

ISMG 6080 - Database Management Systems **gtPATHWAYS:**

Choose one of the following courses:

ISMG 6480 - Data Warehouse and Administration **gtPATHWAYS:**

BUSN 6828 - Business Applications of Data Mining **gtPATHWAYS:**

or

DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**

Marketing for Sustainability

The world has changed. More than ever, companies around the globe need to introduce smart, sustainable brands to lead the way into the future. The strong core of MS marketing courses will give you the skills to become an effective marketing manager, while the specialized set of sustainability courses will give you the knowledge to work toward a better tomorrow. The sustainability courses will focus on the triad of economic, environmental and social sustainable development.

Required:

MKTG 6040 - Services Marketing **gtPATHWAYS:**

MKTG 6120 - Non-Profit and Social Marketing **gtPATHWAYS:**

Choose two of the following courses:

BUSN 6830 - Business and the Natural Environment **gtPATHWAYS:**

BUSN 6850 - Accounting and Finance for Sustainability **gtPATHWAYS:**

ENTP 6858 - Innovation in the Social Sector **gtPATHWAYS:**

MGMT 6821 - Managing for Sustainability **gtPATHWAYS:**

MGMT 6822 - Business Ethics and Corporate Social Responsibility **gtPATHWAYS:**

Marketing in Nonprofit Organizations

Are you someone who would rather help people, communities and the environment rather than focus on turning a profit? Many of our alumni have followed career paths

with nonprofit organizations. They tell us that a strong core in marketing combined with specialized knowledge of the unique needs of not-for-profit organizations helped them to succeed.

Required:

MKTG 6040 - Services Marketing **gtPATHWAYS:**

MKTG 6120 - Non-Profit and Social Marketing **gtPATHWAYS:**

Choose two of the following courses:

BUSN 6550 - Analyzing and Interpreting Accounting Information **gtPATHWAYS:**

BUSN 6822 - Services Operations **gtPATHWAYS:**

or

DSCI 6822 - Services Operations **gtPATHWAYS:**

ENTP 6858 - Innovation in the Social Sector **gtPATHWAYS:**

ENTP 6860 - Business Planning for Social Entrepreneurs **gtPATHWAYS:**

MGMT 6822 - Business Ethics and Corporate Social Responsibility **gtPATHWAYS:**

MKTG 6030 - Sales and Sales Force Management **gtPATHWAYS:**

MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

Marketing Research

Marketing and survey researchers gather information about what people think, measure customer satisfaction and repurchase intentions, help companies decide what goods and services to offer and at what price, and detect up-and-coming trends. Marketing researchers need good quantitative skills, strong analytical skills and a good understanding of marketing and buyer behavior. Many of our alumni got their starts in marketing research positions. According to the U.S. Bureau of Labor Statistics, employment is expected to grow faster than average with the best job opportunities for those with an MS marketing degree (Don't just take our word for it; check out http://www.bls.gov/oco/ocos013.htm).

Required:

MKTG 6040 - Services Marketing **gtPATHWAYS:**

MKTG 6090 - Customer Relationship Management **gtPATHWAYS:**

Choose two of the following courses:

BUSN 6530 - Data Analysis for Managers **gtPATHWAYS:**

DSCI 6480 - Simulation Modeling **gtPATHWAYS:**

BUSN 6828 - Business Applications of Data Mining **gtPATHWAYS:**

or

DSCI 6828 - Business Applications of Data Mining **gtPATHWAYS:**

MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

Sports and Entertainment Marketing

The sports business industry is one of the largest and fastest growing in the United States. Add to that the burgeoning music, film, theater, television, cable and other entertainment industries and you've got virtually limitless choices. Every one of those industries needs good marketers. The strong core of marketing courses in the MS marketing program will give you the skills you need to hit the ground running with the specialized courses to teach you how to tailor your skills to the unique needs of the sports and entertainment industries.

Required:

MKTG 6040 - Services Marketing **gtPATHWAYS:**

MKTG 6820 - Sports & Entertainment Marketing **gtPATHWAYS:**

Choose two of the following courses:

BUSN 6860 - Finance in the Sports Entertainment Industries **gtPATHWAYS:**

MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries **gtPATHWAYS:**

MGMT 6830 - Sports and Entertainment Management **gtPATHWAYS:**

MKTG 6070 - Integrated Marketing Communications and Brand Identity **gtPATHWAYS:**

Master in Business Administration for Executives, MBA

Program Director: W. Scott Guthrie
Telephone: 303-623-1888 or 1-800-228-5778

The executive MBA program provides executive-level students with a broad, rigorous 21-month academic experience leading to the master of business administration degree. The program is designed for persons who hold managerial positions in the private and public sectors. It builds upon the knowledge and experience of these executives with a sophisticated, challenging curriculum that can be pursued simultaneously without career interruption.

The executive MBA program emphasizes strategic leadership; the organization in a complex, international environment; and the applied tools of management. Courses are taught through a variety of methods. Case studies, lectures and computer simulation are combined with research projects and other teaching methods to provide students with tools useful in their present positions and applicable to more advanced responsibilities as they progress in their management careers.

Each new session of the executive MBA program begins the last week of August. Classes meet for a full day, once a week, on alternating Fridays and Saturdays, making it possible for those who live outside the Denver area to participate.

Two courses are taken simultaneously throughout the program. The program is supplemented by an intensive orientation at the beginning and a two-day seminar at the conclusion of the first academic year. A second-year seminar is held at an international business center outside of North America.

Master of Science in Recording Arts (MSRA)

► Graduate School Rules apply to this program

Master of Science in Recording Arts (MSRA)

Program Overview

Recording Arts is a field that deals with all aspects of recorded music and sound including mixing, mastering, sequencing, calibration, reinforcement, media forensics and post-production. CAM's program refines student skills in sound recording, aesthetics, multitrack recording, digital signal processing, automated mixing, synchronization, stereo imaging and monitoring, media forensics and post-production.

In addition, the program recognizes and includes:

Study in the rapidly growing field of media forensics, which is audio and video for the legal field. The program includes study in forensic media enhancement, audio and image authentication, digital evidence handling, and expert witness testimony. See section below for MSRA emphasis in media forensics (MSRA-MF) for program information.

The need for pedagogy degrees. Pedagogy is synonymous with teaching, and this program includes a survey of available resources for audio education. The program offers an interdisciplinary approach by including physics, acoustics, engineering, music, broadcast, medicine, psychology, multimedia, theatre and film/video. The program emphasizes design and development of new methods and materials.

CU Denver's Master of Science in Recording Arts (MSRA) has the only pedagogy track in the nation, as well as the only college-level course in audio forensics. This graduate degree is designed to:

- prepare students for careers in audio application for the fields of mass communications, education, arts and the entertainment industries
- help professionals advance their careers
- help prepare the music educators of the future

Students may choose between a thesis (research) or non-thesis (portfolio) option.

Graduate courses constituting the core of the MSRA advance the artistic, pedagogical, technical and problem-solving abilities of the enrolled students. Elective courses allow each student to develop additional skills and knowledge in related areas, including film, broadcasting, education, music business and the performing arts.

CAM encourages students from allied disciplines (music, physics, engineering, etc.) to apply. Students are not required to have their bachelor's in recording arts—the student's bachelor's degree can be from any discipline. Applicants can qualify for the MSRA by having equivalent level preparation (e.g., work experience). Candidates without sufficient experience/training in recording arts may be required to take preparatory courses at the undergraduate level.

Emphasis in Media Forensics

Students can also earn a master of science in recording arts with an emphasis in media forensics. See the media forensics program page for specific requirements; they differ from the general MSRA degree.

Application Components

The following is required of all students applying to the MSRA program, with the exception of International students. International students should consult the Office of Internatinal Affairs for specific information on application and admission requirements. Contact the Office of International Affairs for specific application forms, www.internationaladmissions.ucdenver.edu.

Graduate Admissions Application—Parts I and II

Students may request an application packet by calling 303-556-2279. Please be sure to provide a mailing address.

Students are required to complete the application for graduate admissions form.

Program of study—on the application, the code for all Master of Science in Recording Arts candidates is GR-RAMS. The degree is MS.

International students must complete additional paperwork in addition to the components below. International student applications must be received six months prior to the term for which the student is applying. Contact the Office of International Affairs for specific application forms, www.internationaladmissions.ucdenver.edu.

In-State Tuition Classification Application

Students who may qualify for Colorado in-state tuition (i.e., residency) should fill out the in-state tuition form. *The Office of Admissions will make the determination of residency.* For information on residency criteria contact the Office of Admissions, 303-556-2704 or admissions@ucdenver.edu.

Entrance Examinations(s)

Official GRE scores (www.gre.com)—All applicants to the MSRA degree program must submit scores from the GRE. The “General Test” offered by Educational Testing Service will assist the department in evaluating applicants to the degree program. The test evaluates verbal, quantitative and analytical writing skills for the candidates. This examination is offered internationally by Educational Testing Service on a continuous schedule. The minimum required score for entrance in the program is the 50th percentile, although each student’s score will be evaluated as part of complete application process. This examination is not intended to exclude any applicant from the degree program, but rather to assist in academic advising.

Scores must be received by the application deadline; therefore, students should plan accordingly when scheduling their testing dates. Late GRE scores are not accepted; these applications will not be reviewed.

Test of English as a Foreign Language (TOEFL) (www.ets.org/toefl)—This examination is required for international students for whom English is not their primary language. These students are required to have a minimum TOEFL score of 500 (173 electronic).

Transcripts

The most recent *official* academic transcripts must be sent from the registrar of all previous higher education institutions. Official transcripts should be mailed to:

MSRA Graduate Admissions Committee
Campus Box 162, P.O. Box 173364
Denver, CO 80217-3364

Letters of Recommendation

Three (3) letters of recommendation are required from responsible persons who can attest to the academic and professional accomplishments of applicants. The names those who are providing letters of recommendation should be included in Part II of the application.

Letters of recommendation must be accompanied by the letter of recommendation form, available on the MSRA website.

Incomplete letters of recommendation will not be considered, and the application will not be reviewed.

Application Essay

This essay should summarize the educational and professional history of the applicant relative to a career in the audio/music industry, and should include:

complete name and contact information

educational background

career objective

anticipated dates of attendance

The essay must be typed, double-spaced and in English; the preferred length is three to five pages.

Resume

Students are required to submit a 1-2 page typed resume, including educational background, work experience and relevant skills. Students are welcome to include any published works, exhibitions, performances, awards or other relevant achievements. The resume should be chronological, beginning with educational background and progressing to employment history. Please refrain from functional resumes or those that simply summarize qualities or competencies. This professional vita complements the essay by providing a chronology of all educational and work experiences and of scholarly/creative work.

Portfolio

All applicants will submit a portfolio of recordings that represent their best accomplishments in audio production. Presentation, breadth of experience, technical and artistic quality will be evaluated.

The required submission format is Compact Disc (CD) or Digital Video Disc (DVD), with an annotated discography (index) to the portfolio material and a clear and accurate labeling of all material. Discography *must* include the applicant's function on each track (e.g. artist/performer, engineer, producer, arranger, etc.).

A DVD portfolio may be submitted if the student's primary experience is in visual media (film, TV, etc.). DVD portfolios must also contain an annotated discography.

Helpful tips for a good portfolio are available on the MSRA website. Portfolio submissions that do not follow these guidelines will not be evaluated, and the application will not be processed.

Application Fee

$50 nonrefundable for domestic (within the USA) applicants
$75 nonrefundable for international applicants

The application fee must be paid with a check, money order or by credit card. Cash will not be accepted. The fee must be paid in U.S. dollars.

Applications that do not include all of the requirements listed above or that include partial components are considered incomplete and will not be reviewed.

Required Courses

MSRA 5000 - Introduction to Graduate Studies **gtPATHWAYS:**

MSRA 5580 - Graduate Audio Seminar I **gtPATHWAYS:**

MSRA 5590 - Graduate Audio Production **gtPATHWAYS:**

MSRA 6510 - Graduate Audio Studies Pedagogy **gtPATHWAYS:**

MSRA 6950 - Thesis in Professional Audio **gtPATHWAYS:**

MSRA 6951 - Professional Audio Portfolio Thesis **gtPATHWAYS:**

Total: 18 Hours

Electives

Students may take courses not listed here upon approval of the faculty or academic advisor.

MSRA 5500 - Topics in Professional Audio **gtPATHWAYS:** (fall and spring)

MSRA 5505 - Audio Post Production I **gtPATHWAYS:** (fall and spring)

MSRA 5575 - Graduate Surround Sound **gtPATHWAYS:** (fall and spring)

Total: 16 Hours

Program Total: 34 Hours

Below is the semester-by-semester sequencing of courses and semester hours.

Fall

MSRA 5000 - Introduction to Graduate Studies **gtPATHWAYS:**

MSRA 5590 - Graduate Audio Production **gtPATHWAYS:**

Topics course (1 semester hour)
Two MSRA electives (8 semester hours)

Total: 16 Hours

Spring

MSRA 5580 - Graduate Audio Seminar I **gtPATHWAYS:**

MSRA 6510 - Graduate Audio Studies Pedagogy **gtPATHWAYS:**

MSRA elective (4 semester hours)
Topics courses (3 semester hours)

Total: 14 Hours

Summer

MSRA 6950 - Thesis in Professional Audio **gtPATHWAYS:** or

MSRA 6951 - Professional Audio Portfolio Thesis **gtPATHWAYS:**

Total: 4 Hours

The above progression is merely suggested and shows the quickest possible schedule for graduation (three semesters). Students may elect to enroll for less than the suggested semester hour total, and/or enroll in additional semesters as needed. Students can apply for graduation in any semester (fall, spring or summer) provided they have completed the required course work. All course work must be completed with a satisfactory grade of "B" (3.0) or higher. Students should not register for thesis/portfolio, unless approved by the faculty advisor.

Please refer to the Master of Science in Recording Arts Web site for additional information: http://cam.ucdenver.edu/meis/recordingarts.htm.

Mechanical Engineering MEng

► Graduate School Rules apply to this program

The master's of engineering (MEng) is an interdisciplinary degree program designed to meet the needs of those practicing engineers who wish to follow an integrated program of studies in engineering and allied subjects related to the individual student's professional work. Students can combine advanced engineering course work with graduate-level non-engineering courses such as business administration, environmental sciences, social sciences, biological sciences or public administration.

Prospective students are required to present a well-defined objective in order to be admitted to the program. In consultation with faculty advisors, an academic program is developed to meet this objective.

An advisory committee will be appointed for each student by the department. The advisory committee that guides the student is responsible for approving the individual's degree program and admission to candidacy, and approves the student's written report and the awarding of the degree.

The requirements for admission are the same as those for the MS degree awarded through the College of Engineering and Applied Science. A minimum of 30 semester hours of academic work are required for the MEng degree. At least 15 of these hours must be at the 5000 level or above in mechanical engineering. A maximum of 12 semester hours may be taken outside of engineering. In addition to course work, a written report is required in the MEng program as a final project (3 semester hours). The report may be related to the student's professional work. The report will be of the same general quality as that required for the master of science thesis and must be defended orally. It may be based on work done for credit under independent study.

Mechanical Engineering MS

► Graduate School Rules apply to this program

For the master of science (MS) degree in mechanical engineering, students may choose between two plans with each plan totaling 30 semester hours. Students following Plan I (thesis option) take 24 semester hours of formal course work plus 6 semester hours of thesis work. Students following Plan II (project option) take 27 semester hours of formal course work plus a 3 semester hour final project requiring a report. Students following Plan I or Plan II must submit a proposal to their examination committee prior to the semester in which they register for their thesis or project semester hours, and the examination committee must approve the proposal for the thesis or project.

Students in either plan may choose one of three options. In the first two options, the student may choose to specialize in either thermal science or mechanics. The third option is the general mechanical engineering option.

The **thermal science option** requires 12 semester hours of course work in analytical methods, numerical methods, fluid mechanics and thermodynamics. The student then selects 9 semester hours of course work in approved electives from a selection of thermal science electives.

The **mechanics option** requires 12 semester hours of course work in analytical methods, numerical methods, elasticity and dynamics. The student then selects 9 semester hours of course work in approved electives from a selection of mechanics electives. For students following Plan I, both the thermal science and mechanics options allow the student to pick one approved 3-semester-hour elective not necessarily in the chosen specialty. For students following Plan II, both the thermal science and mechanics options allow the student to pick two approved 3-semester hour electives not necessarily in the chosen specialty.

The **general mechanical engineering option** requires the student to take 18 semester hours of required course work in analytical methods, numerical methods, fluid mechanics, thermodynamics, elasticity and dynamics. For students following Plan I, the general mechanical engineering option allows the student to pick two approved 3-semester hour electives. For students following Plan II, the general mechanical engineering option allows the student to pick three approved 3-semester hour electives.

Media Forensics Emphasis, Recording Arts MS

► Graduate School Rules 11-12 apply to this program

Program Overview

This unique degree program prepares students from various backgrounds for work in the field of forensic audio and video analysis utilizing the state-of-the-art methods and technology necessary to fight crime in the digital age. Housed in the National Center for Media Forensics (NCMF), this program offers the **only graduate-level education specific to audio and video forensics in the country**.

Students from all disciplines (media production, electrical engineering, general forensics, etc.) are encouraged to apply, as this program enhances scientific inquiry while guiding students through a three-semester cohort curriculum. Classes feature faculty from around the country and emerging avenues of exploration and related legal topics needed in report preparation for expert witness testimony. Digital media evidence acquisition through computer forensics applications are emphasized in an environment that fosters creativity and individual skills. The capstone of this program is a research thesis of the student's choosing under the advisement of the director and associate director of the NCMF as well as an advisory board of forensic professionals from around the world. The thesis is a topic of exploration throughout the program and serves to enhance a graduate's specialty as he or she enters the work force in private forensic practice, corporate research and development, academic research and teaching, or crime labs at the local, state or federal levels.

Note: The application process, requirements and deadlines for the master of science in recording arts emphasis in media forensics will differ from those listed for the traditional MSRA program. Refer to the National Center for Media Forensics Web site for up-to-date information regarding application process, requirements and deadlines.

Curriculum

The master of science in recording arts emphasis in media forensics comprises 34 semester hours: 30 hours are required courses and 4 hours are thesis. All courses must be completed with a grade of B (2.7) or better and students must maintain at least a 3.0 cumulative GPA. Grades of C+ (2.75) or lower, or a cumulative GPA below 3.0 will result in the student's dismissal from the program. Students are admitted to the program in the fall as a cohort and must follow the curriculum in sequence. Students who do not complete the program in sequence must reapply.

Curriculum and application requirements for the MSRA-MF program are subject to change. Please refer to the National Center for Media Forensics website for up-to-date information regarding curriculum and application requirements for the emphasis in media forensics.

New Directions, Political Science MA

Director: Kathryn Cheever
Telephone: 303-556-5950
E-mail: kathryn.cheever@ucdenver.edu

An alternative track of the political science MA program (Plan II) is offered off-campus through the Center for New Directions in Politics and Public Policy at Chaparral in Douglas County and on the Fort Lewis College campus in Durango. This politics and public policy track presents courses in an intensive weekend format. The emphasis on politics and the policy-making process relates to the ability of leaders to mobilize resources and achieve constituent goals consistent with the public interest. In this context, politics entails communication, and effective politics requires communication. In short, this emphasis on political awareness seeks to help participants utilize the political process as the “art of making what appears to be impossible, possible.”

Degree Requirements

Students must complete a total of 33 graduate credit hours to complete the MA degree.

Core Courses

PSCI 5014 - Seminar: American Politics **gtPATHWAYS:**

PSCI 5085 - Comparative Public Policy **gtPATHWAYS:**

PSCI 5324 - Politics, Public Policy and Leadership **gtPATHWAYS:**

PSCI 5457 - Seminar: American Political Thought **gtPATHWAYS:**

PSCI 5468 - Research Methods in Political Science **gtPATHWAYS:**

Total: 15 Hours

Electives

In addition to the required core courses, students must take 15 credit hours of political science electives.

[*NOTE*: Previously earned graduate credit may be submitted for approval to satisfy up to nine hours of the supportive elective requirement. The elective courses offered may change from time to time based on needs, interests and other factors.]

Below are examples of electives taken by New Directions students:

PSCI 5007 - Beyond Political Correctness **gtPATHWAYS:**

PSCI 5009 - Politics of the Budgetary Process **gtPATHWAYS:**

PSCI 5024 - State Politics: Focus on Colorado **gtPATHWAYS:**

PSCI 5084 - Local Government and Administration **gtPATHWAYS:**

PSCI 5274 - Conflict Resolution and Public Consent Building **gtPATHWAYS:**

PSCI 5354 - Seminar: Environmental Politics and Policy **gtPATHWAYS:**

PSCI 5374 - Public Priorities for the 21st Century **gtPATHWAYS:**

PSCI 5414 - Organizational Change Agents **gtPATHWAYS:**

PSCI 5644 - Ethical Responsibilities of Leaders **gtPATHWAYS:**

Total: 15 Hours

Project Requirement

All students are required to complete a 3-credit master's project under the direction of a faculty advisor. Registration is done using the Special Processing form, rather than online.

PSCI 5960 - Master's Project **gtPATHWAYS:**

Total: 3 Hours

Major Total: 33 Hours

Common Course Outcomes

In addition to clearly stated subject outcomes, all courses will have a common set of outcomes related to the following areas which are considered critical in developing leadership capacities necessary to address the changing public priorities for the 21st century:

- Creativity and innovation
- Changing public priorities
- Political and social diversity
- Ethical accountability
- Deductive and inductive reasoning
- Applied use of appropriate technology
- Strategic planning and decision making
- Resolution of conflicts and public consent building
- Individual, organizational and cultural communication effectiveness

Course Format

All courses are offered in a weekend format that consists of two or three weekend sessions for a given course spread out over a two-month period. Three-weekend classes are held from 9:00 am to 4:00 pm on both Saturday and Sunday of each weekend session. Two-weekend classes meet from 5:00 until 9:00 p.m. on Friday evening and from 8:30 a.m. until 4:30 p.m. on Saturday and Sunday. In most cases, a student will complete all of the two or three weekend sessions of one course before starting the weekend sessions for the next course. There is typically a 2-3 week break between semesters.

Location

All of the courses for the Denver-based programs are currently offered at the University Center at Chaparral, 20 miles south of downtown Denver. The University Center is located next to the Chaparral High School, just north of Lincoln Avenue at Chambers Road in Douglas County (15653 Brookstone Drive).

Courses for the Durango-based program are currently offered on the campus of Fort Lewis College.

Political Science MA

► Graduate School Rules apply to this program

The political science department offers a master of arts (MA) degree in political science with an emphasis on building academic and practical skills in key areas of the discipline. Research and teaching in the department centers on the major fields of American politics, comparative politics, international relations, political theory and public policy; however, the department also offers more specialized training in human rights, legal studies, gender politics, race and ethnic politics, European studies, indigenous politics and urban politics. Students pursuing the MA have the option of completing the traditional track or an alternative track centered on the study on politics, public policy and leadership. Students completing the program have gone on to PhD programs across the country and work in a variety of areas, including; state and local elected office, government service, directors of community-based organizations and nongovernmental organizations, legislative analysts, UN affiliates, lobbyists, teachers, media analysis and political consulting.

Requirements for Admission

Students applying for admission to the MA program in political science should present at least 18 semester hours of previous academic work in political science, at least 9 hours of which should be at the upper-division or graduate level. The department may make exceptions to these requirements in unusual cases (for instance, if course work in related fields such as psychology, economics and history compensates for the deficiencies in political science). Applicants should present an undergraduate GPA of at least 3.0 to be considered; however, the department typically admits students with a GPA of 3.2 or higher. In their applications, students must submit transcripts and letters of recommendation (from academic sources) as specified by the Graduate School. In addition, applicants must submit a statement of academic objectives and an academic writing sample. Standardized test scores are not required of applicants, but will be considered if submitted.

In order to take graduate courses in political science, students must either be admitted to the MA program or secure permission as a nondegree student. Nondegree students may take up to 12 semester hours of graduate course work; however, they must first secure permission from the department graduate advisor to enroll in all graduate course work.

Degree Requirements

In addition to the requirements for admission and details of the program spelled out here, graduate students in political science must also abide by department rules and procedures specified in the Graduate Student Handbook . Failure to meet these policies may result in a student being dropped from the program.

Under the MA program in political science, two degree plans are available:

- Plan I requires the completion of nine graduate courses (27 semester hours) and a 6-credit thesis
- Plan II requires the completion of ten graduate courses (30 semester hours) and a 3-credit project.

Course work in both plans completed under the traditional track offered on the Downtown Campus must include:

P SC 5000. The State of the Discipline

Additionally, at least one graduate seminar is required in each of the following areas: American politics, comparative politics or international relations, political theory and research methods.

Students will complete between 12 and 15 elective semester hours, depending on whether they are working under Plan I or II, which may be fulfilled through graduate

course work in political science, related disciplines, independent study or internships. Ultimately, the total combination of independent study, graduate course work in related disciplines and internship cannot exceed 9 semester hours. With either plan, students are required to complete a minimum of 16 semester hours with the political science department at the University of Colorado Denver, and maintain a minimum *B* (3.0) overall GPA or better. Students who are on probation must meet regularly with the graduate advisor and must secure approval from the advisor for all course work while on probation.

Plan II is available both under the traditional MA track offered on the Denver campus, as well as through an alternative track offered off-campus through the Center for New Directions in Politics and Public Policy. For details about this off-campus track in politics and public policy, see New Directions, MA in Political Science .

Psychology MA

► Graduate School Rules apply to this program

Objectives and Requirements

The major objective of the MA program is to prepare graduates for doctoral-level study in both PhD and PsyD programs. Assessment training includes theory, diagnostic interviewing, intelligence testing and some personality testing with both children and adults. We introduce students to the theory and application of major models of psychotherapy and to psychopathology theory and research. We also emphasize the ethical principles that permeate clinical psychology and the application of these principles to problems in mental health practice, teaching and research. Finally, students become well versed in statistical methods. Students take the required courses during their first year in the program. During the second year, they choose to specialize by opting for a research-based thesis and/or an applied internship at a mental health agency. Students also demonstrate competency by defending a thesis or an internship competency project. Students can complete the program in slightly less than two years, and have up to five years to complete the program according to Graduate School Rules.

Admissions

The application deadline is February 1 for the following fall. Applicants are responsible for making sure all materials are in on time. We do not consider late applications. International students should be sure to submit all materials at least two weeks before this deadline (by January 15) so that they arrive at our department on time. Below is condensed information; see the psychology department website for complete information.

Admission Requirements:

BA or BS from an accredited college or university, with a minimum GPA of 3.5 based on all college course work. However, successful applicants over the past several years have typically held GPAs above 3.5, with an average GPA of 3.7.

Undergraduate courses in: introductory psychology, psychological statistics and abnormal psychology. Additional courses in psychology are highly desirable; our admissions committee will also look favorably upon courses in the biological and physical sciences.

Two official transcripts from each college and university attended.

Graduate Record Exam (GRE) General Test (verbal, quantitative, analytical writing) is required for all applicants. The subject test in psychology is not required, but is strongly recommended for applicants who do not hold an undergraduate degree in psychology. Successful applicants in recent years have typically had GRE verbal plus quantitative scores above 1100. Take the exam at least six weeks before the February 1 deadline so that the scores arrive on time.

Three letters of recommendation, at least two of which must be academic references, accompanied by the Request for Recommendation form.

Graduate Application Form, with answers as informative as possible.

Application fee of $50 ($75 for International Students). This fee can be paid online; however, if paying by check, please specify “PSY M.A. CLN” on the memo line in the lower left corner of your check.

Financial Information

The University of Colorado Denver administers various forms of financial aid for graduate students: fellowships, scholarships and a number of awards from outside agencies. See the Office of Financial Aid for further information. Additionally, the psychology department offers teaching assistantships each year in such courses as introductory psychology, statistics, research methods and human development. Teaching Assistantships are not guaranteed.

Contingent upon the availability of grant money, faculty may also offer part-time research assistantships to qualified students. The typical RA position involves data collection and analysis, library research, etc. Some computer and statistical skills are usually required. RA positions may arise on very short notice.

Please note: Neither teaching nor research assistantships confer in-state tuition status or include tuition waivers.

Degree Requirements

A total of 30 (for thesis students) or 33 (for internship students) semester hours are required for graduation: 24 for required courses and either six thesis hours or eight internship hours. Internship students must also register for one credit for the Internship Competency Project. Students must maintain a 3.0 grade point average.

Demonstration of competence

Upon completion of the 24 hours of course work (eight courses), students must demonstrate competence in several core areas (e.g., statistics and methods, ethics, assessment, psychotherapy, psychopathology) by completing a thesis or an internship competency project (ICP).

Internship or Thesis

Students have the option of completing a master's thesis and/or pursing an internship. The thesis involves a research project that makes a significant contribution to the field. Topics pursued by students in our master's program have included body image in eating disorders, HIV infection and childhood abuse, humor as a moderator between social conflict and psychological distress, and ethical issues regarding informed consent for psychotherapy.

Students who are particularly interested in going on to PhD programs should strongly consider the thesis option, since most PhD programs prefer individuals who have prior research experience. Applicants who are interested in the thesis option and whose research interests/experience overlap with those of a faculty member should contact that faculty member directly.

Alternatively, students may begin work on an 800-hour internship following successful completion of their courses. Students select internships (subject to program approval) based on personal interests. The greater Denver area offers a rich variety of internship possibilities, and our students have worked at a variety of agencies, including community mental health centers, inpatient and residential treatment facilities, social services, hospitals, probation and diversion programs and university counseling centers.

At minimum, students must complete either an 800-hour internship or a thesis. Students also have the option to complete both or to do a thesis and a 400-hour internship.

Public Administration MPA

Program Director: Mary Guy, PhD

Faculty

Professors:

Kathleen Beatty, PhD, Washington State University
Lloyd Burton, PhD, University of California, Berkley
Peter deLeon, PhD, Pardee RAND Graduate School
Mary Guy, PhD, University of South Carolina
Richard Stillman, PhD, Syracuse University
Paul Teske, PhD, Princeton University

Associate Professors:

Angela Gover, PhD, University of Maryland
Tanya Heikkila, PhD University of Arizona
Jody Fitzpatrick, PhD, University of Texas, Austin
Christine Martell, PhD, Indiana University
Jessica Sowa, PhD, Syracuse University
Paul Stretesky, PhD, Florida State University
Allan Wallis, PhD, City University Graduate Center
Brian Gerber, PhD, Stony Brook University

Assistant Professors:
Todd Ely, PhD, New York University
Danielle Varda, PhD, University of Colorado Denver
Chris Weible, PhD, University of California-Davis
Benoy Jacob, PhD, University of Illinois at Chicago

MPA, Western Slope Director:
Fred Rainguet, PhD, University of Colorado

Wirth Chair:
Alice Madden, JD, University of Colorado

Research Professor:
Stephen Block, PhD, University of Colorado

Associate Research Professor:
Callie Rennison, PhD, University of Houston

Clinical Professor:
Malcolm Goggin, PhD, Stanford University

Research Associate:
Robert Reichardt, PhD, Pardee RAND Graduate School
Kelly Hupfeld, JD, Northwestern University

Professors Emeritus:
John Buechner, PhD, University of Michigan
Dale Neugarten, PhD, University of Southern California

The master of public administration (MPA) is designed to provide graduate professional education for students who wish to prepare themselves for careers in public management or policy, in nonprofit organizations or in private corporations that interface with the other sectors. The program also offers to those already in public service an opportunity to pursue additional education as a means of furthering their careers.

MPA AND MCJ—General Information

Admission Requirements

A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.

Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.

Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant* professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.

A current resume highlighting professional accomplishments and community involvement.

International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

Semester	*Preferred Application Deadline*	*Final Deadline**
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: PUAD 5001 , 5003 or 5004 . They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval of an advisor**. Nondegree student application forms are available in the Office of Admissions or online.

Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the CU Denver Office of Financial Aid and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

Time Limit for Master's Degree

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

Degree Requirements

The minimum requirements for the basic MPA degree are outlined below. Occasionally, changes are made; students may graduate under the requirements that were in effect when they were admitted.

1. Graduate Course Work

All students must complete a minimum of 36 semester hours of graduate course work, with an average of B or better. No more than 6 semester hours of independent study can be applied toward the degree. Students who have not had professional work experience in the public or nonprofit sectors must complete an internship through an additional 3-semester-hour course described in No. 6 below, bringing their total semester-hour requirements to 39.

2. Complete the Following Core Courses

All MPA students (with the exception of those in the executive MPA option) must complete the following core courses or approved equivalents:

PUAD 5001 - Introduction to Public Administration and Public Service **gtPATHWAYS:**

PUAD 5002 - Organizational Management and Behavior **gtPATHWAYS:**

PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**

PUAD 5004 - Economics and Public Finance **gtPATHWAYS:**

PUAD 5005 - The Policy Process and Democracy **gtPATHWAYS:**

PUAD 5006 - Leadership and Professional Ethics **gtPATHWAYS:**

Total: 18 Hours

Students must receive a grade of *B*- or better in each core course. Students who earn a lower grade may repeat the course once to attempt to earn a *B*- or better.

3. Electives

All MPA students must complete 15 hours of electives. Courses in which a student earns a grade of less than a *C* will not be counted toward a degree.

4. Capstone Class

All MPA students, except those pursuing the thesis option, must complete the capstone course during the last semester of their degree program. All core courses must be completed before beginning the capstone.

PUAD 5361 - Capstone Seminar **gtPATHWAYS:**

5. Thesis Option

The thesis option is available in lieu of PUAD 5361 for MPA students who have an interest in pursuing a topic in-depth or who are planning to pursue a career in research or academia. Students must receive approval from their faculty advisor or the MPA director to pursue the thesis option. The thesis is a six credit course that normally spans two semesters.

6. Internships

Students who have limited experience (generally defined as less than one year of experience) in public, nonprofit or relevant private-sector service must enroll in PUAD 6910, Field Study in Public Administration. The decision to require PUAD 6910 for a particular student is made by the faculty admissions committee or the student's faculty advisor upon the student's acceptance to the MPA program. A minimum of 240 hours of supervised work and study is required to earn 3 semester hours of credit. This requirement raises the total semester hours needed to earn the MPA degree to 39.

MPA Options

Concentrations and Graduate Certificates

All SPA concentrations are a total of 15 semester hours and may either be taken as part of the MPA program or as a stand-alone graduate certificate.

A student *may* choose to select one of the concentrations described below or may complete the MPA without a specified concentration. Students completing a concentration take their electives in the area of their concentration, complete the advanced seminar project in the area of their concentration and are advised by faculty from the concentration. The concentrations and their particular required courses are:

Environmental Policy, Management and Law Concentration

Students take at least two of the three courses listed below:

PUAD 5631 - Seminar in Environmental Politics and Policy **gtPATHWAYS:**

PUAD 5632 - Seminar in Environmental Management **gtPATHWAYS:**

PUAD 5633 - Seminar in Natural Resource and Environmental Health Law **gtPATHWAYS:**

Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Local Government Concentration

Students take at least two of the three courses listed below:

PUAD 5625 - Local Government Management **gtPATHWAYS:**

PUAD 5626 - Local Government Politics and Policy **gtPATHWAYS:**

PUAD 5628 - Urban Social Problems **gtPATHWAYS:**

Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Domestic Violence Concentration

Students take four specified courses and one elective.

PUAD 5110 - Seminar in Nonprofit Management **gtPATHWAYS:**

PUAD 5910 - Women and Violence: A Sociological Perspective **gtPATHWAYS:**

PUAD 5920 - Psychology of Violence Against Women **gtPATHWAYS:**

PUAD 5930 - Battered Women and the Legal System **gtPATHWAYS:**

Elective approved by advisor (1) (3 semester hours)

Total: 15 Hours

Emergency Management and Homeland Security Concentration

Students take two required courses as well as electives approved by advisor.

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**

PUAD 5650 - Disaster and Emergency Management Policies **gtPATHWAYS:**

Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

The emergency management and homeland security concentration requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

Nonprofit Organizations Concentration

Students take two required courses as well as nonprofit electives approved by advisor.

PUAD 5110 - Seminar in Nonprofit Management **gtPATHWAYS:**

PUAD 5140 - Nonprofit Financial Management **gtPATHWAYS:**

Other nonprofit courses (9 semester hours)

Total: 15 Hours

The Accelerated Cohort

The accelerated MPA is a fast-paced, full-time option that brings academically superior students together with a dedicated research and teaching faculty in the midst of the vibrant downtown Denver environment.

The accelerated option enables students to focus their energies in a concentrated program of study and earn a nationally accredited, 36-hour MPA in 12 months. (It is preferred that applicants have some knowledge of economics, statistics and political science.)

The cost for the accelerated option is the same for both in-state and out-of- state students, providing out-of-state students with substantial savings.

The students in the cohort enjoy a unique experience as they go through all classes in the MPA together, fostering a community of scholar-practitioners.

Students are admitted to the program in cohorts of approximately 20 participants. A new cohort starts each fall. The cohort format helps to increase the opportunity to become acquainted with other graduate students and increases the opportunities for interaction between program participants and faculty.

The Executive Option

The School of Public Affairs currently offers an executive MPA option for senior level professionals in the nonprofit and public sectors. Potential students may contact the program director, Dr. Kathleen Beatty, at 303.315.2485, for more information.

Online Option

SPA provides a unique opportunity for students who live at a distance from the university to obtain a MPA degree.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others. For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom. The nonprofit organization concentration is available online, as well as a variety of other electives leading to a general MPA degree. Students in the executive option may also choose to do all SPA course work online.

Domestic Violence Cohort

The first graduate program of its kind in the nation, the University of Colorado Denver's MPA concentration in domestic violence focuses on the management and policies surrounding domestic violence, as well as grass-roots social justice work and best practices in this emerging field. Each fall, 10 to 20 students are accepted into the cohort program, allowing the participants to build a strong community of advocates and learners.

The program invites students from around the world to participate in a unique cohort program, which combines online courses with five intensive campus seminars spaced throughout the two-year program. Students may choose to take all courses in the classroom if they wish.

The cost of the domestic violence concentration courses is the same for in-state and out-of-state students. Nonresident students pursuing the MPA with a concentration in domestic violence may also qualify for reduced tuition through the Western Regional Graduate Program which covers 14 western states.

Western Slope Cohort

Public and nonprofit sector professionals living in Colorado's Western Slope have the opportunity to earn a MPA without traveling to the Front Range. SPA offers one MPA course each semester in Grand Junction at Mesa State College and supplements these offerings with online courses. Courses are designed to integrate the academic and applied experiences necessary to be an effective modern manager. The courses are offered in an intensive weekend format and emphasize the needs of small and rural communities.

Public History, MA in History

The MA program in history offers graduate-level major and minor fields in public history. Public history is a field of study that applies historical methods to the public sphere. This graduate major does not require a concentration, but students can choose to concentrate in museum studies or historic preservation. Public history majors can minor in any subspecialty the department currently offers. Students majoring in U.S., European or global history can also minor in public history.

Admission Requirements—See History MA

Degree Requirements

Required Introductory Course

HIST 6013 - Introduction to the Professional Study of History **gtPATHWAYS:**

Total: 3 Hours

Major Courses

HIST 5234 - Introduction to Public History **gtPATHWAYS:**

Concentration Requirement (optional)
Students who choose to concentrate in museum studies or historic preservation must take either

HIST 5231 - History in Museums **gtPATHWAYS:**

-OR- HIST 5232 - Historic Preservation **gtPATHWAYS:**

Research Seminar (3 hours)
Research seminars focus on students' development of an original, primary research paper.

Major Electives (9-12 hours)
Electives are made up of courses in public history, which focus on methodology and practice and thesis or project credits. These courses include:

HIST 5133 - Management of Material Culture and Museum Collections **gtPATHWAYS:**

HIST 5228 - Western Art and Architecture **gtPATHWAYS:**

HIST 5229 - Colorado Historic Places **gtPATHWAYS:**

HIST 5240 - National Parks History **gtPATHWAYS:**

HIST 5242 - Oral History **gtPATHWAYS:**

HIST 5243 - Public History Administration **gtPATHWAYS:**

HIST 5244 - Interpretation of History in Museums: Exhibits and Education **gtPATHWAYS:**

HIST 5245 - Heritage Tourism **gtPATHWAYS:**

HIST 6992 - Seminar: Colorado Studies **gtPATHWAYS:**

Additionally, special topics courses may be offered in such areas as historic reenactments, monuments and memory and recreating historic house interiors. Students who didn't take HIST 5231 or HIST 5232 as their concentration requirement may use these courses toward their elective requirements.

Total: 18 Hours

Minor Electives

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

Total: 12 Hours

Open Elective

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

Total: 3 Hours

Total: 36 Hours

INDEPENDENT STUDIES AND/OR INTERNSHIPS

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Students will not be allowed to satisfy the research seminar requirement via independent study. *Any independent study or internship at the*

6000-level needs the permission of the graduate advisor. Students interested in pursuing an independent study or internship must find a faculty member willing to oversee their work, and they should expect the workload to equal or exceed that required for other courses at the same level.

HIST 5840 - Independent Study: History **gtPATHWAYS:**

HIST 6840 - Independent Study: HIST **gtPATHWAYS:**

HIST 6939 - Internship **gtPATHWAYS:**

COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)
Students majoring in public history must complete either a thesis (6 semester hours) or a project (3 semester hours).
OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)
Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

HIST 6950 - Master's Thesis **gtPATHWAYS:**

HIST 6951 - Masters Project: Advanced History Curriculum Development **gtPATHWAYS:**

HIST 6952 - Master's Project: Public History **gtPATHWAYS:**

Thesis Requirements

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students enroll for six credit hours in HIST 6950 to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

Project Requirements

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey or similar activities. Students are required to prepare a paper describing the process and results of their project.

HIST 6952 - Master's Project: Public History **gtPATHWAYS:**

Opportunities for Teachers and Teachers-in-Training

Curriculum Projects

Licensed teachers and teachers-in-training enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the credits from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document Advanced History Curriculum Development Projects.

HIST 6951 - Masters Project: Advanced History Curriculum Development
gtPATHWAYS:

(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure.

We strongly encourage students to complete the School of Education & Human Development's teacher licensure program before enrolling in the history MA program; the history graduate program and the teacher licensure program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the teacher licensure program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the teacher licensure program and the MA in history:

HIST 5464 - Problems and Methods in Teaching History and Social Studies I
gtPATHWAYS:

-and-

HIST 5465 - Problems and Methods in Teaching History and Social Studies II
gtPATHWAYS:

Certificate in Historic Preservation

The history department also offers a certificate in historic preservation in conjunction with the College of Architecture and Planning. History students pursuing the certificate should consult the historic preservation website for this program as well as their history advisor to determine appropriate course work.

Reading and Writing Option, MA Curriculum and Instruction

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Websites: www.ucdenver.edu/education/literacy and
www.ucdenver.edu/education/englished

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (LLCRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LLCRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. This program is a credentialed program meeting the Colorado Department of Education requirements for the reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each

student’s reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed University of Colorado Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master’s degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor’s degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master’s degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)						
	ELEMENTARY (K-6)			**SECONDARY (7-12)**		
Course	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**
LCRT 5020 - Workshop in Literacy	Required		Required	Required	Required	Required

and Language Teaching						
LCRT 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LCRT 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LCRT 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LCRT 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			

LCRT 5201 - Adolescent Literature				Required	Required *(waived if taken as part of English Licensure)*	Required
LCRT 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LCRT 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LCRT 6915 - Seminar and Practicum in Literacy Professional Development	Required	Required		Required	Required	Required

Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations.

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

30 graduate semester hours in English education

6 graduate semester hours of core courses

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy Semester Hours: 3
LCRT 5201 - Adolescent Literature Semester Hours: 3
LCRT 5200 - Theory and Methods of English Education Semester Hours: 3
-OR-
LCRT 5835 - Special Topics: Literacy and Language Semester Hours: 3

LCRT 5810 - Wksp: Lang Acq & Development Semester Hours: 3
LCRT 5010 - Foundations of Language Semester Hours: 3
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3
Research and Evaluation Methodology core course (see list below).
Interdisciplinary core course (see list below).
Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 36 semester hours

Program Requirements--When Added to CU Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to CU Denver's graduate teacher education licensure program:

18 graduate semester hours

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student’s course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
-OR-
SPED 5300 - Collaborating in Schools and Communities Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3

-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3
RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America Semester Hours: 3
LCRT 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours:

3
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certficate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

School Library and Instructional Leadership MA

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/schoollibrary

Faculty

Information about SLIL faculty is available online at www.ucdenver.edu/education/schoollibrary.

Program Overview

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries. The program integrates information literacy standards through the use of collaborative planning, as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL website for more information about specific plans of study, course offerings and expectations of cohort groups.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation and fit with the program as reflected in a letter of intent. In some

cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program website for complete admission procedures and requirements.

Professional Expectations

All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass the PLACE test in school library. This is a Colorado Department of Education requirement.

An Example of Two-Year Plan for School Library Program

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program**.** Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

Typical First Year

Fall	Spring	Summer
SCHL 5530 - Foundations of School Librarianship* LCRT 5790 - Children's Literature Through the Ages***	SCHL 5020 - Collection Development	SCHL 5110 - Integrating Instructional Technology Practices in School Libraries (MA only)

		LCRT 5201 - Adolescent Literature . ***

Second Year

Fall	Spring	Summer
SCHL 5160 - Managing School Library Programs SCHL 6720 - Practitioner-Based Research in School Libraries *** SCHL 5911 - School Library Field Experience-Elementary **	SCHL 5030 - Information Literacy and Reference SCHL 5912 - School Library Field Experience-Secondary ** Elective (2 semester hours) (MA only)****	SCHL 5040 - Information Storage and Utilization SCHL 6999 - Leadership and Practice in School Libraries (MA Only)

***** SCHL 5530 Foundations in School Librarianship should be taken as the first course in your program.

** 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field experience timeframe. Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

*** LCRT 5201; LCRT 5790; and SCHL 6720 are offered on-campus in other semesters as well.

****Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

Comprehensive Examination for All SLIL Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT website. For complete details about the SLIL program and endorsement requirements, see the ILT website at www.ucdenver.edu/education/schoollibrary.

School Psychology EdS/Licensure

Program Leader: Franci Crepeau-Hobson
Office: Lawrence Street Center, 1113

Phone: 303-315-6315
Fax: 303-315-6349
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/schoolpsychology

Faculty

Information about faculty in the school psychology program is available online at www.ucdenver.edu/education.

Degree

The educational specialist degree in school psychology is a 75 graduate semester-hour program that leads to licensure in school psychology by the Colorado Department of Education, national certification in school psychology by the National Association of School Psychologists Certification Board and the educational specialist degree (EdS) in school psychology.

This NASP-approved program allows students to create individual plans for meeting program requirements on a full- or part-time basis, during summer and academic year terms and during evening and weekend hours.

The school psychology faculty have adopted a culturally responsive preventative model of school mental health services. Upon completion of the program, students will be able to:

- screen for and recognize the early warning signs of social, emotional or academic risk, distinguishing between these and the typical development of infants, children and adolescents (birth–age 21)
- communicate effectively and consult collaboratively with students, parents, school professionals and community leaders to enhance the academic and mental health skills of students
- incorporate data-based decision making through formal and informal assessment procedures and planning interventions that enhance students' cognitive, social-emotional and behavioral competencies
- plan, implement and evaluate the effectiveness of preventative and remedial therapeutic interventions that strengthen students' mental health and academic skills
- advocate for children and families through the application of legal, ethical and professional standards for practice

Bilingual School Psychologist Concentration Option

This specialization provides School Psychology students with the knowledge and skills to effectively serve English language learners in the school setting. In addition to the two required courses and practicum component, the Bilingual School Psychologist concentration consists of language proficiency assessments to ensure that school psychologists are adequately proficient in another language to provide psychoeducational services. CU Denver provides one of the few bilingual school psychology concentration areas in the country making our graduates even more desirable in their future endeavors.

Admission Requirements

Successful applicants to the school psychology (SPSY) program will have obtained a minimum 3.0 undergraduate GPA and will score at least 1000 on the verbal and quantitative sections of the Graduate Record Exam (GRE) and a minimum score of a 3.5 on the written portion of the GRE. Applicants will also submit a current resume, a personal statement that outlines their reasons for pursuing a degree in school psychology at CU Denver, and three letters of recommendations. Applicants meeting these minimum standards will be invited to a half-day group interview that includes a program orientation, and a writing assignment.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline—January 15 for fall semester. Application materials include the following:

- part I of the application for admissions
- tuition classification form
- $50 application fee (make checks payable to the University of Colorado Denver)
- letter of intent
- three letters of recommendations (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in the original, sealed envelope)
- official GRE scores sent directly to the University of Colorado Denver
- oath and consent
- fingerprint affidavit

Requirements for the Educational Specialist Degree in School Psychology and Licensure

Students will complete course work in child development, learning and cognition, academic interventions, legal and professional issues, assessment, crisis intervention, counseling and other direct, interventions and consultation. Specific course requirements include one prerequisite course, 20 graduate courses, including one elective and 15 graduate semester hours (1700 clock hours) of supervised experiences. Prerequisites include an undergraduate or graduate course in tests and measurement (i.e., RSEM 5100 or RSEM 7110).

Students will complete the following core course work:

CPCE 5010 - Counseling Theories **gtPATHWAYS:**

EPSY 5100 - Advanced Child Growth and Development **gtPATHWAYS:**

Or
EPSY 5140 - Advanced Adolescent Growth and Development **gtPATHWAYS:**

Or
EPSY 5240 - Cognition and Instruction **gtPATHWAYS:**

EPSY 6200 - Human Development Over the Life Span **gtPATHWAYS:**

RSEM 5400 - Introduction to Evaluation of Programs and Persons **gtPATHWAYS:**

RSEM 5100 - Basic Statistics **gtPATHWAYS:**

Or
RSEM 7110 - Intermediate Statistics **gtPATHWAYS:**

SPSY 5600 - Behavior Analysis and Intervention **gtPATHWAYS:**

SPSY 5900 - School-Based Multicultural Interventions **gtPATHWAYS:**

SPSY 6100 - School Psychology: Professional and Legal Foundations **gtPATHWAYS:**

SPSY 6150 - Psychoeducational Assessment I **gtPATHWAYS:**

SPSY 6160 - Psychoeducational Assessment II **gtPATHWAYS:**

SPSY 6170 - Assessment and Intervention: Birth to 3 **gtPATHWAYS:**

SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health **gtPATHWAYS:**

SPSY 6350 - School-Based Interventions: Children, Youth and Families **gtPATHWAYS:**

SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems **gtPATHWAYS:**

SPSY 6410 - Psychoeducational Assessment of Culturally and Linguistically Diverse Students **gtPATHWAYS:**

SPSY 6420 - Crisis Prevention, Planning and Intervention **gtPATHWAYS:**

SPSY 6450 - School-Based Consultation for Mental Health Professionals **gtPATHWAYS:**

SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents **gtPATHWAYS:**

SPSY 6550 - Academic Interventions in School Psychology **gtPATHWAYS:**

SPSY 6917 - Advanced Practicum in Psychological Assessment **gtPATHWAYS:**

One 3-credit hour elective course from the list below

ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives **gtPATHWAYS:**

EPSY 5180 - Psychology of Gifted, Talented and Creative Children **gtPATHWAYS:**

SPED 5300 - Collaborating in Schools and Communities **gtPATHWAYS:**

Supervised Experiences

SPSY 6911 - School Psychology Practicum **gtPATHWAYS:**

SPSY 6930 - School Psychology Internship **gtPATHWAYS:**

Total: 75 Hours

The education specialist in school psychology degree also requires satisfactory completion of two professional portfolios (pre-internship and EdS) demonstrating mastery of the program objectives and passing scores (≥ 165) on the PRAXIS specialty exam in school psychology.

Professional Expectations

All students in the SPSY program are expected to show a strong commitment to the program and to maintain a high academic, professional, ethical standards and a sensitivity to diversity. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Secondary English Education Option, MA Curriculum and Instruction

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Websites: www.ucdenver.edu/education/literacy and
www.ucdenver.edu/education/englished

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (LLCRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LLCRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. This program is a credentialed program meeting the Colorado Department of Education requirements for the reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed University of Colorado Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)

	ELEMENTARY (K-6)			SECONDARY (7-12)		
Course	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**
LCRT 5020 - Workshop in Literacy and Language Teaching	Required		Required	Required	Required	Required
LCRT 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LCRT 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LCRT 5710 - Primary Literacy:	Required	Required	Required			

Pre-3rd Grade						
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LCRT 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LCRT 5201 - Adolescent Literature				Required	Required *(waived if taken as part of English Licensure)*	Required
LCRT 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			
LCRT 6911 - Seminar and Practicum in Literacy and				Required	Required	Required

Language, 7-12+						
LCRT 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LCRT 6915 - Seminar and Practicum in Literacy Professional Development	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	

PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations.

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy Semester Hours: 3
LCRT 5201 - Adolescent Literature Semester Hours: 3
LCRT 5200 - Theory and Methods of English Education Semester Hours: 3
-OR-
LCRT 5835 - Special Topics: Literacy and Language Semester Hours: 3

LCRT 5810 - Wksp: Lang Acq & Development Semester Hours: 3
LCRT 5010 - Foundations of Language Semester Hours: 3
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3
Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).
Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 36 semester hours

Program Requirements--When Added to CU Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to CU Denver's graduate teacher education licensure program:

18 graduate semester hours

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
-OR-
SPED 5300 - Collaborating in Schools and Communities Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3
RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America Semester Hours: 3
LCRT 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certficate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

Social Science MSS

► Graduate School Rules apply to this program

Requirements for Admission

General rules for admission into the Graduate School apply to admission into the MSS program.

For admission as a regular graduate student, applicants must:

have earned a bachelor's degree

submit two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0

have appropriate undergraduate training or professional background or indicators that supply evidence of ability to pursue the MSS degree

include a writing sample

submit three letters of recommendation (at least two from academic sources)

submit a written statement specifying the goal of advanced study in the social sciences, expressed in clear, correct and effective English

standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

Provisional Admission:

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

Non-degree Students:

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program
–or–

Wish to start courses in the program prior to completing their application. Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted into the program (the 12-hour limit also includes graduate work from another university).

International Students:

International students must also meet UC Denver requirements for international admission. See the Information for International Students section of this catalog or call 303-315-2230 for further information.

Degree Requirements

The MSS is a 36-semester-hour program, of which 30 hours must meet all specifications of the Graduate School . Throughout their work toward the MSS degree, students must maintain at least a *B* (3.0) average in all courses. A grade below *B*- will not be counted toward the degree.

Students may pursue courses around any coherent theme with the approval of MSS program directors and advisors. In addition to the unlimited self-structured options, there are five tracks in place from which students can select: women's and gender studies,

international studies, social justice, society and environment and community health science.

Three Required Core Seminars

The following two courses must be taken during the first year following entrance to the program:

SSCI 5013 - Philosophical Problems in the Social Sciences and Humanities **gtPATHWAYS:**

(Offered spring only)

SSCI 5020 - Elements of Social Thought **gtPATHWAYS:**

(Offered fall only)

The third required course should be taken later in the program when students are ready to write a proposal for the thesis or project:

SSCI 5023 - Research Perspectives in Social Science **gtPATHWAYS:**

(Offered spring only)

Total: 9 Hours

Electives

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-structured portion of the program must be selected with the approval of one of the MSS program directors.

A total of two independent study courses and two 4000-level undergraduate courses taken while enrolled in the program may count toward the degree. All independent study contracts must be approved by one of the program directors. The remaining course work must be 5000/6000-level courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

Total: 21-24 Hours

Thesis or Project

In order to proceed with a thesis or project, all students must submit a proposal approved by three faculty members (and approved by one of the program directors in cases where one of the directors is not serving on the committee). Students must also

pass an oral comprehensive exam to graduate. Total hours required are: 3 hours of project and 6 hours of thesis.

SSCI 6950 - Master's Thesis **gtPATHWAYS:**

SSCI 6960 - Master's Project or Report **gtPATHWAYS:**

Total: 3-6 Hours

Degree Total: 36 Hours

Sociology MA

► Graduate School Rules apply to this program

Program Requirements

Two plans of study are available for students. Both options require a minimum of 36 hours. A thesis is required for the thesis option, and a project and internship are required for the nonthesis option. Before beginning the required course work, attendance at an orientation is required for incoming cohorts as well as the completion of mandatory diagnostic exams.

Required Courses

Core courses are required for all graduate students, regardless of plan. Students who are officially admitted to the program are required to follow a sequential plan. SOCY 5000 must be taken in the first fall semester. Students must take SOCY 5014 before taking SOCY 5015. Similarly, SOCY 5024 must be taken before SOCY 5183.

SOCY 5000 - Professional Seminar: Sociological Inquiry **gtPATHWAYS:**

SOCY 5014 - Classical Sociological Theory **gtPATHWAYS:**

SOCY 5015 - Contemporary Sociological Theory **gtPATHWAYS:**

SOCY 5024 - Seminar: Research Methods I **gtPATHWAYS:**

SOCY 5183 - Seminar: Quantitative Data Analysis **gtPATHWAYS:**

Total: 15 Hours

PLANS OF STUDY

Students must also choose **one** of the following options:

Thesis Option Requirements

Core course requirements	15 Hours
Five elective courses	15 Hours
Master's thesis	6 Hours total required

SOCY 5955 - Master's Thesis **gtPATHWAYS:**

Thesis Option Total: 36 Hours

Nonthesis Option Requirements

Core course requirements	15 Hours
Five elective courses	15 Hours
Internship	3 Hours
Master's project	3 Hours

SOCY 5964 - Master's Report **gtPATHWAYS:**

Nonthesis Option Total: 36 Hours

Elective Credit Requirements (15 semester hours for both options)

Students can take an unlimited number of sociology graduate (5000-level) seminars to fulfill their 15 elective semester hours, or a combination of the following:

Independent study: maximum 6 semester hours

Courses in other departments: maximum 6 semester hours

Internship: maximum 3 semester hours

For further information about the Department of Sociology or the MA program, visit the Sociology website.

Spanish MA

► Graduate School Rules apply to this program

The CU Denver modern languages faculty offers a Spanish master's degree program that is an alternative to the exclusively literary studies that traditionally lead to doctoral programs. By integrating language, literature and cultural studies with ancillary work in other disciplines, the degree provides a broader expertise that will lead to or enhance careers in teaching, government, social services, business and international trade. Students will tailor the program to their specific interests and needs by developing a topical focus and including courses from outside the Department of Modern Languages, through which they may develop a secondary emphasis that can be incorporated in a thesis project.

Requirements for Admission

In addition to the general admission requirements of the Graduate School, the Spanish MA program requires:

- an undergraduate GPA of at least 2.5, with a GPA of at least 3.0 in Spanish courses
- a bachelor's degree in Spanish is not required, although all candidates must demonstrate Spanish oral and written proficiency at the advanced level, as defined by the American Council on the Teaching of Foreign Languages
- two copies of all college transcripts
- three letters of recommendation
- a statement of the applicant's purpose in pursuing the degree, in Spanish; any gaps, weaknesses or special circumstances affecting an applicant's academic record should be addressed in the statement of purpose portion of the application
- a TOEFL score higher than 550 for students whose previous academic degree was completed in a non-English-speaking country

In special circumstances, the department may modify its admission standards.

Program Requirements

Candidates in Spanish must satisfy the general requirements of the Graduate School as outlined in this catalog and will be required to complete 33 hours of course work distributed with respect to one of the following two options:

Thesis option (course work + thesis):

SPAN 5000 - Introduction to Graduate Studies in Spanish **gtPATHWAYS:**

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **15 semester hours**
Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**
Elective, as approved by advisor: **3 semester hours**
Thesis preparation and writing: **6 semester hours**
SPAN 5950 - Master's Thesis **gtPATHWAYS:**

Thesis Option Total: 33 Hours

Nonthesis option (course work):

SPAN 5000 - Introduction to Graduate Studies in Spanish **gtPATHWAYS:**

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **18 semester hours**
Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**
Electives as approved by advisor (may include another course outside the Department of Modern Languages): **6 semester hours**

Nonthesis Option Total: 33 Hours

Notes:

No more than one undergraduate course (3 semester hours) may be applied toward the MA degree and then only in an ancillary field outside the Department of Modern Languages.

Students choosing the nonthesis option may elect to take three courses (9 semester hours) outside the department.

Financial Aid

The department offers a limited number of teaching assistantships for graduate students on a semester-by-semester basis. Appointment is competitive and is typically based on a student's academic credentials. Contact the department for details. For information on grants, federal work-study programs, scholarships and loans, contact the Office of Financial Aid (303-556-2886).

For further information concerning the master's degree in Spanish at CU Denver, direct inquiries to the graduate advisor.

Special Education MA

Special Education

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education

Special Education Program Overview

The special education program within the initial professional teacher education division offers a special education generalist license and a special education endorsement as well as a master of arts degree in special education. All special education program options foster the development of critical reflection, inquiry about teaching and learning, as well as the breadth and depth in content knowledge necessary to work effectively in elementary and secondary classrooms. The program faculty promote the ability of teacher candidates to meet the needs of an increasingly diverse population of K–12 learners, as well as to participate productively in and lead school renewal.

The faculty in the program in special education value collaborative relationships between general and special educators, so we offer our teacher candidates the option of pursuing a dual endorsement in both general and special education to offer our teacher candidates the option of pursuing a dual endorsement in both general and special education.

Special Education Program Distinctions

Special Education Licensing Pathways

To be a licensed as a special education generalist for grades ages 5-21, a teacher candidate must hold a bachelor’s degree from a four-year accepted institution of higher

education, have completed the plan of study from one of the program options for the preparation of special education generalist, have passed the approved elementary content and special education assessments and have demonstrated all required state and national standards.

Program options for the special education generalist include: 1) initial licensure as a special education generalist; 2) dual licensure in either elementary or secondary education and as a special education generalist; and, 3) for those who already hold a Colorado teaching license, an added endorsement, which is also fully online. There is also an option to count these courses towards a masters in special education which will require an additional 12 semester hours of course work.

The time needed to complete the various special education generalist program options varies based on the needs of teacher candidates. In addition to traditional on-campus offerings, a wide selection of courses are available in online formats. During the academic year, core special education courses are scheduled in late afternoons, evenings and on Saturdays to avoid conflict with teaching responsibilities.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Special education eeacher candidates engage in a series of four internships from the beginning of the program to the end of the program. Dual teacher candidates engage in five internships that result in a general education license at the elementary or secondary level and then complete a fifth internship and additional course work; this can be done during an additional full time semester or can be worked out flexibly as the student assumes their first teaching position to complete their special education license. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

Assessment

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based

Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in special education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

The four additional PBAs that all teacher candidates in the special education program are expected to proficiently complete include:

1. Assessment
2. Collaboration & Positive Behavior Supports
3. Literacy Instruction for Students with Identified Special Needs
4. The Individualized Education Program (I.E.P.) Process

Passing the PLACE or PRAXIS II Content examinations prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and constantly evaluated the program to meet student's needs, for the 2011-2012 term, please refer to the most current version of the Special Education Handbook for academic requirements for this program.

Requirements for Admission

The program conducts rolling admissions each semester. Summer admission deadlines are January 15 and February 15; fall admission is February 15 and March 15. Spring admission deadlines are August 15 and September 15.

Teacher Education Information Sessions

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the CU Denver website. Go to www.ucdenver.edu/education and click on "Information Session" to reserve a space.

Teacher Education Program Requirements

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. *
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. *
- Copy of passing official scores for PLACE or PRAXIS II.
- A complete application on file that can be obtained at information sessions, online or through the Student Services Center.

*This is determined through transcript evaluations at information sessions.

Urban and Regional Planning MURP

Overview of the Curriculum

The requirements for the master of urban and regional planning degree fall into three categories:

- core courses required of all students (27 semester hours)

concentration courses (15 semester hours)

planning related elective courses (9 semester hours)

Completion of at least 51 semester hours is required for graduation, less transfers and other waivers approved during the first semester of study. Students are encouraged to focus primarily on core courses during their first year of study, except Studio II, which would normally be taken in the second year. Studio II serves as a capstone experience. It is offered every semester.

Beyond the core, the graduate planning program offers three 15-semester-hour concentrations around which students normally organize course selections: economic and community development planning, land use and environmental planning and urban place making. These have been carefully constructed to cover the broad terrain of the profession. Students may also, with an advisor's approval, craft their own unique concentrations. The remaining 9 semester hours of the 51-semester-hour MURP requirement are generally used either to deepen expertise within the concentration field or to enable lateral coverage of allied or distinct fields. Those in the MURP-MPA, MURP-MBA, MURP-JD, MURP-MLA and MURP-MArch dual degree programs will find that the core of each serves as the elective base of the other, leaving few free electives. In no instances may remedial study needed to secure course or program prerequisites apply to the basic degree requirement.

The concentration is meant to insure synergy among courses elected and to lay the foundation for a satisfying and productive career and extended learning on the job. Students should bear in mind that planning is a diverse and evolving profession and that personal interests and career options often change after graduation. Moreover, the mix of courses elected normally allows some breadth in the subsequent definition of one's expertise as new graduates attempt to match their qualifications with employer requirements. Highly focused studies sometimes elevate the marketability of expertise in certain niches in the market for entry level planners, but may limit access to others. Excessive breadth may limit claims of specialized expertise; however, many positions do indeed require competent generalists.

Prerequisites

Students are expected to have achieved a basic level of computer literacy prior to enrollment, and should be familiar with PC or Apple operating systems. Acquiring some prior familiarity with digital visualization techniques is recommended for students who do not have a background in graphic communication. A higher level of proficiency is desirable for those seeking to emphasize the design elements of professional practice, most in evidence in our urban place-making concentration. Some assistance in attaining

these skills may be provided in advance of the fall semester. Applicants are annually welcomed from virtually every field of prior study.

Advanced Standing

Entering students who earned the college's bachelor of environmental design (BEnvd) degree offered on the CU Boulder campus, within five years prior to enrollment, and who have maintained a GPA of at least 3.0, will be admitted to the MURP with advanced standing. Those who graduated still earlier may receive advanced standing at the discretion of the department chair, in consultation with the program faculty.

These students can earn the MURP degree after completing a minimum of 42 semester hours, which will include the core courses (less any waived due to prior study), an approved concentration and additional electives required to meet the overall credit requirement of 42.

Students holding the college's BEnvd degree who also have completed, in this study, the undergraduate planning option with a GPA of at least 3.0 (and with a grade of at least 3.0 in ENVD 4320, Planning Studio III) will, in addition, receive a waiver with credit for URPL 6630, Planning Studio I. These students will earn the MURP degree upon completion of a minimum of 36 semester hours, including 21 semester hours of core courses and an additional 15 semester hours in an approved concentration.

Program Requirements

The master of urban and regional planning is the college's accredited degree for students intending to pursue careers in planning and in related fields across a wide spectrum of employment niches both within and outside government.

With no advanced standing, candidates for the MURP degree must complete a minimum of 51 semester hours of graduate work, including all core courses (27 semester hours), a concentration (15 semester hours minimum) and additional electives (9 semester hours).Concentrations currently include: land use and environmental planning, economic and community development planning and urban place making. Students may also devise their own individual concentrations with an advisor's approval.

Entering students who have engaged in the study or practice of planning elsewhere may petition the faculty prior or during their initial semester to determine whether any credit will be awarded or degree requirements relaxed as a result of these prior activities. A maximum of 9 semester hours of course work can be applied for advanced standing when such work was pursued at other institutions and meets prescribed level, content and quality thresholds. Graduates of the

college’s own BEnvd program are eligible for up to 15 semester hours of advanced standing.

Advising

Students should, early in their course of study, secure a program advisor. When that advisor also happens to serve as the concentration coordinator for the specific official concentration that the student wishes to pursue, then the faculty member should continue in both capacities. If the student wishes to pursue an official or self-devised concentration that is outside the program advisor's prime field of expertise, the student may either consult with the concentration coordinator while retaining the original program advisor, or switch all advising duties to the concentration coordinator. It will be important for the concentration coordinator to know of and approve course work in the context of the concentration itself. Monitoring student involvement in each concentration will also help the faculty to gauge demand, adjust offerings and facilitate activities outside the classroom such as visiting speakers and field trips, and to provide related services such as data bases, software libraries and job placement information. Maintaining an active roster of interested students will also help to sustain contacts among students and with graduates in order to build career networks and engage area professionals.

Internships

Internships are encouraged though they are generally not accepted in meeting concentration requirements. Exceptions must be approved in writing by the concentration coordinator prior to commencement of the internship. No more than three credits of internship work may be applied to the 51-semester-hour degree requirement. Any student wishing to undertake an internship must comply with the procedures established in the internship materials available in the program office.

Independent Study, Thesis and Special Topic Courses

To engage in an independent study course, the student must provide the instructor with an outline of the topic, and a time schedule for its completion. The instructor may require additional supporting materials before agreeing to work with the student. Independent study courses (URPL 6840) and thesis work (URPL 6950 and URPL 6951) may meet concentration requirements, depending on the topic, upon the program advisor's approval. Special topics courses (URPL 6686) will be acceptable in at least one of the categories in the three official concentrations. A completed thesis may substitute for Studio II. Students considering thesis work must secure a thesis advisor drawn from our regular faculty, assemble a committee, secure approval of the thesis proposal before work commences, comply with the official campus form guidelines, make a final presentation, win the approval of the committee and file a bound copy in the Auraria Library.

MURP Program Planning Form

Each student should have a copy of the Program Planning Form and use it to keep an up-to-date record of his/her program plan and progress. In addition, a copy of this form should be submitted to the program office and retained in the student's file. If you have any questions about how to use the form, contact your program advisor. No student will be certified for graduation by the department chair until a fully updated Program Planning Form is placed in the student's official file.

Core Curriculum

The core curriculum is composed of the courses listed below. Students are encouraged to focus primarily on core courses during the first year of study, except Studio II, which would normally be taken in the second year. Studio II serves as a capstone experience and is offered every semester. We aspire to offer a diversity of Studio II options befitting the three official concentrations.

URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**

URPL 5510 - Planning Methods I **gtPATHWAYS:**

URPL 5511 - Planning Methods II **gtPATHWAYS:**

URPL 5520 - Urban Spatial Analysis **gtPATHWAYS:**

URPL 5530 - Planning Law **gtPATHWAYS:**

URPL 6630 - Planning Studio I **gtPATHWAYS:**

URPL 6631 - Planning Studio II **gtPATHWAYS:**

Areas of Concentration

The concentration is meant to insure synergy among courses elected, and to lay the foundation for a satisfying and productive career and extended learning on the job. Students should bear in mind that planning is a diverse and evolving profession and that personal interests and career options often change after graduation. Moreover, the mix of courses elected normally allows some breadth in the subsequent definition of one's expertise as students attempt to match qualifications with employer requirements.

Highly focused studies will sometimes elevate marketability in certain niches for an entry level planner, but may limit access to others. Excessive breadth may limit claims of specialized expertise, however, many positions do indeed require competent generalists.

The program supports three official concentrations:

Economic and Community Development Planning

This concentration focuses on:

- The marriage of community development and urban economic development. Communities, regions and nations suffering economic insufficiency, stagnation or decline—evidenced in under or unemployment, poverty, diminished opportunity, environmental decline or fiscal decay—often seek remedies for these shortcomings through strategic economic development planning.
- In this concentration, considerable attention will be given to means for assessing economic impact and apportioning growth's gains across people, places and sectors.

Land Use and Environmental Planning

This concentration focuses on:

- Practices and innovations in land use regulation and public investment
- Analytical methods including transportation modeling, land market evaluation, environmental impact analysis and use of decision support systems
- Administration of policies and plans
- Management of collaborative processes across diverse interest groups
- Planning politics and governance

Urban Place Making

This concentration focuses on responding effectively to the following recent trends and demands on the profession:

- Stronger residential real estate markets in urban centers, especially in the Front Range communities
- Planning for mixed-use and high density neighborhoods
- Necessity for understanding of urban form and the interactions between uses, facilities and services within complex urban contexts
- Higher levels of public participation
- Wider scope of in design review and increased level of discretion that necessitates design creativity in review processes.

A set of foundation courses is identified in each concentration, plus additional supporting electives.

Course Sequence

Applicants may be admitted for both the fall and spring semesters. The schedule below posits a fall onset. If study is commenced in the spring the student may not encounter Planning Methods I until the following fall, so Planning Methods would be deferred to the third semester of study since we now encourage students to take these in the numeric sequence. Planning Issues and Processes is currently offered only in the fall and is the usual “door of entry” to the program. It is possible however that we will move to offer sections of this course during both semesters. Students may take more than 12 semester hours of study and so may progress faster than the template below would indicate. Generally taking more than 15 hours is ill-advised. Under some circumstances—and on a space-available basis—Studio I may be taken during the first semester of study. Both Studio I and II are offered every semester, and additional sections will be added as demand warrants to preserve an acceptable class size. We offer numerous courses beyond the core, and also designate additional options in other departments, elsewhere within our college and across the campus.

First Year

Fall

URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**

URPL 5510 - Planning Methods I **gtPATHWAYS:**

URPL 5530 - Planning Law **gtPATHWAYS:**

Elective course (3 semester hours)

Total: 12 Hours

Spring

URPL 5511 - Planning Methods II **gtPATHWAYS:**

URPL 5520 - Urban Spatial Analysis **gtPATHWAYS:**

URPL 6630 - Planning Studio I **gtPATHWAYS:** *

Total: 12 Hours

Second Year

Fall

Concentration Courses (9 semester hours)
Electives (6 semester hours)

Total: 12 Hours

Spring

URPL 6631 - Planning Studio II **gtPATHWAYS:** *

Concentration Courses (6 semester hours)

Total: 12 Hours

* Both studios are offered in the fall and spring semesters.

Dual Degree Options

Students may enroll in dual degree programs with public administration (MURP+MPA), law (MURP+JD) and business (MURP+MBA). In addition, dual degree options are also available combining the MURP with landscape architecture (MLA) and architecture (MArch). A new dual degree combining planning and public health (MURP+MPH) is under development combining strengths on both CU Denver and the CU Anschutz Medical Campus. The dual degree with law combines study on the Denver campus and in the CU Boulder Law School. Interested students should consult the college website for additional information regarding these options. Overall, applicants to any dual option must apply to and gain separate admission to each degree program. Once admitted the student can graduate from neither until the work is completed for both degrees. Synergies enable a significant reduction in both the time and credit required to complete these pairings than would be needed if each were separately pursued. If the student should opt to drop either member of the dual set, he/she must then fulfill the stand-alone requirements of the remaining degree.

Certificate Programs

The college offers official certificate programs in design build, geospatial information science and historic preservation. Consult our website for details on each of these. The first is more attuned to the requirements of architectural students, whereas the latter two could suffice—with the approval of the department chair—as a basis for a concentration satisfying the MURP concentration requirement. Some students may wish to augment

their 51-semester-hour MURP with additional course work in order to complete any one of these certificate programs.

Urban Design MUD

► Graduate School Rules apply to this program

Program Information: Jeremy Németh
Telephone: 303-556-3688
Email: jeremy.nemeth@ucdenver.edu

The master of urban design (MUD) is an intensive, one-year, interdisciplinary postprofessional degree program intended for talented persons already holding a professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Urban design is an integrative activity focused on creating vibrant, environmentally sustainable and socially just public places. By contextualizing architecture while providing a means of implementation for planners and landscape architects, urban design occupies a realm supportive of these fields while simultaneously generating its own responses to the most pressing urban issues. Although urban designers often intervene on the neighborhood scale, the program fosters mastery of inclusive and participatory community design processes and the attendant means for effectively implementing physical plans at the metropolitan, neighborhood, district, corridor, street and block scale.

The MUD program focuses on creating sustainable urban infrastructure and interprets the city as a set of overlaid and integrated systems. The program views urban designers playing a vital role in the production of the built environment, because of their dual responsibility to illustrate preferable design solutions and shape the regulatory patterns governing future development. The inherent interdisciplinarity of this approach brings students into frequent contact with professors, practitioners and experts in urban planning, architecture and landscape architecture, and encourages students to forge their own tailored degree by pursuing an independent study and a variety of electives in the college. Students relate their independent study projects to one of the college's fields of expertise, such as participatory design in distressed communities, postindustrial landscapes, "green streets," vernacular design or historic preservation.

Denver and the American West provide an exciting urban laboratory as we face a number of complex and difficult challenges (e.g. water scarcity, urban sprawl). Students undertake at least one studio in the Denver metropolitan region while remaining cognizant that similar systems and challenges exist in a variety of domestic and international contexts. As a capstone project during their final term, students enroll in an international studio course, preparing for this studio by taking a mandatory seminar in global design history and practice.

The MUD program is informed by innovations in practice. Tested techniques and methods are brought into classroom and studio settings to be evaluated, refined and disseminated in ways that prepare graduates for highly innovative work as critical, reflective urban designers employed in both the public and private sectors. In addition, each spring semester brings a visiting urban design fellow to the college. This practitioner-in-residence is selected from a highly competitive pool of designers from around the world. The selected practitioner teaches an advanced urban design studio and supervises independent study projects.

Prerequisites

Students are required to hold a first professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Admissions

The master of urban design admissions committee accepts applications for fall semester entry. Right now, the program does not allow entry to the program in any spring semester. The general requirements the admissions committee considers are:

- Evidence of a professional degree (BArch, BLA, MArch, MLA, MURP/MUP) or equivalent
- At least a 3.0 undergraduate or graduate cumulative GPA
- A portfolio (8.5 × 11-inch bound document) that includes:
    - Your statement of purpose (which should include your educational and professional goals and objectives)
    - Résumé (which describes your educational and professional background)
    - Examples of student or professional projects
    - A list of courses that you have taken that relate to design and planning
    - A writing sample from previous professional or academic work
- Graduate Record Exam (GRE) scores are encouraged

Program Requirements

The requirements for the postprofessional master of urban design (MUD) degree depend on your current standing and educational background. The basic study plan is a 36-semester-hour plan that includes two elective courses. Students obtaining a first

professional degree in University of Colorado Denver College of Architecture and Planning may receive up to 12 semester hours of advanced standing.

Core Courses

The basic study plan is 36 semester hours including these core courses, plus two elective courses.

URBN 6610 - Infrastructure Studio **gtPATHWAYS:**

URBN 6611 - Regulatory Studio **gtPATHWAYS:**

URBN 6612 - Urban Synthesis Studio **gtPATHWAYS:**

URBN 6640 - History of the City **gtPATHWAYS:**

URBN 6641 - Design Process/Practice **gtPATHWAYS:**

URBN 6642 - Design Policy/Regulation **gtPATHWAYS:**

URBN 6840 - Independent Study: URBN **gtPATHWAYS:**

or

URBN 6930 - Urban Design Internship **gtPATHWAYS:**

Total: 30 hours

Course Sequence

Fall

URBN 6610 - Infrastructure Studio **gtPATHWAYS:**

URBN 6640 - History of the City **gtPATHWAYS:**

URBN 6641 - Design Process/Practice **gtPATHWAYS:**

Elective Course

Spring

URBN 6611 - Regulatory Studio **gtPATHWAYS:**

URBN 6642 - Design Policy/Regulation **gtPATHWAYS:**

Then choose two of the following courses:

URBN 6840 - Independent Study: URBN **gtPATHWAYS:**

or
URBN 6930 - Urban Design Internship **gtPATHWAYS:**

or
URBN 6644. Sustainable Urban Design (pending course approval)
or
Elective Course

Summer

URBN 6612 - Urban Synthesis Studio **gtPATHWAYS:**

Dual Degree Programs

Business Administration/Business MBA/MS

The Business School also offers MBA/MS dual degree programs for each function of business. The program consists of a minimum of 66 semester hours of graduate work and leads to both an MBA degree and an MS degree, which must be completed within seven years and one semester. See MS program pages for a list of functional areas. Contact a graduate academic advisor for details, 303.315.8200.

Business Administration/Global Management MBA/MGM

This unique combined degree is offered in cooperation with the Thunderbird School of Global Management located in Glendale, Arizona, a suburb of Phoenix. Thunderbird has established eight dual programs with universities in the United States. The student applies independently to both schools and, if admitted, earns the MBA from CU Denver and a Master of Global Management degree from Thunderbird. The student begins the program at CU Denver and, after completing 36 semester hours (12 courses) required for the MBA, transfers to the Thunderbird campus and takes a minimum of 30 semester hours (10 courses) for the MGM. When all dual degree requirements are finished, the student is awarded a diploma from each school. For more information about admission to the MBA on the Denver campus, refer to the appropriate section of this chapter. For specifics about the dual MGM application process, call Felicia Welch, the associate director of academic and international services at Thunderbird, 1-800-848-9084.

Business Administration/Medicine MBA/MD

The MBA/MD is for medical students at the University of Colorado School of Medicine who wish to pursue a career in administrative medicine or who seek additional training in administration or business. The program is designed to be completed in five years, at which time both the MD and MBA degrees would be awarded. Candidates for the MBA/MD complete 36 semester hours of course work in the business school and all requirements for the MD.

Business Administration/Urban and Regional Planning MBA/MURP

This dual degree enables students to obtain both the Master of Urban and Regional Planning offered by the College of Architecture and Planning and the Master of Business Administration offered by the Business School upon completion of 78 semester hours. The dual degree program is composed of the core curricula in each program plus a set of electives jointly approved by the student's advisors.

Business/Business MS/MS

Students may concurrently pursue dual MS degrees in any two fields of business. The program consists of a minimum of 51 semester hours of core course work, which must be completed within a period of seven years and one semester. In addition, candidates for the dual degree must satisfy all common body of knowledge (CBK) and background requirements prescribed for each degree. Waivers may be approved for some of the CBK or background upon transcript evidence of equivalent undergraduate or graduate course work. For more information contact a graduate academic advisor, 303-315-8200.

Chemistry BS/MS

While students are completing a BS degree in chemistry, they may also complete some of the requirements for an MS degree in chemistry under the following guidelines:

- The student must apply and be accepted for participation in the BS/MS program prior to completion of the BS degree and be advised by both the undergraduate and graduate advisors.

Up to 9 semester hours of graduate-level course work may be taken as an undergraduate and applied toward the MS degree. This course work may not be applied toward the BS degree or ACS certification requirements for the BS degree.

Up to 3 semester hours of independent study (research) may be applied toward the graduate degree if that research is expanded and continued for a portion of the master's thesis research. This requires approval of the student's graduate research advisor in chemistry, the chemistry graduate program director and the CLAS associate dean for graduate studies.

The chemistry department will waive the requirement for qualifying examinations in each area of chemistry for which the student has completed the undergraduate sequence of courses and laboratories at the Downtown Campus with grades of *B* or better for each course.

The student must apply for and be admitted to the graduate program in chemistry beginning the semester immediately following completion of the BS degree in chemistry at the Downtown Campus.

This program allows undergraduate students who have begun their research as undergraduates to complete up to 12 semester hours (with approval of the graduate dean) toward the 30 semester hours required for a Plan I MS degree in chemistry while they are still completing their BS degree. This makes it possible for students to complete an MS degree in chemistry in only one year beyond the BS degree in chemistry. Students entering the program through the BS/MS program option must fulfill all of the requirements of the Plan I or Plan II graduate programs.

Criminal Justice BA/MCJ

The dual BA/MCJ program is designed to allow students to work concurrently toward the BA in criminal justice and the master in criminal justice (MCJ). Graduate credit hours earned while enrolled in the BA/MCJ program can be counted toward both the bachelor of arts and master of criminal justice. This program offers high-achieving students the opportunity to complete their undergraduate and graduate degrees in criminal justice in five years.

Admissions Requirements and Process

Interested students should contact their BA academic advisor as early as possible to ensure proper planning for the five year degree.

Eligibility Requirements

Both current UC Denver students and new transfer students are eligible to apply after meeting the following:

- Currently enrolled in the School of Public Affairs as a criminal justice major
- Completed the University of Colorado Denver's core curriculum
- Completed 60 semester credit hours
- Completed the following 12 semester credit hours in criminal justice: CRJU 1001 Introduction to Criminal Justice, CRJU 2041 Crime Theory and Causes, CRJU 3100 Criminal Justice Research Methods, and CRJU 3150 Statistics for Criminal Justice (transfer criminal justice courses must have been approved and accepted toward the major).
- Minimum 3.0 cumulative GPA
- Minimum 3.5 cumulative GPA in criminal justice courses
- Completed or Scheduled official GRE or LSAT exam

Application Process

Students can apply for the joint program anytime from their second year forward, but students will most likely apply during the second semester of their junior year. We require students submit all application materials by Oct. 15 for admission to the spring semester and by March 15 for admission to the fall semester for full consideration. The following steps should help in the application process:

- Plan ahead when scheduling courses through the junior year. All four of the required criminal justice courses and all of the student's core education requirements must be completed by the end of the student's junior year.
- At the beginning of the semester in which the student is applying to the program, the student should approach a criminal justice faculty member about writing a letter of recommendation. The student should also begin working on a personal statement of purpose. The following guidelines should help with writing the statement.
    - Length 1 to 2 pages
    - The statement should describe:
        - Applicant's reasons for undertaking graduate study in criminal justice
        - Applicant's future career plans

Planned area of concentration within criminal justice

By Oct 15 of the fall semester or March 15 of the spring semester the student must submit the following items to the undergraduate coordinator:

Personal statement of purpose

One letter of recommendation from a faculty member

School of Public Affairs' BA/MCJ application form

Official GRE or LSAT scores

Admission Criteria

Admission to the BA/MCJ program is competitive. Applicants will be evaluated on the following:

Grade point average (overall and in criminal justice course work)

Grade trend (improving, consistent, or declining)

Total number of credit hours completed

Likelihood of success and persistence based from the Statement of Intent and Reference Letter

Official GRE or LSAT scores

Students who are not admitted to the BA/MCJ program are eligible to reapply after completing an additional 12 semester credit hours. *Students can apply and be considered for admission to the dual BACJ/MCJ program a maximum of two times.*

BA/MCJ Program Matriculation

Students must successfully complete (*B*, or better) a minimum of 6 semester credit hours of graduate criminal justice course work each academic year following admission to the BA/MCJ program. A maximum of 15 graduate semester credits can be completed as a BA/MCJ student, for dual credit.

Students must maintain a minimum 3.0 cumulative grade point average for all course work and a 3.0 grade point average for courses in criminal justice.

The School of Public Affairs reserves the right to rescind a BA/MCJ student's admittance to the dual program *if at any point the students' grade point average falls below the requirements lists above.*

Tuition and Fees

Students will be assessed tuition and fees at the undergraduate rate until the bachelor of arts in criminal justice degree is conferred.

Students will assess tuition and fees at the graduate level upon formal acceptance to the master of criminal justice program.

Program Requirements

General BA/MCJ Degree Program Requirements

- 144 total semester credit hours passed
- 34-36 semester credit hours in the general education core curriculum
- 46-48 semester credit hours in general electives
- 21 semester hours of undergraduate criminal justice course work
- 18 upper-level (3000 or higher) semester credit hours in criminal justice
- 45 total semester hours of upper-division course work (3000 and above)
- Minimum 3.0 CU cumulative grade point average in undergraduate criminal justice courses
- Full acceptance to the Graduate School and the master in criminal justice program
- Minimum 36 semester hours of graduate-level course work (5000 and above)
- Minimum of 30 hours of resident credit; 21 out of the last 30 hours in resident course work
- Minimum of a B (3.0) in each required core MCJ course
- Minimum of 3.0 CU cumulative grade point average in all graduate level courses
- Successful completion of master of criminal justice capstone/advanced seminar or thesis
- Fulfillment of all college and major requirements

Degree Confirmation

Students are eligible to receive the BA in criminal justice degree once they have successfully completed 120 semester hours and all CU Denver undergraduate degree requirements. The MCJ will be conferred once the student has completed all requirements of the master of criminal justice degree.

Economics/Finance MA/MS Dual Degree

► Graduate School Rules apply to this program

Admissions Advisor: Brian Duncan (brian.duncan@ucdenver.edu)
Schedule Advisor: Dan Rees (daniel.rees@ucdenver.edu)

For students interested in combining the quantitative skills of an economics degree with the specific applications of a business degree, we offer an MA economics/MS finance dual degree. This 42-semester-hour program is offered jointly with the Business School. It is a "dual" degree, meaning that students who complete the program earn two master's degrees: MA in economics and MS in finance. Students must be admitted separately to both the MA program in economics and MS program in finance; they may apply to both programs at the same time or apply to the economics program first, and then to the finance program at the end of their first semester, or vice versa. Both programs must be completed in the same semester to take advantage of the dual degree program. Further information about this program can be obtained from either the Department of Economics or the Business School. Click here for admissions information for economics.

The dual degree program is intended to create highly-skilled research professionals with considerable econometric skill as well as familiarity with their chosen financial institutions. Given the similarity in course work within the two programs, there can be considerable time savings for the student. Essentially, the program allows students to complete the two programs that separately would require 60 hours of course work with 42 hours of combined course work.

Degree Requirements

Core Courses

ECON 5073 - Microeconomic Theory **gtPATHWAYS:**

ECON 5083 - Macroeconomic Theory **gtPATHWAYS:**

ECON 5803 - Mathematical Economics **gtPATHWAYS:**

ECON 5813 - Econometrics I **gtPATHWAYS:**

ECON 5823 - Econometrics II **gtPATHWAYS:**

ECON 6073 - Research Seminar **gtPATHWAYS:**

BUSN 6640 - Financial Management **gtPATHWAYS:**

FNCE 6300 - Macroeconomics and Financial Markets **gtPATHWAYS:**

FNCE 6330 - Investment Management Analysis **gtPATHWAYS:**

Total: 27 Hours

Electives

Four 6000-level finance elective courses: **12 semester hours**

One 5000-level or above economics elective course: **3 semester hours**

Total: 15 Hours

Dual Degree Total: 42 Hours

Economics/Public Administration MA/MPA Dual Degree

► Graduate School Rules apply to this program

Admissions Advisor: Brian Duncan (brian.duncan@ucdenver.edu)
Schedule Advisor: Dan Rees (daniel.rees@ucdenver.edu)

The fields of public administration and economics are inextricably linked. Economists provide much of the theory and analytic foundation that administrators use to evaluate and implement policy. Given that the capital of the state of Colorado is in Denver, there is great need for administrators that fully understand methods of program evaluation and have the theoretical background needed to forecast how individuals and institutions will respond to new proposals. Similarly, good theory and practice must take into account how the proposals will be implemented and results interpreted. Both administrators and economists need to be engaged in constructive dialogue for either to be fully effective.

Students interested in completing the dual degree in economics and public administration *must apply separately* to each program, meet the admission requirements

of each program, and *be accepted by* each program. If one program accepts a student for the dual degree but the other program does not, then the student may not graduate under the dual degree program. It is possible for students currently admitted to one program to learn about the dual degree and choose to apply after admission to either economics or the School of Public Affairs (SPA). Both degrees must be completed in the same semester to take advantage of the dual degree program.

Admission Requirements

Deadlines for Application:	**Fall**	**June 1**
	Spring	**December 1**

Applicants must:

- Meet all general requirements of the Graduate School (including a 2.50 undergraduate grade-point average).
- Submit three letters of recommendation (at least two of your letters of recommendation should come from individuals who are familiar with your scholarly record)
- Submit two copies of official transcripts from all colleges attended
- Have completed 15 credit hours of undergraduate economics (including intermediate microeconomic theory and intermediate macroeconomic theory)
- Have completed courses in calculus and statistics
- All applicants, international and domestic, must submit GRE scores regardless of prior degrees, course work, or work experience. **The institution code for CU Denver is 4875**. Most students admitted to the MA program score 690 or above on the quantitative section of the GRE, but there is not a minimum GRE cutoff score.
- International students must submit TOEFL scores. The required minimum score is 197 (computer-based TOEFL), 71 (IBT-based TOEFL), 525 (paper-based TOEFL), or 6.0 (IELTS). **The institution code for CU Denver is 4875**.

The Department of Economics accepts late applications after these official deadlines. However, there is no guarantee that a late application will be processed in time for the start of the semester. Students are encouraged to apply well before the application deadline.

International students who apply after the June 1 or November 1 deadline may not have time to obtain a student visa. Being admitted to the MA program in economics does not guarantee that a student will receive a student visa in time for the start of the semester. International students who are admitted to the MA program, but fail to obtain a visa in time, may defer admission for up to one year. All questions about student visas should be directed to the Office of International Education.

Course Requirements

The requirements for the dual degree in economics and public administration include completing 21 credit hours in ECON and 27 credit hours in public administration course work (48 total credit hours).

Core Courses

ECON 5073 - Microeconomic Theory **gtPATHWAYS:**

ECON 5083 - Macroeconomic Theory **gtPATHWAYS:**

ECON 5803 - Mathematical Economics **gtPATHWAYS:**

ECON 5813 - Econometrics I **gtPATHWAYS:**

ECON 5823 - Econometrics II **gtPATHWAYS:**

PUAD 5001 - Introduction to Public Administration and Public Service **gtPATHWAYS:**

PUAD 5002 - Organizational Management and Behavior **gtPATHWAYS:**

PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**

-OR- PUAD 5004 - Economics and Public Finance **gtPATHWAYS:**

PUAD 5005 - The Policy Process and Democracy **gtPATHWAYS:**

PUAD 5006 - Leadership and Professional Ethics **gtPATHWAYS:**

ECON 6073 - Research Seminar **gtPATHWAYS:**

-OR- PUAD 5361 - Capstone Seminar **gtPATHWAYS:**

Core Total: 33 Hours

Electives

If the student takes ECON 6073, then 3 hours of elective credits must come from economics and 12 hours from public administration.

If the student takes PUAD 5361, then 6 hours of elective credits must come from economics and 9 hours from public administration.

All elective courses must be at the 5000 level and above.

Electives Total: 15 Hours

Dual Degree Total: 48 Hours

Finance/Economics MS/MA

Students may concurrently pursue an MA in Economics offered by the College of Liberal Arts and Sciences and the MS in Finance offered by the Business School. Students must complete 27 semester hours of a combination core, 15 semester hours of combination electives and 3 semester hours of a 5000- or 6000-level economics elective. Students apply to each program seperately and admission into one of the programs does not guarantee admissions into the second program.

Public Administration MPA/JD

The School of Public Affairs and the University of Colorado at Boulder School of Law jointly sponsor a dual degree program leading to the simultaneous granting of the master of public administration (MPA) and juris doctor (JD) degrees. The program may be of particular interest to students who wish to practice law within the public sector, obtain a senior administrative post, represent public-sector clients, represent private-sector clients in transactions with government agencies and institutions and/or develop scholarly expertise in the relationship between law and public administration.

Interested persons must separately apply to and be admitted by both SPA and the School of Law. Upon admission, students may begin full-time study at either SPA or the School of Law; however, law study must be initiated no later than the beginning of the second year of enrollment in the program, and the first year of law study must be taken in its entirety and exclusive of nonlaw course work.

Through the choice of electives, students may develop a limited substantive specialization within the study of law and public administration. The dual degree program is structured to allow for 12 semester hours from the law school to be accepted as electives in the 36-semester-hour MPA program, and 12 semester hours from SPA to be accepted into the law school's 89-semester-hour JD program. Students are thus simultaneously awarded both degrees with a cumulative total of 101 semester hours; the

program therefore allows students to complete all dual degree requirements in approximately four years of full-time study. Students without prior public-sector work experience will be required to complete an internship in an appropriate governmental institution or closely related nonprofit organization.

Public Administration/Economics MPA/MA

The fields of public administration and economics are inextricably linked. Economists provide much of the theory and analytic foundation that administrators use to evaluate and implement policy. Given that the capitol of Colorado is in Denver, there is great need for administrators that fully understand methods of program evaluation and have the theoretical background needed to forecast how individuals and institutions will respond to new proposals. Similarly, good theory and practice must take into account how the proposals will be implemented and results interpreted. Both administrators and economists need to be engaged in constructive dialogue for either to be fully effective.

Therefore the Department of Economics of the College of Liberal Arts and Sciences and the School of Public Affairs jointly sponsor a dual degree program. This program enables students to simultaneously earn an MA degree in economics with a master of public administration (MPA).

The dual degree program provides students to opportunity to take the core of both programs and choose electives that suit their career and personal goals best. Electives in one program are allowed to count as an elective in the other. The net result is that while both degrees separately require 66 hours, the dual degree program provides a more comprehensive and effective education in 48 hours or 73 percent of the dual degree total.

Degree Requirements

Admission into both programs

Students must apply separately to each program, meet the admission requirements of each program and be accepted by each program. If one program accepts a student for the dual degree but the other program does not, then the student will not be accepted for the dual degree. It is possible for students currently admitted to one program to learn about the dual degree and choose to apply after admission to either economics or SPA.

Other policies

Minimum Grade for Graduation

Students must maintain a GPA of 3.0 or higher across all courses that are applied to the dual degree. Students who fail to maintain a GPA of 3.00 will be placed on probation for a semester, after which they may be dropped from the dual degree program if the GPA is not increased to 3.0 or above. Additionally, any core course in which a student receives a final grade lower than B- cannot be counted toward the total credits required for the dual degree; in such a case, the student must retake the course.

Capstone Advising

All students are required to complete a capstone paper and obtain the signatures of three graduate faculty. Every dual degree student, regardless of the capstone course they choose (ECON 6073 or PUAD 5361) must select a committee composed of faculty from both programs.

Course Credit Transfers from Other Universities

No more than 6 hours may be transferred, and both SPA and economics program directors must approve any transfers.

Sample Plan of Study for the MPA/MA Economics

Total: 48 semester hours with 21 in economics and 27 in public administration

Core

(33 semester hours)

A grade of B- or better is required in all core courses, with a B average overall. No public administration course may be taken a third time.

ECON 5073 - Microeconomic Theory **gtPATHWAYS:**

ECON 5083 - Macroeconomic Theory **gtPATHWAYS:**

ECON 5803 - Mathematical Economics **gtPATHWAYS:**

ECON 5813 - Econometrics I **gtPATHWAYS:**

ECON 5823 - Econometrics II **gtPATHWAYS:**

PUAD 5001 - Introduction to Public Administration and Public Service **gtPATHWAYS:**

PUAD 5002 - Organizational Management and Behavior **gtPATHWAYS:**

PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**

or

PUAD 5004 - Economics and Public Finance **gtPATHWAYS:**

PUAD 5005 - The Policy Process and Democracy **gtPATHWAYS:**

PUAD 5006 - Leadership and Professional Ethics **gtPATHWAYS:**

ECON 6073 - Research Seminar **gtPATHWAYS:**

or

PUAD 5361 - Capstone Seminar **gtPATHWAYS:**

To be completed after all other core courses or with instructor and advisor consent.

Electives

(15 semester hours)

If the student takes PUAD 5361, then they are required to take 6 semester hours of economics electives and 9 semester hours of electives from SPA labeled 5000 or above.

If the student takes ECON 6073, then they are required to take 3 semester hours of economics electives and 12 semester hours of electives from SPA labeled 5000 or above.

Public Administration/Urban and Regional Planning MPA/MURP

Background and Purpose

Public administration and urban and regional planning have many aspects in common. To provide students with an excellent education through understanding of both professions, the School of Public Affairs and the College of Architecture and Planning have developed a dual degree program. Students can obtain both master of public administration (MPA) and master of urban and regional planning (MURP) degrees with a minimum of 63 semester hours, as compared to a total of 87 semester hours to complete both degrees independently.

To be eligible for the dual MPA/MURP degree program, students must be admitted to each of the two schools under their respective admission procedures and standards and indicate an intention to pursue the dual degree. Students will take all the core courses and the advanced seminar in public policy and management required for an MPA, plus the core and concentration requirements necessary for the MURP.

Students in each school must apply to the other school before completing 18 hours in their respective programs. Upon admission to both schools, students will be assigned an advisor in each school to work out a specific degree plan.

Core and Elective Requirements

Core Courses (42 semester hours)

MURP

URPL 5501 - Planning Issues and Processes **gtPATHWAYS:**

URPL 5511 - Planning Methods II **gtPATHWAYS:**

URPL 5520 - Urban Spatial Analysis **gtPATHWAYS:**

URPL 5530 - Planning Law **gtPATHWAYS:**

URPL 6630 - Planning Studio I **gtPATHWAYS:**

URPL 6631 - Planning Studio II **gtPATHWAYS:**

Total: 18 Hours

MPA

PUAD 5001 - Introduction to Public Administration and Public Service **gtPATHWAYS:**

PUAD 5002 - Organizational Management and Behavior **gtPATHWAYS:**

PUAD 5004 - Economics and Public Finance **gtPATHWAYS:**

PUAD 5005 - The Policy Process and Democracy **gtPATHWAYS:**

PUAD 5006 - Leadership and Professional Ethics **gtPATHWAYS:**

Total: 15 Hours

Take one of two

PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**

URPL 5510 - Planning Methods I **gtPATHWAYS:**

Total: 3 Hours

Additional Course Work (21 semester hours)

MURP

12 hours if URPL 5510 elected, or 15 hours if PUAD 5003 elected. Courses are to be selected with MURP advisor's approval.

URPL 5510 - Planning Methods I **gtPATHWAYS:**

PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**

Total: 12-15 Hours

MPA

6 hours if PUAD 5003 elected, or 9 hours if URPL 5510 elected.

PUAD 5003 - Research and Analytic Methods **gtPATHWAYS:**

URPL 5510 - Planning Methods I **gtPATHWAYS:**

Total: 6-9 Hours

Practicum

PUAD 5361 - Capstone Seminar **gtPATHWAYS:** (3 hours required)

Total: 3 Hours (required)

Electives

Take one of the following or another option with MPA advisor's approval (3 hours):

PUAD 5250 - Intergovernmental Management **gtPATHWAYS:**

PUAD 5410 - Administrative Law **gtPATHWAYS:**

PUAD 5440 - Negotiation and Conflict Resolution **gtPATHWAYS:**

PUAD 5502 - Public Financial Management and Policy **gtPATHWAYS:**

PUAD 5503 - Governmental Budgeting **gtPATHWAYS:**

PUAD 5540 - Organization Development **gtPATHWAYS:**

PUAD 5625 - Local Government Management **gtPATHWAYS:**

PUAD 5626 - Local Government Politics and Policy **gtPATHWAYS:**

PUAD 5631 - Seminar in Environmental Politics and Policy **gtPATHWAYS:**

PUAD 5632 - Seminar in Environmental Management **gtPATHWAYS:**

Total: 3 Hours

Public Affairs BA/MPA

The College of Liberal Arts and Sciences and the School of Public Affairs, offer students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. The five year BA/MPA program decreases the time and number of semester hours required to earn both degrees by allowing students to count graduate level courses in the School of Public Affairs toward the bachelor's degree requirements. The program is designed to give students an opportunity to prepare for professional positions and advancement with federal, state or local governments, nonprofits or private sector firms concerned or involved with public affairs.

Admissions Requirements and Recommendations

Interested students should contact their CLAS advisor as early as possible to ensure proper planning for the five year degree.

Interested students should contact the MPA Director as early as possible for advising (Dr. Mary Guy, 303-315-2007 or mary.guy@ucdenver.edu).

Students may apply to the program during the semester in which they will successfully complete 90 semster hours.

To apply, students must have a 3.5 or higher GPA in CLAS.

Students who wish to apply should have most of their general education and major requirements completed by the time they have earned 90 semester hours.

Students must complete all the required application materials for the School of Public Affairs:

The CU Denver graduate application, parts 1 and 2

A declaration of program form

A resume highlighting work and volunteer experience, extra-curricular activities and any special skills, achievements and awards

Scores from the GRE, GMAT or LSAT (GRE preferred)

Program Requirements

Students must fulfill all the requirements for graduation for CLAS:

Total of 120 hours (includes hours in public affairs)

30 hours in the core curriculum

30-48 hours to satisfy major requirements

Writing proficiency (1 – 7 hours)

Mathematics proficiency (0 – 3 hours)

Level III foreign language (0 – 13 hours)

It is highly recommended that students complete a course in American government, statistics and economics before applying to the MPA program

Students must maintain a 3.5 GPA in CLAS course work.

Students may complete a maximum of 18 semester hours of SPA course work while classified as an undergraduate student.

Students must fulfill all the requirements for graduation from SPA:

Total of 36–39 semester hours in public affairs

Six core courses (PUAD 5001 – PUAD 5006)

Five elective courses at the graduate level (5000 and 6000 level courses)

Nine of the 15 elective semester hours must be PUAD courses

An internship (3 hours) is required from those who do not have significant work experience in the field

Successful completion of the advanced seminar (capstone) course taken in a semester AFTER all core courses are completed. A thesis option is available. Interested students should contact their SPA faculty advisor.

Students must maintain a 3.0 or higher GPA in public affairs course work.

Program Options

BA/MPA students may choose from any CLAS major.
BA/MPA students may choose to do a general MPA or select a MPA concentration in local government, nonprofit management, environmental policy, emergency management and homeland security or domestic violence.

Degree Confirmation

Students are eligible to receive a bachelor's degree once they have successfully completed 120 semester hours and all CLAS requirements. The BA/MPA will be conferred once the student has completed all requirements of the master of public administration degree, including at least 36 hours of graduate level course work.

Doctoral Programs

Applied Mathematics, PhD

► Graduate School Rules apply to this program.

Program Requirements

The Department of Mathematical and Statistical Sciences also offers a PhD in applied mathematics. The degree is designed to give candidates a contemporary, comprehensive education in applied mathematics and to provide research opportunities in the special fields of discrete mathematics, optimization, operations research, applied probability, computer science, computational mathematics, applied statistics and the mathematics of science and engineering.

There are six phases of the PhD program. A candidate must fulfill course requirements, pass the preliminary examinations, establish a PhD committee, meet the academic residency requirement, pass the comprehensive examination and write and defend a dissertation.

Students must complete 42 semester hours of non-thesis course work at the graduate level (up to 30 hours of this course work may be transferred in, including courses taken as part of a master's degree). In addition, 30 hours of

dissertation credit must be taken. The following courses are required as part of the formal course work: the math clinic and three readings courses (1 semester hour each). Students must also satisfy a **breadth requirement** by completing a total of six graduate math courses from among several areas of mathematics, with no more than three of these courses from any one area. A 3.25 GPA must be maintained throughout all course work.

The preliminary examinations are designed to determine that students who intend to pursue the PhD program are qualified to do so. These four-hour written examinations are in the areas of applied analysis and applied linear algebra. Students must pass these exams within two years of entering the program. Exception: students admitted with prerequisite deficiencies must pass these exams within three years.

Six semesters of full-time scholarly work are required, as specified in the rules of the Graduate School. All students are strongly advised to spend at least one year doing full-time course work or research with no outside employment.

Application for candidacy is made after completion of the preliminary examinations and after at least three semesters of residency. The application must be submitted at least two weeks before taking the comprehensive examination. The comprehensive examination is designed to determine mastery of graduate-level mathematics and the ability to embark on dissertation research. It consists of a six-hour written examination and potentially an oral follow-up examination. Students must pass the comprehensive exam within 4 years of admission. Within six months after passing the comprehensive examination, the candidate must present a dissertation proposal to their dissertation committee.

Each student must write and defend a dissertation containing original contributions and evidence of significant scholarship. The dissertation defense is public and must be given before an examining committee approved by the Graduate School.

For more detailed information about the applied mathematics PhD, see the Mathematical & Statistical Sciences Graduate Handbook (July 2010).

Civil Engineering PhD

► Graduate School Rules apply to this program

The PhD degree in civil engineering is offered through a coordinated program with University of Colorado Boulder.

Specialty Areas for Degrees:

Environmental and Sustainability Engineering

Geotechnical Engineering

Hydrologic and Hydraulic Engineering

Structural Engineering

Transportation Engineering

Civil Engineering Systems

What is civil engineering systems?

The doctoral program in civil engineering systems has different rules than the five other traditional doctoral tracks in order to facilitate more interdisciplinary research. This doctoral track can be the degree that would follow a master's of engineering.

Additional Doctoral Admissions Requirements

In addition to the admissions requirements listed for master's students, doctoral applicants need to have the support of a faculty advisor before they are admitted. Once doctoral students are approved by the graduate admissions committee, their application must be reviewed again by the Department of Civil, Environmental and Architectural Engineering at CU Boulder as the programs are jointly administered. Prospective PhD students should contact the Department of Civil Engineering at CU Denver to inquire about application requirements and to obtain the “Rules and Policies for the Coordinated PhD Program.”

Requests for applications for graduate study in civil engineering should be addressed to

CU Denver Department of Civil Engineering
Campus Box 113
P.O. Box 173364
Denver, CO 80217-3364

Clinical Health Psychology PhD

► Graduate School Rules apply to this program

Objectives of the Program

A primary focus of clinical health psychology is the development of effective disease prevention interventions for populations at high risk for medical problems. A second focus of clinical health psychology is the development of strategies to help individuals who are already ill to manage their disease, increase their ability to collaborate with medical professionals and improve their coping skills. Students in this program will be trained to work within the community to use psychological tools and techniques to

promote health, prevent and treat illness and improve the health care system. In addition to course work, students acquire expertise in research by completing a second-year project and doctoral dissertation, and demonstrate competence in clinical assessment and intervention through several applied practicum experiences, a clinical competency project and a pre-doctoral internship. Students can complete the program in five years and have up to eight years to complete the program according to Graduate School Rules.

Admissions

The application deadline is December 15 for the following fall. You are responsible for making sure all materials are in on time. We do not consider late applications. International students should be sure to submit all materials at least two weeks before this deadline (by December 1) so that they arrive at our department on time. Below is condensed information; see the department website for complete information.

Admission Requirements:

BA or BS from an accredited college or university, with a minimum GPA of 3.5 based on all college course work.

Undergraduate courses in: introductory psychology, psychological statistics, research methods and abnormal psychology. Additional courses in psychology are highly desirable; our admissions committee will also look favorably upon courses in the biological and physical sciences.

Two official transcripts from each college and university attended.

Graduate Record Exam (GRE): The GRE General Test (verbal, quantitative, analytical writing) is required. General test: minimum score of 1100 for the combined verbal and quantitative sections is expected. The GRE should be taken at least six weeks before the December 15 deadline so that the scores arrive on time.

Three letters of recommendation, at least two of which must be academic references, accompanied by the Request for Recommendation form.

Graduate Application, with answers as informative as possible.

Application fee of $50 ($75 for International Students). This fee can be paid online; however, if paying by check, please specify "CHP PhD" on the memo line in the lower left corner of your check.

Financial Information

The University of Colorado Denver administers various forms of financial aid for graduate students: fellowships, scholarships and a number of awards from outside agencies. See the Office of Financial Aid for further information. Additionally, the psychology department offers teaching assistantships each year in such courses as introductory psychology, statistics, research methods, human development and other courses. Although we do not guarantee TA positions, we generally have been able to offer positions to most of our interested students.

Contingent upon the availability of grant money, faculty may also offer part-time research assistantships to qualified students. The typical RA position involves data collection and analysis, library research, etc. Some computer and statistical skills are usually required. RA positions are less available than TA positions, and they may arise on very short notice.

In-state tuition waivers and additional stipend monies may be available for doctoral students. We do guarantee to pay a full stipend, usually in the form of an assistantship, plus tuition for the first year. We will make every effort to do so for four years.

Please note: Neither teaching nor research assistantships confer in-state tuition status.

Degree Requirements

Course Work:
Approximately 60 credits of course work are required for graduation. Typically, students will take 4 courses each semester of their first year, 3 courses each semester of their second and third years, 2 courses in the first semester of their fourth year and at least 1 course in the second semester of their fourth year in the program. Students must maintain a 3.0 grade point average, and no grade below a *B-* will count toward the requirements.

In addition to the minimum required 60 credits of course work, students must also register for a minimum of 24 clinical practicum hours. Students must also register for and complete a doctoral dissertation. Students must also register for 3 credits of pre-doctoral internship each of the three semesters of their internship year, for a total of 120 credits. Students can complete the program in five years and have up to eight years to complete the program according to Graduate School Rules.

Second Year Project:
All students must complete a second year research project. This thesis involves a research project that makes a significant contribution to the field. Although the question must be the student's own original question, use of archival data and pilot studies are encouraged for this project.

Clinical Practica:
A minimum of 500 face-to-face intervention and assessment hours and 1200 total

practicum hours [face-to-face intervention and assessment hours, plus supervision, plus support hours as defined by the Association of Psychology Postdoctoral and Internship Centers (APPIC)] will be required in preparation for applications to pre-doctoral internships. A minimum of 50% of required practica will be conducted in medical settings. Beyond the minimum requirements, students select practica based on personal interests. All field placements must be approved by the Director of Clinical Training (DCT) in advance.

Demonstration of competence:
Upon completion of the first two years of course work (42 credits), in the third year of training, students must demonstrate competence in clinical psychology by completing a clinical competency project (CCP). This project is designed to demonstrate competency in applied clinical skills relevant to assessment and intervention and to encourage integration of empirical research and applied clinical work.

Dissertation:
Students must complete a dissertation that involves original empirical work and is distinct from other research projects and publications. The dissertation proposal must be completed and defended prior to making application for the pre-doctoral internship. Students must have a dissertation committee composed of four members. When the dissertation is completed to the satisfaction of the primary advisor, the student must orally defend the dissertation to the committee.

Internship:
Students must complete a 12-month, full-time pre-doctoral clinical internship, preferably at an APA-accredited site. This internship is required of all clinical psychologists and is the capstone of clinical training in the doctoral program.

Computer Science and Information Systems PhD

► Graduate School Rules apply to this program

Program co-directors: Gita Alaghband (CSE) and Mike Mannino (Business School)

Website: http://engineering.ucdenver.edu/CSISPhD

The Department of Computer Science and Engineering (CSE) and the Business School offer a joint doctor of philosophy degree program in computer science and information systems (CSIS). The program targets students with a master's-level education in either computer science or information systems who seek research training that combines CS and IS along with strong industry interaction. The joint PhD program provides training for

academic positions, industrial research positions and senior consulting positions. The specific goals of the program complement these general goals:

create a pool of graduates with CSIS research training who are qualified for academic and nonacademic careers

meet student demand for advanced training in CSIS with accommodations for full-time and part-time students

promote interdisciplinary research between CSE and the Business School

enhance technology transfer between CSIS academic units and Front Range technology businesses through joint research, student internships, faculty externships and committee participation

Advisor

Upon entering the program, each chooses an advisor to provide mentoring and guidance throughout the program and work with the student to prepare a program of study. Requests to change advisors must be approved by the program co-directors, and this happens in very rare circumstances.

Doctoral Committee

The advisor and four other members form a doctoral committee. To foster interdisciplinary work, you may have your doctoral research co-supervised by two faculty members. At least one co-supervisor must be a full-time current graduate faculty member in the CSE department or Business School. The committee must contain at least one faculty member from the CSE department and at least one from the Business School. At least one committee member is from outside of the CSE department and the information systems faculty.

Program Components

Plan of Study

A list of course work and other requirements for the degree should be prepared with the advisor and then submitted to the co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for reapproval by the co-directors.

Preliminary Exam

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the PhD CSIS website.

Comprehensive Exam

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition, and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

Dissertation Proposal

Each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

Dissertation Completion

Once the dissertation proposal is approved, each student prepares and submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense.

Graduation

Upon completion of all degree requirements including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through CSE receive the PhD from the College of Engineering and Applied Science, while students applying through information systems receive the PhD from the Business School.

CSIS-Business PhD

Program Components

Plan of Study

A list of course work and other requirements for the degree should be prepared with the advisor and submitted to the program co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for reapproval to the co-directors.

Preliminary Exam

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the CSIS program website.

Comprehensive Exam

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

Dissertation Proposal

As the first phase of the dissertation, each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

University-Level Instructional Training

During the program, each student will obtain training for university-level instruction. This requirement can be fulfilled by working with a faculty member as a teaching assistant, attending university-level teacher training or teaching a university-level class. Students who plan a university career will be encouraged to teach one or more courses and participate in training. When teaching or working as a teaching assistant, a student will be compensated according to standard university salaries.

Dissertation Completion

Following completion of the approval of the dissertation proposal, each student prepares and then submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense of the dissertation.

Graduation

Upon completion of all degree requirements, including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through the CSE receive the PhD from the College of Engineering and Applied Science, while students applying through the information systems program receive the PhD from the Business School.

Design and Planning PhD

► Graduate School Rules apply to this program

Program Director: Kevin J. Krizek
Telephone: 303-315-2422

The PhD in design and planning from University of Colorado Denver trains scholars for careers in higher education, research and high-level policy positions. It is a research-oriented doctoral degree with a flexible, interdisciplinary focus. Students actively draw from the rich intellectual resources of the University of Colorado campuses in both Denver and Boulder for classes, personalized instruction, teaching opportunities and research appointments. Graduates of the program work in universities, government, nonprofits and the private sector, both in the U.S. and around the world.

Planning and design form a well-established and expanding field of knowledge and practice regarding the relationships of natural, behavioral, technological, political, economic and cultural factors to the organization of physical space, and their combined influence on the quality of life in general. Housed within the college, the departments of architecture, landscape architecture, and planning and design share the idea that the

complex problems of the built environment are best addressed through collaboration among the various design and planning disciplines. As a result of this collaboration, the departments jointly offer the advanced research degree, a PhD in design and planning.

Areas of Specialization

The PhD program serves as the intellectual driver of the College of Architecture and Planning; its mission is to provide a scientific foundation for planning and design. Unique and distinguishing characteristics include the physical environment as the domain of interest, the interdisciplinary and integrative orientation of study and the applied nature of prescriptions. Being broad in its offerings, available study covers issues ranging from highly technical urban modeling to the history of architecture. Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum specific to the domains of expertise and faculty interests; in exceptional circumstances, advanced study on a related topic (e.g., historic preservation, green buildings) is available to bridge the two specialty areas.

Sustainable and Healthy Environments (SHE)

Studies in SHE are concerned with the design making by public agencies to guide the pattern and timing of land development that advance goals of sustainable and healthy environments. Subfields include land use planning, growth management, transportation, urban design, housing and community development, environmental planning and management of urban, rural and natural areas. Primary work in this area focuses on land use controls, design review processes and the development of models and tools to understand and support decision processes and design practices.

History of Architecture, Landscape and Urbanism (HALU)

Studies in HALU include the history and theory of architecture, landscape and urbanism considered within socioeconomic and political contexts, intellectual history and cultural studies, as well as questions concerning the evolution of technology, technique and materiality. Interdisciplinary and cross-cultural collaboration is encouraged. In this manner, the disparate range of ideologies and methodologies within the discipline itself are introduced. It is critical for the contemporary scholar and teacher to be aware of the tradition of strategies and perspectives in order to operate in an intellectually responsible manner in the present. A background in a professional design field is desirable for all applicants.

As part of studies in either specialty area, students work on diverse topics, advancing the intellectual environment of the college by participating in a common colloquium, organizing workshops, presenting at conferences and writing publications.

Admission Requirements

As a candidate for admission to the PhD program, you must meet the requirements of the Office of Vice Chancellor of Academic and Student Affairs of CU Denver. These include but are not limited to:

- Matters of provisional admission
- Transfer credit restrictions
- Residency requirements
- Eligibility of courses for graduate-level credit
- Foreign language requirements
- Examination schedules

Residency

To be accepted, you will have to meet the academic residency requirement, which requires six semesters of scholarly work beyond the attainment of an acceptable bachelor's degree.

Two semesters of residence credit may be allowed for a master's degree from another institution of approved standing.

At least four semesters of resident credit, two of which must be consecutive in one academic year, must be earned from this university.

Specific Requirements

The specific admission requirements for the PhD program in design and planning are as follows:

1. Degree

Minimally, to be a successful applicant, you must have a bachelor's degree, however, it is strongly advised that students entering the program will have completed both a bachelor's and a master's degree. Field specialization and background are open.

However, you will preferably have completed a professional (master's or bachelor's) program in planning or a design-related field, such as:

Architecture

Landscape Architecture

Architectural Engineering

Urban Design

In combination with a degree in an area, such as:

Geography

Urban Economics

Environmental Law

Urban Sociology

Real Estate

Management Science

Computer Science

Public Administration

Environmental Psychology

2. Knowledge from Prior Course Work

The applicability of your prior course work will be decided by the program committee upon review of your transcript and additional materials. If you do not have the requisite educational background, grade point average or GRE scores, you may be admitted on a conditional or provisional basis and additional course work may be required in accordance with Graduate School Rules.

A. Design and Planning: You can satisfy this requirement by virtue of having completed either a professional or a pre-professional degree program in these areas.

If you do not have such prior qualifications, you must complete 12 hours of upper level undergraduate course
work in the College of Architecture and Planning, while obtaining in each of these courses a grade of ‘B’ or
higher. These courses are to be chosen from a selected list, in consultation with your faculty advisor, and are
to be completed within two years after admission to the program, and may count

towards fulfilling the degree
requirements.

B. Undergraduate Work: You must have completed 12 semester hours of undergraduate work in one of the following areas:

Social and Behavioral Sciences
Environmental and Natural Sciences
Engineering
Humanities

C. Prerequisites: You must also have completed one of the following prerequisites with a grade of "B-" or above (the choice depends on your area of specialization):

Statistics. Including probability theory, parametric and nonparametric methods, and acquaintance with basic multivariate techniques. A minimum of 3 hours.

Mathematics. Including differential equations, finite mathematics, algorithms, data structures or other appropriate courses. A minimum of 3 hours.

Language. Ability to read at least one foreign language relevant to the area of specialization.

Computer Applications. Background in computer aided Design (CAD) or Geographic Information Systems (GIS). A minimum of 3 hours.

3. Demonstrated Academic Achievement

Academic achievement as evidenced by an undergraduate grade point average of 3.0 (on a 4.0 scale) or better, and a graduate grade point average of 3.5 or better.

A 575 TOEFL (Test of English as a Foreign Language) score is required if you are a foreign applicant whose native language is not English.

Curriculum

Degree requirements are set both by the Graduate School at the University of Colorado Denver and the PhD program within the college. Degree requirements are divided into two parts: pre-candidacy and candidacy/dissertation research. The former involves course work, qualifying examinations and a dissertation prospectus. Candidacy is certification that all requirements have been met except the dissertation. The doctor of philosophy (PhD) degree in design and planning is granted upon the successful completion and defense of the dissertation.

Students meet these requirements through course work and exams over a two year period. During this time, a student's cumulative grade point average may not fall below a 'B' without academic discipline or probation.

Degree Completion

Students in the PhD program in design and planning have up to eight years to complete all requirements for the degree. It is possible to take a leave of absence (referred to as a 'time out,' however, such circumstances should be pursued in tandem with your advisor and/or your committee). A leave of absence form, obtained from PhD program administrative coordinator, must be completed to ensure your place in the program.

Three Components

The PhD curriculum consists of three components:

Core curriculum

Additional course work

Dissertation

1. Core Curriculum (12 semester hours)

Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum that is specific to the domains of expertise and faculty interests. The core curriculum includes 12 semester hours of course work and consists of a series of theory and methods and application courses, which all students must complete during their first two years of residence, plus an additional three hours of programwide colloquia.

The core curriculum for the specialization in sustainable and healthy environments (SHE) includes:

DSPL 7011 - Research Design: the Logic of Inquiry. **Semester Hours:** 3
DSPL 7013 - Environment and Behavior. **Semester Hours:** 3
DSPL 7012 - Theories of Planning, Government Intervention and Implementation: Means and Ends. **Semester Hours:** 3

The core curriculum for the specialization in history of architecture, landscape and urbanism (HALU) includes:

DSPL 7686 - Special Topics. Historiography: History of the Scholarly Discipline. **Semester Hours:** 3
DSPL 7686 - Special Topics. History of Theory: History of the Ideas Informing Practice. **Semester Hours:** 3
DSPL 7686 - Special Topics. Pro-Seminar: Advanced Seminar on Faculty Research Interests. **Semester Hours:** 3

Advanced study on related topics (e.g., historic preservation, green buildings) is available to bridge the two specialty areas, in which case a core curriculum would consist of one of the above tracks complemented by select offerings from the other track. Such circumstances are addressed in close consultation with your initial advisors and/or your committee.

All students are also required to complete three sessions of the colloquium (DSPL 7014 - Colloquium in Design) during their first two years in the program (1 semester hour, pass/fail credits only). You also have the option of taking more than the three required credits. The colloquium includes presentations by speakers (internal to the program, external to the program/university, students), workshops on research/scholarship skills, and perhaps even more social-type activities.
The year-long colloquium has three primary objectives:

It exposes students to various approaches to research related to design and planning.

It enables students to formulate and test out researchable topics among faculty and student peers.

Finally, it serves as a bridge between the two specializations offered within the program, HALU and SHE.

2. Additional Course Work (total 34 semester hours)

In addition to the core curriculum, each student must take at least 12 semester hours of course work in classes broadly conceptualized as “methods” indicative to your field of research. The type of research methods courses varies considerably depending on your chosen area of study. Students must also have 12 semester hours of course work in their minor field of study and will typically take 10 semester hours of support electives. Courses outside the core curriculum may be chosen from outside the college on either the Denver or Boulder campus. Up to 18 semester hours of graduate-level course work can be transferred into the program to qualify for advanced standing.

3. Dissertation (30 semester hours)

It is most important that you continue to work closely with your advisor while you are doing your dissertation research. Meet at least once a month to discuss your progress and be sure to communicate with your other committee members as well. It is a continual process that should be a joint effort to assure that your committee will be well informed and prepared at your defense.

Required Semester Hours

The required semester hours are as follows:

Core Curriculum	12 semester hours
Specialization	12 semester hours
Minor	12 semester hours
Electives	10 semester hours
Dissertation	30 semester hours
Total	76 semester hours

The average course load is 15 semester hours per academic year, especially for the first two years.

Suggested Timing of the Program

(for full-time students without advanced standing):

Year One

- Develop your degree plan
- Complete any prerequisite courses
- Enroll in 11 semester hours of the required core curriculum and additional courses in your specialty area
- Finish the preliminary examination

Year Two

- Enroll in one semester of Colloquium
- Continue or begin to take electives in your minor and specialty areas as described in your degree plan

Begin literature review papers

Prepare for your comprehensive exam

Years Three and Beyond

Complete your literature review papers

Prepare a dissertation proposal

Take the comprehensive exam

Establish your dissertation committee

The remainder of the third and fourth years you will spend researching and writing the dissertation, under the supervision of the dissertation committee.

Educational Studies and Research PhD

► Graduate School Rules apply to this program

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/doctorate

The PhD in educational studies and research links an intensive research-based course of study with a content area in order to prepare candidates to assume positions in institutions of higher education or research-based organizations. Successful applicants will be paired with a faculty mentor with whom the student will engage in research and developing content expertise over time. The preparation model will require students to be available for about 20 hours per week in research and to enroll in 2-3 courses per semester.

Students complete a plan of study that includes at least 45 semester hours of course work (including all required core courses) and 30 semester hours of dissertation and labs. PhD students are expected to be full-time, typically working (research assistantships, teaching assignments, internships, grants, etc.) at the university while completing their course work. This allows for induction to the university research and teaching culture.

Overview of Course Work:

Foundations: Equity and Diversity, Learning, Epistemology, and Teaching in Higher Education - 4 Courses; 12 Semester Hours

Research Methods – 6 Courses; 18 Semester Hours

Concentration Area – 5 Courses; 15 Semester Hours**

Dissertation: 30 semester hours total (6-9 research lab credits and 21-24 dissertation credits)

**Doctoral students will complete a series of courses/experiences in a specified concentration area. Content domains that align to prospective positions in institutions of higher education will be the basis for concentration areas. We define a concentration area as a line of courses that leads to increasing subject matter expertise. Concentration areas are designed to help students focus on a defined discipline or content area in preparation for professional roles as researchers and faculty members. Following, we list the current areas of concentration in which students can be admitted. These areas may change over time as they are tied to faculty research and externally funded grant projects; prospective students will find updated information regarding current availability on the School of Education & Human Development Web site.

Math Education. Students and faculty in this concentration area focus on teacher learning and professional development experiences. Specifically, projects investigate the ways that particular interventions used in professional development for mathematics teachers impacts their content knowledge and pedagogical practices in their classrooms. Work in this area is framed by a situative perspective of learning and incorporates mixed methods to answer questions around the ways particular interventions support teacher and student learning. Video data is prominent in both the design of professional development interventions as well as a major data source for analyses. Analytic methods vary based on the research question and grain size.

Science Education. The goal of this area is to prepare students to explore, understand, and think critically about the nature of science and science education from a largely research-oriented perspective. Students may elect to focus on environmental science education as an area of specialization within this concentration area through electives and discipline- specific research agendas.

Urban Ecologies. This concentration area brings together several faculty members in interdisciplinary study of education in urban ecologies. Participating faculty members are aligned with the interdisciplinary concentration area as a whole, rather than specific threads or foci. The philosophical assumptions underlying work in this concentration area are: 1) Cultural groups are not monolithic, 2) Urban life and learning, including Pre-K-20 education, complex phenomena that benefit from the multiple lenses offered by multi-disciplinarity, and 3) Trans-nationalism characterizes the cultural experiences and political/economic realities

of many communities in cities and contributes to the hybrid identities of residents. These assumptions contribute to a conceptual frame for investigating diversity within the city that is not focused on specific groups and is concerned with the influence of globalization on communities in general within the city. Experiences of and issues confronting different cultural and ethno-linguistic groups will be the key content of this concentration area.

Assessment. The goal of this concentration area is to introduce students to the theory, methods, practices and problems in the development and technical evaluation of assessments in education at both large-scale and classroom assessment levels, considering issues of diverse learners, including English Language Learners and students with special educational needs. The arena of assessment is playing in increasingly important part in P-20 education. This ranges from issues of accountability, student achievement, growth- models, common/benchmark assessments to classroom assessment. In addition to the need for researchers in this area, there are needs for individuals with advanced skills in developing and evaluating the technical quality of instruments in education for different purposes, from developing and implementing surveys to collecting information about teachers to implementing and analyzing achievement assessments to make decisions about the efficacy of educational programs. These individuals need to know how to analyze the information gathered from these instruments and make appropriate decisions based on the information collected. They need to understand the limitations of assessment instruments based on the evaluation on their technical quality.

Administrative Leadership and Policy. This concentration serves as key area for those concerned about leadership in schools and a key focus for research by scholars in higher education. A crucial assumption the underlies this concentration area is that school leadership makes the difference in how schools succeed in improving learning outcomes for all students, but we are only beginning to scratch the surface in understanding why leadership is successful when it is, what the interactions are between effective leadership and effective teaching, and their collective impact on learning outcomes at all levels in schools.

Health and Behavioral Sciences PhD

► Graduate School Rules apply to this program

Requirements for Admission

A master's or equivalent graduate degree is required for admission to the PhD program. In addition, we encourage prior graduate training in the areas noted below. Students

applying without prerequisites may be admitted, but will be required to complete appropriate courses before being permitted to complete the core curriculum.

In addition to the general admission requirements of the Graduate School, the specific admission requirements for the PhD in health and behavioral sciences are as follows:

Knowledge from prior course work or vocational experience at the equivalent of college senior or graduate level in each of the following areas.

Social or behavioral sciences (15 semester hours minimum): knowledge of essential facts and concepts concerning the relationship among individuals and society, social organization, individual psychology and the relationship among culture, belief and behavior. This could be satisfied by course work in psychology, sociology and anthropology.

Human biology or physiology (6 semester hours minimum): familiarity with the functioning of the human body in health and disease states, including an understanding of cellular and organ system processes; an appreciation of evolutionary theory and the mechanisms by which evolution operates on both cellular and population levels; and an understanding of the interplay between the evolution of disease and host response. This could be satisfied by course work in human biology, physiology, pathophysiology or biological anthropology.

Statistics (3 semester hours minimum): prior course work and current familiarity with statistics including probability theory, parametric and nonparametric methods and acquaintance with basic multivariate techniques.

Epidemiology (3 semester hours minimum): prior course work at the advanced undergraduate or graduate level with the basic concepts and methods of epidemiology, including measures of risk, mortality, distribution of disease, role of bias and confounders and study design.

Demonstrated academic excellence as evidenced by an undergraduate GPA of 3.25 (out of a possible 4.0 points) or better, a graduate GPA of 3.5 or better, and scores in the top 30th percentile (averaged) of the GRE. Admission to the program is highly competitive; minimum GPAs and GRE scores for acceptance in any given year may be higher than the minimum levels indicated here.

The applicability of a student's prior course work will be decided by the program executive committee after reviewing the student's transcript and additional materials. If the student does not have the requisite educational background or GPA, the student may be admitted on a conditional or provisional basis and additional course work required in accordance with Graduate School Rules.

Prospective students should not be dissuaded from applying to the program if they do not meet all of the requirements for admission. In some cases, employment experience may be counted toward meeting a requirement. In other cases, students may be

admitted conditionally upon their completion of a list of prerequisite courses that will be established at the time of admission. Students should be sure to address this issue in completing the graduate application by specifying the academic and vocational experience they possess that meets, in part or full, the admission requirements described above.

MASTER'S LEVEL PREPARATION FOR THE DOCTORAL PROGRAM IN HEALTH AND BEHAVIORAL SCIENCES

The program does not currently offer master's-level training in HBSC. Instead, we urge interested applicants to pursue relevant master's degree training in one of the social, behavioral or health sciences disciplines. In addition, we work closely with two master's programs at UC Denver. These are the concentrations in medical anthropology within the anthropology MA program offered by the anthropology department and the master of public health offered by the Colorado School of Public Health. Contact the respective programs for more information on these degree options and our program for how their requirements articulate with those for the health and behavioral sciences PhD.

TO APPLY FOR ADMISSION

At the Denver campus, all graduate applications are now submitted electronically. To begin the application process, go to the online admissions website. If you have any difficulties, call the program assistant at 303-556-4300. The program admits students only for the fall semester, which typically begins in mid- to late August. The deadline for the receipt of all application materials is **February 15** for admission the following August.

Applicants should invest considerable thought and effort in preparing their application. For instance, in the essay (Part II, question six) applicants should provide information on: (a) their academic training and any employment related to public health or health care; (b) their experiences with inter- and multidisciplinary perspectives, and (c) how they envision using their doctoral degree to improve the health status of human populations and individuals. Students should also indicate the kinds of research *foci* that interest them the most.

In addition to the required recommendation form, letters of recommendation are required from at least three individuals in a position to judge the applicant's ability to complete the program. Recommenders may be employers, colleagues or professors; however, the applicant should be sure that the letters address the quality of and aptitude for academic work as well as personal characteristics and qualities.

Financial Aid

There are four kinds of financial aid available: graduate student stipends/fellowships; tuition assistance; research assistantship positions funded by grants to specific program

faculty; and the regular package of financial aid (primarily loans) available through the financial aid office.

Newly admitted, out-of-state and students demonstrating outstanding scholastic achievement receive priority when assigning departmental sources of funding. Students interested in research assistantships should contact the individual faculty member with whom they wish to work regarding potential assistantship positions.

All other aid should be requested through the CU Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

Program Requirements

There are three dimensions to the required curriculum:

- A core curriculum that focuses on problem-oriented, interdisciplinary approaches to theory and method
- Elective course work intended to provide the student with a solid base from which to launch the dissertation research
- Dissertation research and writing

The curriculum is subject to change. What appears below is intended to give students a general idea of the extent, shape and content of the curriculum. Students should check with the program office for up-to-date information on specific course requirements and scheduling.

The Core Curriculum

The core curriculum should be completed by students by the end of their second year of full-time study. It consists of the following series of courses which, together, constitute 29 semester hours:

I. Health and Behavioral Sciences Colloquium

Each fall, the HBSC program will organize a series of presentations by scholars working in the health and behavioral sciences. The presentations provide students with the most current science and theory in the field. Required of all first- and second-year students, who must take at least two times.

HBSC 7001 - Colloquium Series in the Health and Behavioral Sciences
gtPATHWAYS:

Total: 2 Hours

II. Theoretical Perspectives in the Health and Behavioral Sciences

This series is designed to give students a thorough background in how the principles of the social and behavioral sciences have been applied to health issues. Topics include: the interplay between structure and agency in creating and maintaining health; social epidemiology; critical theory and social determinants of health; issues affecting Western biomedicine and public health systems; diffusion of healthy behavioral change among populations; social construction of health and illness; health policy and bioethics; social networks; and stress.

HBSC 7011 - Theoretical Perspectives in Health and Behavioral Science I
gtPATHWAYS:

HBSC 7021 - Theoretical Perspectives in Health and Behavioral Science II
gtPATHWAYS:

HBSC 7071 - Social and Behavioral Determinants of Health and Disease
gtPATHWAYS:

Total: 9 Hours

III. Human Ecology and Environmental Adaptation

This course will emphasize the biological/physiological dimensions of human health and disease.

HBSC 7031 - Human Ecology and Environmental Adaptation **gtPATHWAYS:**

Total: 3 Hours

IV. Research Design and Methods in the Health and Behavioral Sciences

Three HBSC core research design and methods courses, plus one additional advanced methods course of student's choosing. This series covers the philosophy of science and the structure of scientific inquiry, procedures for hypothesis-testing, quantitative and qualitative methodological strategies commonly employed in the field, epidemiology and program evaluation. Students must further develop specialized methodological skills by completing an independent study (HBSC 6840) or taking one additional course in

advanced epidemiology, advanced biostatistics, health economics, survey research design or qualitative methods and data analysis. This requirement will be tailored specifically to the student's particular interests by his/her advisor.

HBSC 7041 - Research Design and Methods in the Health and Behavioral Sciences I **gtPATHWAYS:**

HBSC 7051 - Qualitative Research Design and Methods **gtPATHWAYS:**

HBSC 7061 - Quantitative Methods in the Health and Behavioral Sciences **gtPATHWAYS:**

One elective course in advanced methods: **3 semester hours**

Total: 12 Hours

V. Applications of the Health and Behavioral Sciences

This course offers students the opportunity to focus on individual research interests with guidance from faculty and input from peers.

HBSC 7111 - Applications of the Health and Behavioral Sciences **gtPATHWAYS:**

Total: 3 Hours

TOTAL CORE: 29 Hours

Elective Courses

Elective course work together constitutes 6 semester hours, which can be drawn from the large number of offerings in the health and behavioral sciences at CU Denver. Students will be expected to fulfill the necessary prerequisites for taking these courses, and final authority as to whether a student may enroll in the course will rest with the department in which the course is offered.

TOTAL ELECTIVES: 6 Hours

Doctoral Dissertation Research

The doctoral dissertation research topic is chosen by the student. The student is expected to define a research question in health and behavioral science, identify the

research strategy to be used for answering the question, conduct the research required and document the project in the form of a doctoral dissertation. The student will be guided in this process by a doctoral dissertation advisor and the additional members who comprise the student's doctoral dissertation committee (see below). A minimum of 30 semester hours of dissertation work is required. Students must register for a minimum of 5 dissertation credits each semester of their dissertation work. Students may not take more than a year's leave of absence or fail to enroll for semester hours more than three semesters before they are dropped from the program.

Advisors

Upon admission to the program, each student will be assigned a first-year advisor. The student or the faculty will then choose the faculty advisor who will guide the student through the core and elective course work. The faculty advisor may or may not be the chair of the student's dissertation committee. The student selects his or her chair and a minimum of three additional committee members who oversee the student's comprehensive examination and dissertation research.

Formal Review

A formal review of each student's progress will be undertaken at the end of each year of study. Students who are deemed not to be making satisfactory progress will be informed in writing as to the nature and final result of the review before the end of June.

The Dissertation Prospectus and the Comprehensive Examination

Before a student advances to candidacy, she/he must complete a dissertation prospectus and defend it successfully in the context of an oral comprehensive examination. The dissertation prospectus is a complete description of the question or hypothesis that the student wishes to research for the dissertation project, the research design and study techniques and an assessment of the proposed project's contribution to the field. It will include a comprehensive review of the relevant literature. If the student chooses to undertake research in a particular ethnic or cultural community, she/he must also demonstrate sufficient understanding of that setting including adequate knowledge of the language. This prospectus must be approved by the student's advisor prior to scheduling the comprehensive examination.

The comprehensive examination will be an oral format based in part on, but not restricted to, the material presented in the dissertation prospectus. This exam *must* take place before the student's advancement to candidacy and will typically occur by the end of the third year of study. A committee comprising the chair and a minimum of three faculty members will supervise the completion of the dissertation prospectus. This committee will conduct the oral examination and will recommend to the executive

committee by a majority vote whether or not the student should be advanced to candidacy.

The Doctoral Dissertation and Final Exam

After advancement to candidacy, the student in consultation with his or her advisor will appoint a dissertation committee comprising the chair and a minimum of three faculty members. The chair and composition of the committee will be subject to approval by the program executive committee. The chair and two other members must have been present at the student's comprehensive examination and will be responsible for overseeing the research and writing of the doctoral dissertation. The committee will review drafts of the dissertation and, when the dissertation is completed to its satisfaction, will conduct the final exam, which will be based on the doctoral dissertation and related materials. The final examination will be open to the public.

Dissertation Total: 30 Hours minimum

Leadership for Educational Equity EdD

► Graduate School Rules apply to this program

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/doctorate

Program Overview

The goal of the doctor of education (EdD) leadership for educational equity program is to prepare future leaders for social justice and equity in P-20 and community-based education contexts who can effectively translate research into practice, influence policy, use data effectively in decision making and organize individuals and groups to address challenges collaboratively and successfully.

The EdD is a practice-based, doctoral level program for professional leadership in P-20 or community-based educational contexts. The EdD will prepare leaders within the profession to address complex educational challenges by combining decision-focused analytic and research skills with a broad-based understanding of systems anchored in principles of social justice and equity and access to public education.

This program reflects a cohort model. Courses will generally be offered in weekend, hybrid (part face-to-face, part online), online and/or summer intensive formats. Students follow their cohort in taking the prescribed course work and experiences for three consecutive years.

Course Work – 69 Semester Hours

Equity and Diversity Core (9 hours)

Leadership Core (12 hours)

Research Methods Core (12 hours)

Concentration Area Core (9 hours)

Culminating Experiences:

Concentration Area Internship (one, 6 credit experience)

Dissertation Courses and Independent Hours (21 credits)

Concentration Areas

Executive Leadership: designed to deepen individuals' skills in policy analysis, development and research; personnel management; finance; accountability systems and evaluation; and community relations. Support individuals who hold or seek to move into senior management positions inside school districts, community colleges, higher education policy or community-based education organizations. Roles may include that of a director, deputy, superintendent or president.

Instructional Leadership: designed for individuals who want to hone their skills through inquiry in the areas of adult learning, professional development, teaching, assessment and accountability, technology and policy analysis and application. This concentration area targets professionals who hold or seek to move into positions such as teacher leaders, coaches/mentors, program coordinators, curriculum directors or instructors at teaching colleges or community colleges.

Public Affairs PhD

► Graduate School Rules apply to this program

Program Director: Peter deLeon, PhD

Faculty

Professors:

Kathleen Beatty, PhD, Washington State University
Lloyd Burton, PhD, University of California, Berkley
Peter deLeon, PhD, Pardee RAND Graduate School
Mary Guy, PhD, University of South Carolina
Richard Stillman, PhD, Syracuse University
Paul Teske, PhD, Princeton University

Associate Professors:

Brian Gerber, PhD, Stony Brook University
Angela Gover, PhD, University of Maryland
Jody Fitzpatrick, PhD, University of Texas, Austin
Allan Wallis, PhD, City University Graduate Center
Christine Martell, PhD, Indiana University
Jessica Sowa, PhD, Syracuse University
Paul Stetesky, PhD, Florida State University
Tanya Heikkila, PhD, University of Arizona

Danielle M. Varda, PhD, University of Colorado Denver

Christopher M. Weible, PhD, University of California-Davis

Benoy Jacob, PhD, University of Illinois at Chicago

Assistant Professors:

Todd Ely, New York University

Wirth Chair:

Alice Madden, JD, University of Colorado

Research Professor:

Stephen Block, PhD, University of Colorado

Clinical Professor

Malcolm Goggin, PhD, Stanford University

Research Associate:

Robert Reichardt, PhD, Pardee RAND Graduate School

Professors Emeritus:

John Buechner, PhD, University of Michigan

Dale Neugarten, PhD, University of Southern California

The School of Public Affairs offers a program of advanced graduate study leading to the doctor of philosophy in public affairs. The program, based on the Denver campus, permits elective work to be taken on any campus of the university if it is part of the approved program of study or degree plan.

The doctoral program was developed to meet the need for people with mastery in the scholarly theory, concepts and research skills of public administration, public policy and public management, and who are able to use such skills in careers of research, teaching and analysis of public-sector challenges. The PhD is designed to prepare students for leadership responsibilities in academia, research and public policy analysis. Accordingly, the PhD stresses the development of theoretical, conceptual and methodological knowledge in public administration, policy and management.

Participants

The doctoral program is primarily designed to serve (1) people who desire to further the field of public policy and public and nonprofit management through teaching and research; (2) scholar-practitioners working in government, private-sector organizations concerned with government and nonprofit organizations; and (3) policy analysts in government, private-sector organizations concerned with government and nonprofit organizations.

Time Required for PhD Degree

The PhD program requires an intense commitment. Most courses and seminars are offered during the late afternoon, in the evenings or on an intensive basis. (Some electives are offered online, but core courses are not.) Anyone starting the PhD program with a master's degree in public administration can expect to take at least three but no more than eight years to complete all of the requirements for the PhD.

Students are required to enroll for a minimum of 6 semester hours of course work each fall and spring semester. All requirements for the PhD degree should be completed within eight years of admittance. Any student entering the program with no prior

graduate work in public administration, public policy or management should expect additional course requirements.

PhD Admission Requirements

Admission to the program is based on the personal and professional qualifications of the applicant. It is desirable that an applicant have a master's degree in public administration or a closely related field before undertaking doctoral work. Applicants should have a 3.5 GPA or above in master-level course work, as well as a combined score of 1,000 or better on the quantitative and verbal sections of the GRE. Successful applicants will also show the potential for productive careers of scholarship, research and analysis.

Meeting the minimum thresholds listed above does not assure admission. In unusual cases, students who fail to meet the thresholds may be admitted if high academic skills are demonstrated in other ways.

PhD Application Process

Applicants must submit the following items to the SPA office before they can be formally considered for admission. The application deadline is February 1; admitted students will begin in the fall semester.

- application forms
- official transcripts (two copies) from all degree granting institutions
- GRE scores (no more than three years old)
- a resume or vita
- three letters of recommendation from colleagues and previous professors, focusing on the potential for deriving benefit from the PhD program
- a 500–1,000 word statement of educational and career goals, focusing on research interests

In addition, students may also submit samples of research reports or publications. All application materials will be retained by SPA and will not be returned. A personal meeting with the PhD director or other faculty member is recommended.

Financial Assistance

For excellent candidates, SPA will fund a small number of doctoral research assistantships each year based on financial availability. Students selected will receive a full-tuition waiver as well as a stipend of $15,000 for the academic year. Our goal is to provide such funding for students for at least three years.

Degree Requirements

Course Work

A total of 36 semester hours of course work is required past a master's degree in public administration or a related degree. In some cases, additional prerequisite courses may be required to assure adequate preparation for doctoral studies. All PhD students are required to take a minimum of 6 semester hours of course work in both the fall and spring semesters, until their course work requirements are met, if they wish to maintain their full-time student status.

During their first year of study, all PhD students are required to take the following four doctoral seminars:

PUAD 8010 - Historical and Comparative Foundations of Public Administration **gtPATHWAYS:**

PUAD 8020 - Seminar in Public Management **gtPATHWAYS:**

PUAD 8030 - Seminar in Public Policy **gtPATHWAYS:**

PUAD 8040 - Seminar In Economic and Institutional Foundations of Public Affairs **gtPATHWAYS:**

Total: 12 Hours

During the next year, doctoral students are required to take

PUAD 8070 - Quantitative Methods II **gtPATHWAYS:**

PUAD 8060 - Seminar On The Conduct Of Empirical Inquiry **gtPATHWAYS:**

Total: 9 Hours

The Doctoral Program at SPA requires advanced proficiency in research methods or tools that will assist in completing dissertation research; six credit hours of advanced proficiency are required - PUAD 8050 & 8070. Before enrolling in PUAD 8070, students must successfully complete PUAD 8050, as well as PUAD 8010, 8020, 8030, 8040 and 8060. These prerequisites may be waived with the permission of the doctoral director. An approved qualitative course of the student's choosing is also required. This course might include qualitative methodology, administrative law, geographical

information systems, or Social Network Analysis. In addition, all PhD students must complete four elective courses relevant to the student's dissertation plans.

Comprehensive Exam and Dissertation

In addition to course work, PhD students must pass a comprehensive exam no later than the beginning of their third year of study. Students are also required to complete and defend, before a faculty committee, a dissertation that makes a significant contribution to the literature and theory of public administration, management or policy.

Students are advanced to candidacy for the PhD once they have completed all required course work and examinations, have successfully presented their research colloquium and have been certified for candidacy by his/her doctoral committee. After students are formally advanced to candidacy, they must register for a total of 30 hours of dissertation research credit to complete the PhD. Each fall and spring semester, students are expected to register for 5 semester hours hours of dissertation research; if unable to register for at least 5 semester hours, students must request a leave of absence from the PhD program until able to complete the minimum dissertation requirement. Students may take up to two semesters' leave of absence before they are disenrolled from the program. Students then would need to reapply to the program.

Further details on the program can be found in the *Handbook for the Doctor of Philosophy in Public Affairs Program*, available from the SPA office on online at http://spa.ucdenver.edu.

Licensure

Administrator License - Executive Leadership Program

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/alps

Faculty

For information about faculty in this area, visit www.ucdenver.edu/education/alps.

The primary responsibility of the administrative leadership and policy studies (ALPS) faculty is to prepare leaders for public education in Colorado and the nation. Currently, the principal license is required for people seeking building-level administrative positions in Colorado.

Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

Note: Those already holding a master's degree and 5 years of leadership in education should also see the Executive Leadership Program (below) for pursuing administrator licensure.

Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.
EDUC 5751 - Principal/Administrator Licensing I Semester Hours: 5 to 9
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9

EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**
EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9
Total: 32 Hours

MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

Section A: Educational Research

RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3
LCRT 5140 or CLDE 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 or CLDE 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

Section C: Educational Psychology/Special Education

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3
EPSY 5110 - Human Learning. Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

EdS Program

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally, for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

Administrator Licensure - Executive Leadership Program

Designed for the professional educator who, already holding a master's degree and 5 years leadership experience in education, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at www.ucdenver.edu/education/elp.

Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Early Childhood Special Education Specialist Licensure

Early Childhood Education

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education

Faculty

More information about faculty in this division is available online at www.ucdenver.edu/education.

Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

MA in early childhood education

ECSE specialist license (initial or added endorsement)

MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

literacy development and disorders

child growth and development, differences and disorders

learning approaches with young children

measurement and evaluation

basic statistics/research methods

multicultural education

research and current issues

early childhood curriculum and program development for inclusive classrooms

working collaboratively with parents and families

program administration/leadership

The early childhood special education program provides specialized preparation in:

screening and assessment of young children

intervention strategies with infants and preschoolers

behavior management

working as a member of the transdisciplinary team

cognitive and socio-emotional development and disorders

treatment of children who have neurological impairment and chronic illness

challenging behaviors and autism

Program Requirements

Semester Hour Requirements

Master's degree in ECE: 40 semester hours
ECSE specialist license: 40 semester hours
Master's degree plus ECSE specialist license: 49 semester hours
Master's degree plus ECSE specialist added endorsement: 40 semester hours
ECSE specialist added endorsement: 25 semester hours

Fieldwork and Practicum Requirements

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

ECE Program Options Plans of Study	MA in ECE	ECSE Specialist License	MA in ECE and ECSE Specialist License	ECSE Specialist Endorsement for those holding Elementary or ECE License	MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License	ECSE Specialist Endorsement for those holding Special Education License	MA in ECE and ECSE Specialist Endorsement for those holding Special Education license
Course							
EPSY 5100 - Advanced Child Growth and Development	Required	Required	Required				

RSEM 5100 - Basic Statistics	Required		Required		Required		Required
ECED 5000 - The Early Childhood Profession	Required	Required	Required	Required	Required	Required	Required
ECED 6100 - Medical and Physiological Aspects of Developmental Disabilities	Required	Required	Required	Required	Required	Required	Required
ECED 5020 - Approaches to Young Children's Learning	Required	Required	Required		Required **	Required *	Required **
ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children **or** ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives		Required	Required	Required	Required	Required *	Required *
ECED 5080 - Language and Literacy	Required	Required	Required	Required	Required	Required *	Required*

in Young Children							
ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required
ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives	Required				Required **		Required **
ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education	Required		Required		Required		Required
ECED 5140 - Measurement and Evaluation in Early	Required		Required		Required		Required

Childhood Education							
ECED 6010 - Literacy and Mathematics K-2	Required	Required	Required	Required*	Required*		
ECED 5200 - Screening and Assessment of Young Children		Required	Required	Required	Required	Required	Required
ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
ECED 6911 - Practicum in Early Childhood Education	Required						
ECED 6910 - Infant/Toddler Practicum in ECSE		Required	Required	Required	Required	Required	Required
ECED 6912 - Preschool Practicum in ECSE Preschool Practicum		Required	Required	Required	Required	Required	Required
ECED 6914 - Primary Practicum in ECSE		Required	Required	Required	Required	Required	Required

Total Semester Hours	**40**	**40**	**49**	**25**	**40**	**25**	**40**
Comprehensive Exam	Required		Required		Required		Required
PLACE Exam #27		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

Elementary/Secondary Education Licensure

Urban Community Teacher Education Program

Lawrence Street Center, 701
Campus Box 106
P.O. Box 173364
Denver, CO 80217-3364
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/ipte

Urban Community Teacher Education Licensure Program Overview

The Urban Community Teacher Education program is both an undergraduate and graduate level program for general education licensure. (Special education is currently

only an option at the graduate level, but undergraduates who want to obtain a special education license are encouraged to consider pursuing their endorsement plus an MA in special education.) The expectations for performance are identical for both undergraduates and graduates because the expectations for newly licensed teachers in the state of Colorado are exactly the same. Undergraduates and graduates work side by side in coursework and internships. There are very slight differences including the course registration numbers (undergraduates register for 4000 level; graduate students register for 5000 level) and undergraduates take 1-2 licensure courses and one internship prior to admission in the program. The teacher education program fosters critically reflective inquiry about teaching and learning and the development of collaborative skills necessary to work effectively with other adults on schooling issues. The program strives to meet the needs of an increasingly diverse population of students, and to productively participate in and lead school renewal by applying democratic principles in educational settings.

Education Pathways

The graduate teacher education program at CU Denver is designed for individuals with a minimum of a bachelor's degree who seek a master's degree along with an initial Colorado provisional teacher's license in the following areas:

Elementary Education (K–6) (43 semester hours)

Secondary Education (7–12) (36 semester hours)

English

mathematics

science (general science, biology, earth science, physics, chemistry)

social studies

foreign language (Spanish, French)

Special Education Generalist (Ages 5–21) (59 semester hours)

Dual General Education/Special Education (64-67 semester hours)

Program Distinctions

Program Structure

The program admits teacher candidates in three cohort groups, one in the summer, one in fall and one in the spring. The initial professional teacher education program includes a full time 1 - 1.5 year licensure plan for regular education and a 1.5 year full time option

for initial special education and dual special education. Part time 2-3 year options for regular education are planned for spring 2011. Students will be taking course work at the university and field-based work in one of CU Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship level with the sequence of the program plan. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher/mentor, called a site coordinator.

Assessment

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in Special Education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)

4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluting our program to meet student needs, please see current programs of study in the teacher education handbook.

Master's Degree Options

The teacher education program design supports the concept of teacher education as an ongoing developmental process linking preservice, induction and ongoing professional growth experiences. Upon completion of the licensure portion of the program, beginning teachers continue working toward their master's degree (an additional 18-35 semester hours) in the areas of special education, educational psychology, content in English or history in collaboration with the College of Liberal Arts and Sciences, or curriculum and instruction during their first or second year of teaching. This ensures that CU Denver's new teachers are provided with continuing support from the university while in their first few years of teaching.

Undergraduate Teacher Licensure

Undergraduate Teacher Education Program

The undergraduate teacher education program at CU Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program "gates" that teacher candidates go through to complete licensure.

CU Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

Please note: The admission into the School of Education & Human Development teacher education program is a separate process from admission to the university. Summer deadlines are January 15* February 15; the fall deadline is March 15. Spring admission deadlines are August 15, September 15 and October 15.

Undergraduate Teacher Education Pathways

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

BA—Individually Structured Major Elementary Education Licensure

BA—English Literature Secondary English Licensure

BS—Mathematics Secondary Mathematics Licensure

BA—History Secondary Social Science Licensure

BA—Political Science Secondary Social Science Licensure

BA—Spanish Secondary Spanish Licensure

BA—French Secondary French Licensure

Program Distinctions

Program Structure

The School of Education & Human Development teacher education program admits teacher candidates in two cohort groups: one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 15-month licensure plan. Students will be taking course work at the university and field-based work in one of CU Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

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gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

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6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Undergraduate Advising

Undergraduate teacher candidates will have a team of individuals who work with them throughout the completion of their bachelor’s degree and teacher licensure. The following are the members of the advising team:

College of Liberal Arts and Science (CLAS) Education Advisor

The CLAS advisor will assist you upon entry to the university though graduation.The CLAS advisor will monitor your progress through the core curriculum, pre-IPTE curriculum, eligibility requirements for the IPTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

Faculty Advisor

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

School of Education and Human Development Advisor

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

IPTE Undergraduate Academic Planning Sheets

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

IPTE Undergraduate Community College Articulation

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluating this program for students, for the 2011-2012 term, please

refer to the most current version of the teacher education program handbook for academic requirements for this program.

Requirements for Admission

The program rolling admissions each semester. Summer admission deadlines are January 15 & February 15; Fall admission deadline is February 15 and March 15. Spring admission deadlines are August 15 and September 15.

Urban Community Teacher Education Information Sessions

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the CU Denver website. Go to www.ucdenver.edu/education to reserve a space under the menu item "Information Sessions."

Urban Community Teacher Education Program Requirements

Applicants to theurban community teacher education program must hold at least a bachelor’s degree with a minimum undergraduate cumulative GPA of 2.75 for admission.

Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.

Verification of passing official scores for PLACE or PRAXIS II.

All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. *

All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. *

Undergraduate candidates must have an individually structured elementary emphasis.

A complete application which can be obtained at scheduled information sessions, downloaded online, or at the Student Services Center

*This is determined through transcript evaluations at information sessions.

Principal Licensure

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/alps

Faculty

For information about faculty in this area, visit www.ucdenver.edu/education/alps.

The primary responsibility of the administrative leadership and policy studies (ALPS) faculty is to prepare leaders for public education in Colorado and the nation. Currently, the principal license is required for people seeking building-level administrative positions in Colorado.

Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

Note: Those already holding a master's degree and 5 years of leadership in education should also see the Executive Leadership Program (below) for pursuing administrator licensure.

Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.
EDUC 5751 - Principal/Administrator Licensing I Semester Hours: 5 to 9
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**
EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9
Total: 32 Hours

MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master’s students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor’s degree.

For the MA degree, students must select at least one course in each of the following three areas:

Section A: Educational Research

RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3
LCRT 5140 or CLDE 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 or CLDE 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

Section C: Educational Psychology/Special Education

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3
EPSY 5110 - Human Learning. Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

EdS Program

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally, for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

Administrator Licensure - Executive Leadership Program

Designed for the professional educator who, already holding a master's degree and 5 years leadership experience in education, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at www.ucdenver.edu/education/elp.

Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Special Education

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education

Special Education Program Overview

The special education program within the initial professional teacher education division offers a special education generalist license and a special education endorsement as well as a master of arts degree in special education. All special education program options foster the development of critical reflection, inquiry about teaching and learning, as well as the breadth and depth in content knowledge necessary to work effectively in elementary and secondary classrooms. The program faculty promote the ability of teacher candidates to meet the needs of an increasingly diverse population of K–12 learners, as well as to participate productively in and lead school renewal.

The faculty in the program in special education value collaborative relationships between general and special educators, so we offer our teacher candidates the option of pursuing a dual endorsement in both general and special education to offer our teacher candidates the option of pursuing a dual endorsement in both general and special education.

Special Education Program Distinctions

Special Education Licensing Pathways

To be a licensed as a special education generalist for grades ages 5-21, a teacher candidate must hold a bachelor's degree from a four-year accepted institution of higher education, have completed the plan of study from one of the program options for the preparation of special education generalist, have passed the approved elementary content and special education assessments and have demonstrated all required state and national standards.

Program options for the special education generalist include: 1) initial licensure as a special education generalist; 2) dual licensure in either elementary or secondary education and as a special education generalist; and, 3) for those who already hold a Colorado teaching license, an added endorsement, which is also fully online. There is also an option to count these courses towards a masters in special education which will require an additional 12 semester hours of course work.

The time needed to complete the various special education generalist program options varies based on the needs of teacher candidates. In addition to traditional on-campus offerings, a wide selection of courses are available in online formats. During the academic year, core special education courses are scheduled in late afternoons, evenings and on Saturdays to avoid conflict with teaching responsibilities.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Special education eeacher candidates engage in a series of four internships from the beginning of the program to the end of the program. Dual teacher candidates engage in five internships that result in a general education license at the elementary or secondary level and then complete a fifth internship and additional course work; this can be done during an additional full time semester or can be worked out flexibly as the student assumes their first teaching position to complete their special education license. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

Assessment

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in special education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

The four additional PBAs that all teacher candidates in the special education program are expected to proficiently complete include:

1. Assessment
2. Collaboration & Positive Behavior Supports
3. Literacy Instruction for Students with Identified Special Needs
4. The Individualized Education Program (I.E.P.) Process

Passing the PLACE or PRAXIS II Content examinations prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and constantly evaluated the program to meet student's needs, for the 2011-2012 term, please refer to the most current version of the Special Education Handbook for academic requirements for this program.

Requirements for Admission

The program conducts rolling admissions each semester. Summer admission deadlines are January 15 and February 15; fall admission is February 15 and March 15. Spring admission deadlines are August 15 and September 15.

Teacher Education Information Sessions

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the CU Denver website. Go to www.ucdenver.edu/education and click on "Information Session" to reserve a space.

Teacher Education Program Requirements

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. *
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. *
- Copy of passing official scores for PLACE or PRAXIS II.
- A complete application on file that can be obtained at information sessions, online or through the Student Services Center.

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Undergraduate Teacher Licensure

Undergraduate Teacher Education Program

The undergraduate teacher education program at CU Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and

Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program “gates” that teacher candidates go through to complete licensure.

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School of Education and Human Development Advisor

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IPTE Undergraduate Academic Planning Sheets

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

IPTE Undergraduate Community College Articulation

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluating this program for students, for the 2011-2012 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

Endorsement Programs

Early Childhood Special Education Specialist Endorsement

Early Childhood Education

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education

Faculty

More information about faculty in this division is available online at www.ucdenver.edu/education.

Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

MA in early childhood education

ECSE specialist license (initial or added endorsement)

MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

literacy development and disorders

child growth and development, differences and disorders

learning approaches with young children

measurement and evaluation

basic statistics/research methods

multicultural education

research and current issues

early childhood curriculum and program development for inclusive classrooms

working collaboratively with parents and families

program administration/leadership

The early childhood special education program provides specialized preparation in:

screening and assessment of young children

intervention strategies with infants and preschoolers

behavior management

working as a member of the transdisciplinary team

cognitive and socio-emotional development and disorders

treatment of children who have neurological impairment and chronic illness

challenging behaviors and autism

Program Requirements

Semester Hour Requirements

Master's degree in ECE: 40 semester hours
ECSE specialist license: 40 semester hours
Master's degree plus ECSE specialist license: 49 semester hours
Master's degree plus ECSE specialist added endorsement: 40 semester hours
ECSE specialist added endorsement: 25 semester hours

Fieldwork and Practicum Requirements

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

ECE Program Options Plans of Study	MA in ECE	ECSE Specialist License	MA in ECE and ECSE Specialist License	ECSE Specialist Endorsement for those holding Elementary or ECE License	MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License	ECSE Specialist Endorsement for those holding Special Education License	MA in ECE and ECSE Specialist Endorsement for those holding Special Education license
Course							
EPSY 5100 - Advanced Child Growth and Development	Required	Required	Required				
RSEM 5100 - Basic Statistics	Required		Required		Required		Required
ECED 5000 - The Early Childhood Profession	Required	Required	Required	Required	Required	Required	Required
ECED 6100 - Medical and Physiological Aspects of Developmental Disabilities	Required	Required	Required	Required	Required	Required	Required
ECED 5020 - Approaches to Young Children's Learning	Required	Required	Required		Required **	Required *	Required **

ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children **or** ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives		Required	Required	Required	Required	Required *	Required *
ECED 5080 - Language and Literacy in Young Children	Required	Required	Required	Required	Required	Required *	Required*
ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required
ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence, and	Required				Required **		Required **

Behavior Challenges in Young Children's Lives							
ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education	Required		Required		Required		Required
ECED 5140 - Measurement and Evaluation in Early Childhood Education	Required		Required		Required		Required
ECED 6010 - Literacy and Mathematics K-2	Required	Required	Required	Required*	Required*		
ECED 5200 - Screening and Assessment of Young Children		Required	Required	Required	Required	Required	Required
ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
ECED 6911 - Practicum in Early	Required						

Childhood Education							
ECED 6910 - Infant/Toddler Practicum in ECSE		Required	Required	Required	Required	Required	Required
ECED 6912 - Preschool Practicum in ECSE Preschool Practicum		Required	Required	Required	Required	Required	Required
ECED 6914 - Primary Practicum in ECSE		Required	Required	Required	Required	Required	Required
Total Semester Hours	**40**	**40**	**49**	**25**	**40**	**25**	**40**
Comprehensive Exam	Required		Required		Required		Required
PLACE Exam #27		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

Instructional Technology Endorsement

K–12 teachers may elect to complete a 24-semester-hour program leading to state endorsement in instructional technology at the teacher or specialist level. Teachers beginning their careers may complete the initial teacher licensing program, followed by 24 semester hours for teacher-level endorsement. More experienced teachers may complete 24 semester hours for the specialist-level endorsement.

Comprehensive Examination for all ILT Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT website.

For complete details about ILT programs, endorsement requirements and certificates, see the ILT website.

Sample Plan for K-12 IT Endorsement			
	Fall	Spring	Summer
Year 1	INTE 6750 Current Trends and Issues in Instructional Technology INTE 5830 Information and Learning Technologies Workshop	INTE 6720 Research in Information and Learning Technologies	INTE 6515 Leadership for Learning Technologies Integration INTE 5710 Telecommunications and Networking in Education
Year 2	INTE 6930 Internship in Information and Learning Technologies INTE 6710 Creative Designs for Instructional Materials	INTE 6999 Leadership and Practice in Information and Learning Technologies	

Linguistically Diverse Education Endorsement

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction

the Colorado Endorsement for Linguistically Diverse Education

a Teaching English to Speakers of Other Languages (TESOL) certificate

a Content Instruction for English Learners (CIEL) certificate

a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)

veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)

veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)

individuals interested in teaching English abroad (TESOL: 15 semester hours)

veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)

elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)

individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change

in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate teacher education licensure program)*	**TESOL Certificate**

CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
CLDE 5050 - Linguistic and Cultural Issues in	Required	Required	Required	Required	Required

Linking Assessment and Instruction					
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second Language Learners	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL	Required	Required	Required	Required	

and Bilingual Education					
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3
Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Reading Teaching Endorsement

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Websites: www.ucdenver.edu/education/literacy and
www.ucdenver.edu/education/englished

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (LLCRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LLCRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. This program is a credentialed program meeting the Colorado Department of Education requirements for the reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each

student’s reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed University of Colorado Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master’s degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor’s degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master’s degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)						
	ELEMENTARY (K-6)			**SECONDARY (7-12)**		
Course	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**
LCRT 5020 - Workshop in Literacy	Required		Required	Required	Required	Required

and Language Teaching						
LCRT 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LCRT 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LCRT 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LCRT 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			

LCRT 5201 - Adolescent Literature				Required	Required *(waived if taken as part of English Licensure)*	Required
LCRT 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LCRT 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LCRT 6915 - Seminar and Practicum in Literacy Professional Development	Required	Required		Required	Required	Required

Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations.

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

30 graduate semester hours in English education

6 graduate semester hours of core courses

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy Semester Hours: 3
LCRT 5201 - Adolescent Literature Semester Hours: 3
LCRT 5200 - Theory and Methods of English Education Semester Hours: 3
-OR-
LCRT 5835 - Special Topics: Literacy and Language Semester Hours: 3

LCRT 5810 - Wksp: Lang Acq & Development Semester Hours: 3
LCRT 5010 - Foundations of Language Semester Hours: 3
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3
Research and Evaluation Methodology core course (see list below).
Interdisciplinary core course (see list below).
Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 36 semester hours

Program Requirements--When Added to CU Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to CU Denver's graduate teacher education licensure program:

18 graduate semester hours

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student’s course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
-OR-
SPED 5300 - Collaborating in Schools and Communities Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3
RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America Semester Hours: 3
LCRT 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours:

3
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certficate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

School Library Endorsement

School Library and Instructional Leadership MA

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Website: www.ucdenver.edu/education/schoollibrary

Faculty

Information about SLIL faculty is available online at www.ucdenver.edu/education/schoollibrary.

Program Overview

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries. The program integrates information literacy standards through the use of collaborative planning, as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL website for more information about specific plans of study, course offerings and expectations of cohort groups.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program website for complete admission procedures and requirements.

Professional Expectations

All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass the PLACE test in school library. This is a Colorado Department of Education requirement.

An Example of Two-Year Plan for School Library Program

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program**.** Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

Typical First Year

Fall	Spring	Summer

SCHL 5530 - Foundations of School Librarianship* LCRT 5790 - Children's Literature Through the Ages***	SCHL 5020 - Collection Development	SCHL 5110 - Integrating Instructional Technology Practices in School Libraries (MA only) LCRT 5201 - Adolescent Literature . ***

Second Year

Fall	**Spring**	**Summer**
SCHL 5160 - Managing School Library Programs SCHL 6720 - Practitioner-Based Research in School Libraries *** SCHL 5911 - School Library Field Experience-Elementary **	SCHL 5030 - Information Literacy and Reference SCHL 5912 - School Library Field Experience-Secondary ** Elective (2 semester hours) (MA only)****	SCHL 5040 - Information Storage and Utilization SCHL 6999 - Leadership and Practice in School Libraries (MA Only)

***** SCHL 5530 Foundations in School Librarianship should be taken as the first course in your program.

** 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field experience timeframe. Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

*** LCRT 5201; LCRT 5790; and SCHL 6720 are offered on-campus in other semesters as well.

****Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

Comprehensive Examination for All SLIL Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT website. For complete details about the SLIL program and endorsement requirements, see the ILT website at www.ucdenver.edu/education/schoollibrary.

Undergraduate Certificate Programs

Applied German Language Skills Undergraduate Certificate

Certificate Description

The undergraduate certificate in applied German language skills is designed for students of any discipline who wish to acquire and demonstrate to potential employers that they possess a fluid working knowledge of the German language and understanding of the cultures in which German is spoken. The completion of the requirements for this certificate can also serve as a means for nondegree-seeking professionals to develop a working competency in the German language and culture for use in such areas as international business, education, genealogy, transatlantic travel, academic research, translation and many other fields.

Admission

All currently enrolled students at CU Denver (undergraduate or graduate) in good standing (including nondegree-seeking students) are eligible for admission into the program. Any student who already possesses an undergraduate degree is also qualified for admission into the program, but must apply to the university as a nondegree-seeking student. Students working toward a baccalaureate degree who are currently enrolled in a college-level institution other than UC Denver are also eligible for certification.

Course Requirements

Twenty-four (24) semester hours of course work with CU Denver faculty (15 of which must be upper division), distributed as follows:

German Language Skills (15 credit hours): Students must complete a minimum of 15 semester credit hours of upper-division German language skills courses. These courses are defined as those areas of study in which grammar, vocabulary, pronunciation and/or communicative abilities in German are the primary focus of instruction. Up to six credit hours of upper-division German skills courses may be applied as transfer credit from outside, college-level institutions. Alternately, students may apply up to nine credit hours of officially recognized study abroad credit toward this requirement.

German Culture (9 credit hours): Students must complete a minimum of nine semester credit hours of German culture courses where the primary focus of instruction addresses any facet of Austrian, German and/or Swiss culture. These courses may be completed at any level (lower or upper division as well as graduate) and in any combination of disciplines, provided that the student supplies evidence that a significant

portion of each course is devoted to Austrian, German and/or Swiss culture. This includes but is not limited to history, philosophy, political science, literature (in German or in translation) and other German cultural topics. Up to three credit hours of culture courses may be applied as transfer credit from outside, college-level institutions. Alternately, students may apply up to six credit hours of officially recognized, documented university-level course work (or the equivalent) in a German-speaking country.

Proficiency Exam: Successful completion of an internationally recognized German language proficiency exam. At any point prior to the awarding of the certificate, students must submit documentation that they have passed an internationally recognized German language skills examination. Such proficiency exams (some of which are administered locally in Denver and Boulder) include but are not limited to the TestDaF (Test Deutsch als Fremdsprache), Zertifikat Deutsch (ZD), Zertifikat Deutsch für den Beruf (ZDfB) or Prüfung Wirtschaftsdeutsch (PWD). Students must receive approval from German faculty at CU Denver to ensure that their exam scores are valid and applicable toward certification.

Students must obtain approval from CU Denver German faculty for all of the above and maintain a minimum 3.0 GPA in all course work applied to the certificate.

Transfer Credit

A significant portion of the certificate program is based on language proficiency. Consequently, students who have developed language skills through course work at institutions outside of CU Denver, including study abroad, may apply a limited number of previously earned semester hours toward the program. Please make an appointment with an advisor in the department to discuss details. All transfer credits must be approved by CU Denver German faculty.

Application of Course Work

The course work applied toward certification is meant as a proficiency requirement and not as a total semester hour amount. As a result, students who are working toward a degree may apply course work in German certification as credit toward other programs such as a minor, general education requirements or their major. Students are encouraged to inform their major advisor that they are working toward certification in German for help in coordinating their overall academic curriculum.

Further Information

Students are encouraged to hold a personal conference with a departmental advisor before applying to the certificate program. Phone 303-556-4893 for contact information.

Applied Statistics Undergraduate Certificate

Coordinator: Stephanie Santorico:
Telephone: 303-556-2547
E-mail: Stephanie.Santorico@ucdenver.edu
Web site:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/math/program_info/statisticscertificate/Pages/UndergraduteStatsCertificate.aspx

Entrance Requirements

All undergraduate students in good standing (including non-degree seeking students) will be admitted to the program. For students in the College of Liberal Arts and Sciences, this requires a cumulative grade point average of 2.0 or above. Some mathematical background (including calculus and linear algebra) is recommended.

To apply, see Undergraduate Applied Statistics Certificate Application

Curriculum

There are three parts to the requirements:

Required Courses

MATH 2830 - Introductory Statistics **gtPATHWAYS:** GT-MA1

Basic Methods (choose one):
MATH 4820 - Statistics **gtPATHWAYS:**

MATH 4830 - Applied Statistics **gtPATHWAYS:**

Advanced Methods (choose one):
MATH 4387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**

MATH 4394 - Experimental Designs **gtPATHWAYS:**

Total: 9 Hours

Elective (choose one):

MATH 4101 - Applied Statistics Using SAS and SPSS I **gtPATHWAYS:**

or any statistics course in the math department at the 4000 level or higher

ECON 4150 - Economic Forecasting **gtPATHWAYS:**

ECON 4811 - Introduction to Econometrics **gtPATHWAYS:**

GEOG 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

GEOL 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

SOCY 5183 - Seminar: Quantitative Data Analysis **gtPATHWAYS:**

Equivalent course pre-approved by the certificate coordinator

Total: 3 Hours

Project (1 Hour)

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 4840 (Independent Study) or in an equivalent course pre-approved by the certificate coordinator.

Certificate Total: 13 Hours

Grade Requirements

Students must maintain a 3.0 GPA or above in these courses with no credit given for courses with grades below *B*-.

Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

Biotechnology Certificate

To serve the needs of students who wish to obtain recognition for the acquisition of specialized skills in biology and to prepare students for graduate school, health careers

and jobs in industry, the Department of Integrative Biology offers a certificate program in biotechnology. Upon completion of the required courses (21 to 22 semester hours), including independent study or internship, the student will be awarded a certificate and have the biotechnology certificate noted on their transcript. The certificate may be completed in addition to an undergraduate or graduate degree or as a stand-alone certificate. Click on Biotechnology Certificate for a complete description.

Cultural Diversity Studies Undergraduate Certificate

The undergraduate certificate in cultural diversity studies is designed to appeal to undergraduate students with a background in any major. It will allow students to demonstrate to potential employers that they possess the multicultural skills and knowledge necessary to succeed in the workplace. Students will enroll in department courses that focus on the historical context in which race and culture have emerged in the United States.

This certificate is also targeted to nondegree-seeking professionals who seek to acquire multicultural knowledge and the skills necessary to ensure their success in professional environments. Students will be encouraged to think critically about race and race relations. Their expanded understandings of the implications of race and culture in work environments will ensure employers that they offer the highest quality employees opportunities in employment or advancement.

A certificate in cultural diversity studies offers students an enduring intellectual value based on classic articles, book excerpts and scholars who have shaped the study and understanding of race and ethnicity in contemporary society. Our courses provide the opportunity for students to encounter many of the greatest thinkers in race and ethnicity firsthand. Course curriculum includes carefully edited selections from the works of the most distinguished observers of race and ethnicity, past and present. Students will appreciate the broad range of coverage, the logic of course organization and the accessibility of material covered.

The undergraduate certificate in cultural diversity studies requires 12 semester hours (four courses).

Certificate Requirements

Required Course

ETST 2000 - Introduction to Ethnic Studies **gtPATHWAYS:** GT-SS3

Total: 3 Hours

Electives

Choose three courses from any ethnic studies department courses, including the following:

ETST 2155 - African American History **gtPATHWAYS:** GT-HI1

ETST 2294 - Race and the Media **gtPATHWAYS:**

ETST 3254 - Race and Ethnicity in the Inner City **gtPATHWAYS:**

ETST 3297 - Social History of Asian Americans **gtPATHWAYS:**

ETST 3396 - History of the American Indian **gtPATHWAYS:**

ETST 3704 - Culture, Racism and Alienation **gtPATHWAYS:**

ETST 4558 - Chicano and Latino Politics **gtPATHWAYS:**

Total: 9 Hours

Certificate Total: 12 Hours

There are crosslisted courses in a variety of departments, including history, political science and sociology. Any crosslisted course is acceptable. You must register for it under ETST numbers. A complete listing of department offerings and crosslisted courses can be obtained every semester from the ethnic studies department web page or by calling our office at 303-315-3616 for a copy.

A minimum grade of *B-* must be earned in each of the four courses completed as part of the certificate. All credits for the certificate must be earned at CU Denver.

Additional information about the undergraduate certificate in cultural diversity studies may be obtained from ethnic studies Director Donna Langston, Lawrence Street Center, 480, 303-315-3616, Donna.Langston@ucdenver.edu.

Ethics Undergraduate Certificate

The certificate in ethics is designed for students currently enrolled in a degree program as well as nondegree students.

A total of 15 semester hours is required for an ethics certificate. Students are required to write a capstone paper in an area of ethics directly related to their career and/or field of study (PHIL 3840).

Certificate Requirements

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community
gtPATHWAYS: GT-AH3

Choose four:

PHIL 3002 - Ancient Greek Philosophy **gtPATHWAYS:**

PHIL 3150 - History of Ethics **gtPATHWAYS:**

PHIL 3200 - Social and Political Philosophy **gtPATHWAYS:**

PHIL 3250 - Business Ethics **gtPATHWAYS:**

PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**

PHIL 3840 - Independent Study **gtPATHWAYS:**

PHIL 4150 - Twentieth Century Ethics **gtPATHWAYS:**

PHIL 4242 - Bioethics **gtPATHWAYS:**

Certificate Total: 15 Hours

Geographic Information Science Undergraduate Certificate

GISci Certificate Advisor: Rafael Moreno

Office: North Classroom, 3524

Telephone: 303-352-3762

E-mail: rafael.moreno@ucdenver.edu

The intention of this certificate is to provide undergraduates with a mechanism for demonstrating capabilities in spatial techniques in the social and/or physical sciences.

The focus of this certificate is on a broad array of geotechniques, including geographic information systems, remote sensing, cartography and statistics, which give students additional analytical skills to take into the workplace or on to graduate school. This certificate is designed for geography majors as well as nonmajors.

Upon successful completion of the certificate, students will be able to:

- understand basic theoretical underpinnings of spatial analysis
- apply geo-spatial technologies to real-world problems
- have a basic knowledge of how to operate at least three types of software used for spatial analysis

Students must have a 3.0 GPA in all approved geographic technology courses to earn the certificate. The certificate will be awarded when the student graduates with the bachelor's degree. For those who already have a bachelor's degree, the certificate will be awarded upon completion of the program.

Application

Students may begin the program in any semester or during the summer by making arrangements with Dr. Rafael Moreno, the GISci certificate coordinator, and completing and signing the **Application for GISci Certificate .** This should be done once you have elected to pursue the certificate. Those who are not current students must apply for non-degree admission (go to Information for Undergraduate Students and click on Nondegree Students link at top of page) before registering for any classes.

Curriculum

To obtain the certificate, students must complete four core courses, one elective, and a 1-hour independent study, totaling 16 hours. Although the four core courses may be taken in any order, it is advisable to begin with GEOG 4081/5081, Introduction to Cartography and Computer Mapping, since this course familiarizes students with many key concepts used in the other classes. Of the four core requirements, only the statistics class has prerequisites, including algebra and introductory calculus. Because of the technical nature of the GIS and remote sensing course work, however, some mathematical experience is desirable prior to beginning the program. All core courses are offered on a yearly basis. Any alterations to the program MUST be approved by the GISci Coordinator.

Course Requirements

Core Courses:

GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**

-OR- GEOG 5081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**

-OR- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing **gtPATHWAYS:**

(May also take as GEOL 4060 or 5060)

GEOG 4080 - Introduction to GIS **gtPATHWAYS:**

-OR- GEOG 5080 - Introduction to GIS **gtPATHWAYS:**

GEOL 4770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

-OR- GEOL 5770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

OR equivalent course approved by the GISci Certificate Coordinator

Total: 12 Hours

Lab Requirement (to be taken at the end of the program):

Independent Study in GEOG or GEOL with a geographic technology professor (Moreno, Thomas, Wyckoff, or instructor approved by GISci coordinator). The independent project must also demonstrate a proficiency in GIS in the student's area of interest (1 credit hour) **or** take CVEN 5386. GIS Laboratory (3 credit hours). See below for course numbers/descriptions.

GEOG 4840 - Independent Study: GEOG **gtPATHWAYS:**

GEOL 4840 - Independent Study: GEOL **gtPATHWAYS:**

CVEN 5386 - GIS Laboratory **gtPATHWAYS:**

Total: 1-3 Hours

Elective (choose one from the following):

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**

-OR- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing **gtPATHWAYS:**

(May also take as GEOL 4070 or 5070)

GEOG 4081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**

-OR- GEOG 5081 - Introduction to Cartography and Computer Mapping **gtPATHWAYS:**

GEOG 4085 - GIS Applications for the Urban Environment **gtPATHWAYS:**

-OR- GEOG 5085 - GIS Applications for the Urban Environment **gtPATHWAYS:**

GEOG 4090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**

-OR- GEOG 5090 - Environmental Modeling with Geographic Information Systems **gtPATHWAYS:**

GEOG 4095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**

-OR- GEOG 5095 - Deploying GIS Functionality on the Web **gtPATHWAYS:**

GEOG 4235 - GIS Applications in the Health Sciences **gtPATHWAYS:**

-OR- GEOG 5235 - GIS Applications in the Health Sciences **gtPATHWAYS:**

CVEN 5382 - GIS Spatial Database Development **gtPATHWAYS:**

CVEN 5385 - GIS Relational Database Systems **gtPATHWAYS:**

OR an elective approved by the GISci Certificate Coordinator.

Total: 3 Hours

Certificate Total: 16-18 Hours

Mediation Undergraduate Certificate

Mediation entails a third-party intervention designed to assist parties in managing conflict. Trained mediators are impartial process experts who learn to utilize communication and conflict philosophy and theories to increase the probability of more favorable outcomes between parties in conflict. The undergraduate certificate is designed for communication majors or any student interested in developing practical skills in alternative dispute resolution. The courses in this certificate focus on alternative dispute processes that include strategies for managing conflict in personal, public, legal, political, governmental and corporate contexts.

Certificate Requirements

The undergraduate certificate in mediation requires 12 semester hours (four courses).

Core Courses

Students take three core courses:

COMM 4262 - Mediation **gtPATHWAYS:**

COMM 4255 - Negotiations and Bargaining **gtPATHWAYS:**

COMM 4260 - Communication and Conflict **gtPATHWAYS:**

Total: 9 Hours

Elective

Stuudents take one elective chosen from:

COMM 4140 - Argumentation **gtPATHWAYS:**

COMM 4282 - Environmental Communication **gtPATHWAYS:**

COMM 4681 - Communication Issues in Trial Court Practices and Processes **gtPATHWAYS:**

Total: 3 Hours

Certificate Total: 12 Hours

Students may be allowed to take courses other than those on this list to fulfill the requirements for the certificate, if those courses better fit their professional goals.

Public Relations Undergraduate Certificate

Public relations has been defined as the management function that entails planning, research, publicity, promotion and collaborative decision-making to help any organization’s ability to listen to, appreciate and respond appropriately to those persons and groups whose mutually beneficial relationships the organization needs to foster as it strives to achieve its mission and vision. The undergraduate certificate in public relations

is designed for undergraduate communication majors who wish to demonstrate to potential employers that they possess skills and knowledge in the area of public relations. It also is useful for non-degree-seeking working professionals without bachelor's degrees who plan to enter or re-enter the workplace and who seek to acquire the skills and knowledge necessary to perform public relations in their professional environments.

Certificate Requirements

The undergraduate certificate in public relations requires 12 semester hours (four courses). Students must complete the following three courses:

COMM 4635 - Principles of Public Relations **gtPATHWAYS:**

COMM 4640 - Advanced Public Relations **gtPATHWAYS:**

COMM 4665 - Principles of Advertising **gtPATHWAYS:**

Additionally, students choose one course from the following:

COMM 3680 - Mass Communication Skills **gtPATHWAYS:**

COMM 4240 - Organizational Communication **gtPATHWAYS:**

Total: 12 Hours

Students may be permitted to take courses other than those listed above to fulfill the requirements for the certificate if those courses fit their professional goals better (CMMU 4635, Principles of Public Relations may not be substituted, however). Requests for approval of substitute courses, including an explanation for the substitution, must be made in writing to Hamilton Bean.

Grade and Residency Requirements

A grade of *B* must be earned in each course completed as part of the certificate. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures and Additional Information

Students should apply for the undergraduate certificate in public relations after the completion of the required courses. To apply, students must complete the certificate application and return it to Dr. Hamilton Bean in his mailbox in room 102-A of the Plaza Building or mail to Department of Communication; P. O. Box 173364, Campus Box 176;

University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student.

Students who are not already enrolled at CU Denver must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions in the annex of the CU Building.

Additional information about the undergraduate certificate in public relations may be obtained from Dr. Hamilton Bean, Department of Communication, Plaza 102-V, 303-352-3876, Hamilton.Bean@ucdenver.edu.

Scientific Foundations of Technical Innovation Certificate

The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects—one for a client and one for the student's own pursuits—are combined with a series of six short courses to provide both context and substance for gaining knowledge needed to create technical prototypes. The model is based on the method by which most physical science graduate students learn technical domains on a "just-in-time" basis. It is also a method by which many corporations quickly bring new project team members up to speed on project knowledge. Entry into the certificate program requires prior completion of two semesters of calculus-based physics and two semesters of calculus **or** permission of the certificate advisor.

Undergraduate required courses

PHYS 4850 - Physics for Design and Innovation I **gtPATHWAYS:**

PHYS 4400 - Topics in Scientific Instrumentation and Laboratory Methods **gtPATHWAYS:**

Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor

PHYS 4852 - Physics for Design and Innovation II **gtPATHWAYS:**

Total: 12 Hours

Graduate required courses

Graduate versions of the courses (5000-level) require an undergraduate degree and additional work on technical analysis or connection to professional practice.

PHYS 5850 - Physics for Design and Innovation I **gtPATHWAYS:**

PHYS 5400 - Topics in Scientific Instrumentation and Laboratory Methods **gtPATHWAYS:**

Choose six 1-semester-hour short courses out of a larger list of offered topics; the specific sequence must be approved by the certificate advisor.

PHYS 5852 - Physics for Design and Innovation II **gtPATHWAYS:**

Total: 12 Hours

Technical and Professional Communication Undergraduate Certificate

The undergraduate certificate in technical and professional communication is designed for several types of students:

working adults who are employed or who are seeking employment in the field of technical communication but who are not seeking an undergraduate degree

students who are majoring in communication and want to enhance their technical communication abilities

students pursuing a major other than communication who want to enhance their technical communication abilities

Students enrolled in this certificate receive state-of-the-art training in core professional skills, including technical writing, technical editing and web design. The certificate is especially helpful for those who plan to enter (or re-enter) the workplace and who want to acquire the knowledge and skills necessary to contribute to technical documentation projects.

Certificate Requirements

The undergraduate certificate in technical and professional communication requires 12 semester hours (four courses), as follows:

Required Core

COMM 3120 - Technical Communication **gtPATHWAYS:**

Electives

Students must complete any three of the following courses:

COMM 4120 - Writing Technical Reports **gtPATHWAYS:**

COMM 4290 - Web Design **gtPATHWAYS:**

COMM 4300 - Multimedia Authoring **gtPATHWAYS:**

COMM 4410 - Science Writing **gtPATHWAYS:**

COMM 4805 - Graphics **gtPATHWAYS:**

Total: 12 Hours

Grade and Residency Requirements

A grade of *B* or higher must be earned in each course completed as part of the Certificate (a grade of *B*-is not acceptable). All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures

Students should apply for the undergraduate certificate in technical and professional communication **after the completion of the required courses.** To apply, students must complete the certificate application.

The form should be returned to Jim Stratman, located in the Plaza Building, room 102-F, or put in his mailbox in room PL 102-A, or mailed to him at the Communication Department; Campus Box 176, P. O. Box 173364; Denver, CO 80217-3364. Once the certificate is processed, it will be mailed to the student unless other arrangements have been made by the student to pick up the certificate from the program assistant in PL 102C.

Students need to be registered at the University of Colorado Denver as full-time students, part-time students or as non-degree students in order to register for these classes. To apply as a non-degree student, fill out the Application for Non-Degree Admission. Return the form, along with your fee, to the Office of Admissions in the Annex of the CU Building, located at the corner of 14th and Larimer.

Additional Information

Additional information about the undergraduate certificate in technical and professional communication may be obtained from the director of the technical communication program, Jim Stratman, Department of Communication, Plaza Building, room 102-F, 303-556-2884, James.Stratman@ucdenver.edu

Graduate Certificate Programs

Applied Statistics Graduate Certificate

Coordinator: Stephanie Santorico:
Telephone: 303-556-2547
E-mail: Stephanie.Santorico@ucdenver.edu
Web site:
http://www.ucdenver.edu/academics/colleges/CLAS/Departments/math/program_info/statisticscertificate/Pages/GraduateStatisticsCertificate.aspx

Entrance Requirements

Students are expected to have a bachelor's degree and be admitted to the graduate school as either a degree-seeking or non-degree seeking student. Students are expected to have completed an introductory statistics course (such as MATH 2830 or the equivalent) or an introductory course in probability. At least one semester of calculus and a course containing linear algebra are also recommended.

To apply, see Graduate Applied Statistics Certificate Application

Curriculum

There are three parts to the requirements:

Required Courses

Basic methods (choose one):
MATH 4820 - Statistics **gtPATHWAYS:**

-OR- MATH 4830 - Applied Statistics **gtPATHWAYS:**

-OR- MATH 5320 - Statistics **gtPATHWAYS:**

Advanced methods (choose two):

MATH 5387 - Regression Analysis, Modeling and Time Series **gtPATHWAYS:**

-AND/OR- MATH 5394 - Experimental Designs **gtPATHWAYS:**

-AND/OR- MATH 6360 - Exploratory Data Analysis **gtPATHWAYS:**

Total: 9 Hours

Elective (choose one):

Any statistics course in the math department at the 5000 level or higher

ECON 5150 - Economic Forecasting **gtPATHWAYS:**

ECON 5813 - Econometrics I **gtPATHWAYS:**

ECON 5823 - Econometrics II **gtPATHWAYS:**

ENVS 5600 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

GEOL 5770 - Applied Statistics for the Natural Sciences **gtPATHWAYS:**

PSYC 7713 - Advanced Statistics **gtPATHWAYS:**

SOCY 5183 - Seminar: Quantitative Data Analysis **gtPATHWAYS:**

Equivalent course pre-approved by the certificate coordinator

Total: 3 Hours

Project (1 Hour)

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 5840 (Independent Study) or in an equivalent course preapproved by the certificate coordinator.

Certificate Total: 13 Hours

Grade Requirements

Students must maintain a 3.0 GPA or above in these courses with no credit given for courses with grades below *B*-.

Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

Content Instruction for English Learners (CIEL) Graduate Certificate

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life.

As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement**	**MA and CDE Endorsement**	**CDE Endorsement**	**MA and CDE Endorsement in LDE**	**TESOL Certificat**

	t in LDE	**in LDE**	**in LDE Only**	*(when added to UC Denver's graduate teacher education licensure program)*	**e**
CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
CLDE 5030 - Language/Literac	Required	Required	Required	Required	Required

y Acquisition Part I					
CLDE 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second Language Learners	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826

CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	

LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Culturally Responsive Urban Education (CRUE) Graduate Certificate

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and

teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate*	**TESOL Certificate**

				teacher education licensure program)	
CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English	Required	Required	Required	Required	Required

as a Second Language					
CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second Language Learners	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Design Build Graduate Certificate

Contact: Erik (Rick) Sommerfeld
Telephone: 303-556-6160
E-mail: sommere@colorado.edu

The College of Architecture and Planning offers a graduate certificate in the emerging area of design build as an extension of the MArch program. The certificate course work totals 18 credit hours and emphasizes design build from the designer's point of view.

Certificate Requirements

Five courses totaling 18 semester hours can be applied to the MArch graduation requirements:

ARCH 6370 - Introduction To Design Build **gtPATHWAYS:**

ARCH 6471 - Managing Quality & Risks **gtPATHWAYS:**

ARCH 6472 - Architecture in a Single Source Project Delivery **gtPATHWAYS:**

ARCH 6373 - Construction in Design Build **gtPATHWAYS:**

ARCH 6170 - Advanced Design Studio **gtPATHWAYS:**

taken with
ARCH 6171 - Advanced Design Seminar **gtPATHWAYS:**

Total: 18 Hours

Designing E-learning Environments Graduate Certificate

The DeE certificate is an 15-semester-hour program offered entirely online that focuses specifically on the skills needed to design and facilitate online learning opportunities for learners in K–12, higher education and corporate settings. This program is perfect for educators who are not interested in a graduate degree. More information is available at www.ucdenver.edu/academics/colleges/SchoolOfEducation/Academics/MASTERS/ILT/Pages/eLearning.aspx.

Sample plan for eLearning Certificate

Year 1
Fall: INTE 5660 - Designing and Teaching in eLearning Environments

Spring: INTE 5670 - Developing eLearning Instruction
Summer: INTE 5680 - Integrating Media in eLearning Environments

Comprehensive Examination for All ILT Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester.

For more information or for complete details about ILT programs, see the ILT website.

Digital Storytelling Graduate Certificate

A 9-semester-hour certificate in digital storytelling includes face-to-face workshops as well as a 4-semester-hour online course. Participants develop digital stories using nonlinear video editing programs and other presentation tools. They learn to integrate digital storytelling methods into existing courses and curricula for all ages.

Domestic Violence Graduate Certificate

Certificate Requirements

Students take the four specified courses below and one elective.

PUAD 5910 - Women and Violence: A Sociological Perspective **gtPATHWAYS:**

PUAD 5920 - Psychology of Violence Against Women **gtPATHWAYS:**

PUAD 5930 - Battered Women and the Legal System **gtPATHWAYS:**

PUAD 5940 - Domestic Violence Social Change and Advocacy **gtPATHWAYS:**

Total: 15 Hours

Early and Adolescent Literacy Certificates

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Websites: www.ucdenver.edu/education/literacy and
www.ucdenver.edu/education/englished

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (LLCRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LLCRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. This program is a credentialed program meeting the Colorado Department of Education requirements for the reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed University of Colorado Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)		
	ELEMENTARY (K-6)	**SECONDARY (7-12)**

Course	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**	**MA & CDE Endorsement**	**MA & CDE Endorsement** *(when added to UC Denver's graduate teacher education licensure program)*	**CDE Endorsement Only**
LCRT 5020 - Workshop in Literacy and Language Teaching	Required		Required	Required	Required	Required
LCRT 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LCRT 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LCRT 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LCRT 5720 - Writing: Process,	Required	Required	Required	Required	Required	Required

Developme nt, and Teaching Grades 3-12						
LCRT 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LCRT 5201 - Adolescent Literature				Required	Required *(waived if taken as part of English Licensure)*	Required
LCRT 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LCRT 5055 - Linking Assessment	Required	Required	Required	Required	Required	Required

and Instruction in Language and Literacy, Part I						
LCRT 6915 - Seminar and Practicum in Literacy Professional Development	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations.

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

30 graduate semester hours in English education

6 graduate semester hours of core courses

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy Semester Hours: 3
LCRT 5201 - Adolescent Literature Semester Hours: 3
LCRT 5200 - Theory and Methods of English Education Semester Hours: 3
-OR-
LCRT 5835 - Special Topics: Literacy and Language Semester Hours: 3

LCRT 5810 - Wksp: Lang Acq & Development Semester Hours: 3
LCRT 5010 - Foundations of Language Semester Hours: 3
LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3
Research and Evaluation Methodology core course (see list below).
Interdisciplinary core course (see list below).
Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 36 semester hours

Program Requirements--When Added to CU Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to CU Denver's graduate teacher education licensure program:

18 graduate semester hours

performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3
-OR-
SPED 5300 - Collaborating in Schools and Communities Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:
LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3
-OR-
ENGL 5110 - Denver Writing Project Semester Hours: 3
Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.
Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3
RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3

RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America Semester Hours: 3
LCRT 5140 - Multicultural Education Semester Hours: 3
LCRT 5150 - Culture of the Classroom Semester Hours: 3
CLDE 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certficate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

Emergency Management and Homeland Security Graduate Certificate

Certificate Requirements

Students take two required courses as well as three elective courses approved by their advisor. The emergency eanagement and homeland security concentration/certificate allows students to choose electives organized in the following tracks: policy and management, spatial analysis and quantitative assessment, public safety, homeland security and justice or public and environmental health. Students may choose courses in one track to create a more focused concentration or pick from among the tracks to fulfill their elective course requirements.

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment **gtPATHWAYS:**

PUAD 5650 - Disaster and Emergency Management Policies **gtPATHWAYS:**

Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

The emergency management and homeland security certificate requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy

and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

Environmental Policy, Management and Law Graduate Certificate

Certificate Requirements

Students take at least two of the three courses listed below:

PUAD 5631 - Seminar in Environmental Politics and Policy **gtPATHWAYS:**

PUAD 5632 - Seminar in Environmental Management **gtPATHWAYS:**

PUAD 5633 - Seminar in Natural Resource and Environmental Health Law **gtPATHWAYS:**

Total: 15 Hours

Environmental Sciences Graduate Certificate

The graduate-level certificate in environmental sciences has seven options: air quality, ecosystems, environmental health, environmental science education, geospatial analysis, hazardous waste and water quality. Each option comprises four courses and is designed to approach an environmental issue from various disciplines. To earn a certificate, students are required to satisfactorily complete the courses in the option of their interest. These courses may be taken as electives within an MS degree program or through nondegree admission. Students must have the prerequisites for each course and must meet the requirements listed. Contact the option advisor for the particular option of interest before starting. A certificate will be issued upon proof of satisfactory completion of the courses. For an MS degree, students must coordinate the option courses with electives in their program. The listings of courses in each option are in the electives section of the master's program information.

Geographic Information Systems Graduate Certificate

This certificate is for students who want to get a taste of the geographic information systems (GIS) specialty area before applying for a graduate degree and for professionals who need a working knowledge of GIS. To earn the certificate in GIS, students must complete four of the core GIS classes, equaling 12 semester hours of work. Students can complete this certificate as a master's student or as a nondegree student. Students must already have a baccalaureate degree and must complete any course-specific prerequisites.

Geospatial Information Science Graduate Certificate

Contact: Brian Muller
Telephone: 303-315-2421
E-mail: brian.muller@ucdenver.edu

The College of Architecture and Planning offers a certificate in geospatial information science through participating departments. The emphasis of this certificate is on applications of GIS in urban and environmental planning and design fields. The certificate is available to any student earning one of our graduate degrees; to students earning cognate degrees, for example in the School of Public Affairs, College of Engineering and Applied Science or from the Department of Geography; and to nondegree students who have already earned such a degree.

Certificate Requirements

A minimum of 18 semester hours (with at least 12 related planning and design hours to be earned in residence at UC Denver or University of Colorado at Boulder);

A minimum B (3.0) average and a minimum grade of B- (2.7) in any course, as outlined in the certificate curriculum:

One required introductory class: Introduction to GIS (both theory and methods) (3 semester hours)

At least three additional courses in GIS or remote sensing methods to be approved in advance by the GIS committee (9 semester hours). Such courses may include:

Cartography (Boulder and Denver, geography)

GIS Analysis (Denver, civil engineering)

GIS II (Boulder, geography)

Advanced GIS Workshops (Boulder and Denver, multiple departments)

GIS Management (Denver, civil engineering)

Quantitative Methods in Geography (Boulder, geography)

Remote Sensing (Boulder and Denver, multiple departments)

Applications Option 1: Studio or thesis project involving application of planning and design GIS-based methods to be approved by the faculty GIS committee (6 semester hours)

Applications Option 2: Internship or other work experience is strongly encouraged for all students and may at the discretion of the committee be substituted for other courses (6 semester hours)

It is not possible or desirable to specify every course that should count toward a certificate. CAP and other participating programs will continue to generate new GIS-related courses as the curriculum evolves, and CAP delivers much of its instruction through studio courses that vary in content each semester. A certificate program must include an ongoing structure for managing course requirements and determining when individual students have met them.

Local Government Graduate Certificate

Certificate Requirements

Students take at least two of the three courses listed below:

PUAD 5625 - Local Government Management **gtPATHWAYS:**

PUAD 5626 - Local Government Politics and Policy **gtPATHWAYS:**

PUAD 5628 - Urban Social Problems **gtPATHWAYS:**

Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Nonprofit Management Graduate Certificate

Certificate Requirements

Students take two required courses as well as electives approved by advisor.

PUAD 5110 - Seminar in Nonprofit Management **gtPATHWAYS:**

PUAD 5140 - Nonprofit Financial Management **gtPATHWAYS:**

Additional electives (3): **Semester Hours:** 9

Total: 15 Hours

Public Relations Graduate Certificate

Public Relations has been defined as the management function that entails planning, research, publicity, promotion and collaborative decision-making to help any organization's ability to listen to, appreciate and respond appropriately to those persons and groups whose mutually beneficial relationships the organization needs to foster as it strives to achieve its mission and vision. The graduate certificate in public relations is designed to provide students with the principles and theories that guide the work of public relations practitioners in commercial, public and non-profit contexts.

The graduate certificate in public relations is designed for working professionals who already have earned bachelor's degrees but who would like to enhance or upgrade their skills in the area of public relations. Non-degree students who enroll in the MA program following completion of the certificate may transfer up to 12 hours of credits earned for the certificate into credits for the MA degree. The certificate also is designed for students enrolled in a CU Denver master's program, including the Department of Communication's MA program. For such students, the certificate can be completed as part of or in addition to the course work required for the master's degree (recipients of the undergraduate certificate in public relations are ineligible to complete this certificate).

Certificate Requirements

The graduate certificate in public relations requires four courses (12 semester hours):

COMM 5240 - Organizational Communication **gtPATHWAYS:**

COMM 5635 - Principles of Public Relations **gtPATHWAYS:**

COMM 5640 - Advanced Public Relations **gtPATHWAYS:**

COMM 5665 - Principles of Advertising **gtPATHWAYS:**

Total: 12 Hours

Students may be permitted to take courses other than those listed above to fulfill the requirements for the certificate if those courses fit their professional goals better (CMMU 5635, Principles of Public Relations may not be substituted, however). Requests for approval of substitute courses, including an explanation for the substitution, must be made in writing to Hamilton Bean.

Grade and Residency Requirements

A grade of *B* must be earned in each course completed as part of the certificate. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures and Additional Information

Students should apply for the graduate certificate in public relations after the completion of the required courses. To apply, students must complete the certificate application and return it to Dr. Hamilton Bean in his mailbox in room 102-A of the Plaza Building or mail to Department of Communication; P. O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student.

Students who are not already enrolled at CU Denver must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions in the annex of the CU Building.

Additional information about the graduate certificate in public relations may be obtained from Dr. Hamilton Bean, Department of Communication, Plaza 102-V, 303-352-3876, Hamilton.Bean@ucdenver.edu.

Sustainable Urban Infrastructure Graduate Certificate

This certificate is for students and working professionals who seek an interdisciplinary curriculum in the broad field of sustainable infrastructure to address complex water,

energy, built environment and transportation challenges using engineering and social science strategies. Students must already have a baccalaureate degree.

Teaching English to Speakers of Other Languages (TESOL) Graduate Certificate

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—“home” literacies, school literacy, “mainstream” literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one’s life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in CU Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and

teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	**MA without CDE Endorsement in LDE**	**MA and CDE Endorsement in LDE**	**CDE Endorsement in LDE Only**	**MA and CDE Endorsement in LDE** *(when added to UC Denver's graduate*	**TESOL Certificate**

				teacher education licensure program)	
CLDE 5010 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LCRT 5140 or CLDE 5140 - Multicultural Education LCRT 5150 or CLDE 5150 - Culture of the Classroom CLDE 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
CLDE 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
CLDE 5820 - Techniques in Teaching English	Required	Required	Required	Required	Required

as a Second Language					
CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
One course from field-based teaching options: LCRT 5020 - Workshop in Literacy and Language Teaching CLDE 5825 - Methods and Materials of Language Teaching CLDE 5826 - Language Teaching Lab LCRT 5730 - Language and Literacy Across the Curriculum LCRT 5770 - Effective Literacy Instruction for Second Language Learners	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826
CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

CLDE 5030 - Language/Literacy Acquisition Part I Semester Hours: 3
-OR-
CLDE 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction Semester Hours: 3
-OR-
CLDE 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3
-OR-
CLDE 5825 - Methods and Materials of Language Teaching Semester Hours: 3
-OR-
CLDE 5826 - Language Teaching Lab Semester Hours: 3

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

CLDE 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

CLDE 5180 - Working with Communities and Families Semester Hours: 3

CLDE 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the website at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education (some courses are offered only once per year).

Active Status

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to submit readmission materials.

Teaching of English to Speakers of Other Languages (CTESOL)

Program Description

To meet the increasing needs of individuals seeking advanced training in teaching English as a second language, the English department at CU Denver offers a graduate certificate in the teaching of English to speakers of other languages (CTESOL).

The certificate program is designed to build the necessary skills to teach English as a second language through focused preparation. It is primarily aimed at native speakers of English who want to teach overseas, but may serve the needs of international students wanting to teach English in their home country or other countries.

Upon successful completion of the program, CTESOL participants will be able to:

Discuss the theoretical basis of second language instruction

Demonstrate a variety of effective ESL teaching techniques

Explain, in pedagogically relevant ways, the linguistic structures of the English language

Curriculum

The curriculum consists of 12 semester hours (9 semester hours of required courses, and three semester hours of electives). The required courses must be taken at CU Denver. A GPA of 3.0 or better is required for all graduate courses.

Required Courses

ENGL 5171 - Language Theory **gtPATHWAYS:**

ENGL 5601 - Principles and Practices of Second Language Acquisition **gtPATHWAYS:**

ENGL 5651 - Second Language Writing **gtPATHWAYS:**

Total: 9 Hours

Elective Courses

ENGL 5093 - Teaching of Writing **gtPATHWAYS:**

or an alternative elective approved by the program advisor

Total: 3 Hours

Total: 12 Hours

Additional Information

LENGTH OF TIME
The course of study will typically last one academic year, including the summer session.

WHEN YOU MAY BEGIN
You may begin in any semester. There is no fixed deadline for application for admission.

PREREQUISITES

All applicants must have a bachelor's degree or the equivalent, with a 3.0 GPA, to be accepted to the program. Graduate students at CU Denver will also be permitted to apply for the certificate while they are concurrently completing another graduate degree. Permission may not be granted to graduate students in applied linguistics.

Non-native speakers of English are required to submit an official TOEFL (Test of English as a Foreign Language) report showing a score of at least 580. Those who score below 580 but above 525 on the TOEFL may be admitted conditionally to the program. Under these conditions, students will have their English language skills assessed by the faculty of the program immediately after they arrive on campus to determine whether further courses are needed to develop English language proficiency. After assessment, the students may be assigned to full-time language study in an intensive English program, permitted to take graduate-level classes on a conditional basis along with further designated language study or permitted to begin graduate study without further restrictions.

CONTACT INFORMATION
Hongguang (Ian) Ying, Associate Professor
Office: 1050 Ninth Street Park, Room 100
Phone: 303-556-6728
E-mail: Hongguang.Ying@ucdenver.edu

Water Resources Graduate Certificate

This certificate is for graduate students who seek an interdisciplinary curriculum in the field of hydrologic and hydraulic engineering to analyze water-related problems and obtain knowledge pertaining to watershed hydrology, groundwater modeling, urban

storm water management, flood mitigation and river mechanics. Students must already have a baccalaureate degree

Women's and Gender Studies Graduate Certificate

The women’s and gender studies certificate is administered through the Women’s and Gender Studies program in the College of Liberal Arts and Sciences at the University of Colorado Denver. It is designed to provide members of the CU Denver population and public with specialized knowledge of the history, politics, literature and social practices related to women’s and gender concerns. Students must complete 12 credit hours of course work in order to receive the certificate. Acceptance into the certificate program is subject to CU Denver Graduate School Rules 11-12.

The WGST certificate is available to any qualified graduate student or non-degree seeking, graduate-level student at CU Denver. Students begin with a required, graduate-level methodology or foundational course before pursuing a combination of WGST-related course work. Upon completion of the certificate, students will have foundational and theoretical knowledge of the major concerns of women’s and gender studies.

All prospective students must complete and submit an application to the program. Upon admission to the certificate program, students are eligible for the certificate. All course work must be taken at CU Denver.

Courses

(Please note that some of the following courses may have prerequisites that *must* be met.)

Required Course

Choose one of the following:

SSCI 6010 - Methods and Theories of Feminism and Gender Studies **gtPATHWAYS:**

-OR- WGST 6010 - Methods and Theories of Feminism and Gender Studies **gtPATHWAYS:**

ENGL 5306 - Survey of Feminist Thought **gtPATHWAYS:**

-OR- HIST 5306 - Survey of Feminist Thought **gtPATHWAYS:**

-OR- WGST 5306 - Survey of Feminist Thought **gtPATHWAYS:**

Total: 3 Hours

Elective Courses (choose three)

These courses must be explicitly women's and/or gender and/or identity-based courses. They can be taken through any CU Denver department or program with the approval of an advisor. Only one 4000-level elective may be counted toward the certificate. All other course work must be 5000-level or above.

The following is a representative listing of WGST-related courses that may be taken toward the certificate; it is not comprehensive. Please note that some of these courses may be taught sporadically. Students should meet with their advisor to plan their course of study.

ANTH 5200 - Gender in Cross-Cultural Perspective **gtPATHWAYS:**

COMM 5020 - Feminist Perspectives on Communication **gtPATHWAYS:**

COMM 5045 - Female-Male Friendships **gtPATHWAYS:**

COMM 5265 - Gender and Communication **gtPATHWAYS:**

CRJU 5553 - Women and Crime **gtPATHWAYS:**

ENGL 4510 - Whores and Saints: Medieval Women **gtPATHWAYS:**

-OR- ENGL 5510 - Whores and Saints: Medieval Women **gtPATHWAYS:**

ENGL 5000 - Studies of Major Authors **gtPATHWAYS:**

(depending on author being studied; e.g., Virginia Woolf, George Sand, etc.)

ENGL 5306 - Survey of Feminist Thought **gtPATHWAYS:**

-OR- HIST 5306 - Survey of Feminist Thought **gtPATHWAYS:**

-OR- WGST 5306 - Survey of Feminist Thought **gtPATHWAYS:**

ETST 4555 - International Women's Resistance **gtPATHWAYS:**

-OR- PSCI 5555 - International Women's Resistance **gtPATHWAYS:**

ETST 4827 - Women and the Law **gtPATHWAYS:**

-OR- PSCI 4827 - Women and the Law **gtPATHWAYS:**

HIST 5303 - Sex and Gender in Modern Britain **gtPATHWAYS:**

HIST 5307 - History of Sexuality **gtPATHWAYS:**

HIST 5345 - Gender, Science, and Medicine: 1600 to the Present **gtPATHWAYS:**

HUMN 5720 - Sexuality, Gender and Their Visual Representation **gtPATHWAYS:**

-OR- SSCI 5720 - Sexuality, Gender and Their Visual Representation **gtPATHWAYS:**

PSCI 4215 - Women's Rights, Human Rights: Global Perspectives **gtPATHWAYS:**

PSCI 4564 - Gender and Politics **gtPATHWAYS:**

PSCI 5245 - Gender, Globalization and Development **gtPATHWAYS:**

PUAD 5910 - Women and Violence: A Sociological Perspective **gtPATHWAYS:**

PUAD 5920 - Psychology of Violence Against Women **gtPATHWAYS:**

PUAD 5930 - Battered Women and the Legal System **gtPATHWAYS:**

SOCY 5550 - Seminar: Sociology of the Family **gtPATHWAYS:**

SSCI 6010 - Methods and Theories of Feminism and Gender Studies **gtPATHWAYS:**

-OR- WGST 6010 - Methods and Theories of Feminism and Gender Studies **gtPATHWAYS:**

WGST 5900 - Smart Girl Coaching Training and Practicum **gtPATHWAYS:**

Total: 9 Hours

For more information about this certificate program, contact the Women’s and Gender Studies Director, Gillian Silverman, 303-556-4529, or Margaret Woodhull, 303-352-3926.

Reserve Officers' Training Corps (ROTC)

Aerospace Studies - Air Force ROTC

Contact: Lynda Smith
Office: CU-Boulder Folsom Stadium, Room 218
Telephone: 303-492-8351
Fax: 303-492-8353
Website: http://afrotc.colorado.edu/
E-mail: Det105@colorado.edu

Mailing Address
AFROTC Det 105
University of Colorado
371 UCB
Boulder, CO 80309-0371

The Reserve Officers' Training Corps (Air Force, Army and Navy) programs offer students the opportunity to receive a commission as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. This program is in conjunction with a students' major course of study and is similar to an academic minor. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty and reserve. The Naval ROTC program offers the same with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Denver Campus.

At A Glance: Air Force Aerospace Studies (Air Force ROTC)

Aerospace Studies

U.S. Air Force ROTC offers several programs leading to a commission in the U.S. Air Force upon receipt of at least a baccalaureate degree.

Standard Four-Year Program

This standard program is designed for incoming freshmen, or any student with four years remaining until degree completion. It consists of three parts: the general military course for lower-division students (normally freshmen and sophomores); the professional officer course for upper-division students (normally juniors and seniors); and leadership laboratory (attended by all cadets). Completion of a four-week summer training course is required prior to commissioning.

Modified Two-Year Program

All undergraduate and graduate students are eligible for these programs. They are offered to full-time, regularly enrolled degree students and require at least two years of full-time college (undergraduate or graduate level, or a combination). Those selected for this program must complete a six-week field training program during the summer months as a prerequisite for entry into the professional officer course the following fall semester.

Leadership Laboratory

All AFROTC cadets must attend leadership laboratory (two hours per week). The laboratory involves a study of Air Force customs and courtesies, drill and ceremonies, career opportunities and the life and work of an Air Force junior officer.

Other AFROTC Programs

Other programs are frequently available based on current Air Force needs. Any AFROTC staff member in Boulder (303-492-8351) can discuss best alternatives. Interested students should make initial contact as early as possible, as selection is on a competitive basis. There is no obligation until a formal contract is entered.

Air Force College Scholarship Program

A scholarship board is held at the end of each semester for students who have at least one semester of full-time college credit and a 2.5 GPA. Students selected for this program are placed on scholarships that pay tuition, book allowance, nonrefundable educational fees, and subsistence of $300–$500 per month, tax-free. These scholarships are available in all academic disciplines and are two to three years in length. All cadets enrolled in the professional officer course receive $450–$500 per month subsistence during the regular academic year.

Flight Opportunities

Prior to entering the fourth year of the AFROTC program, qualified AFROTC students can compete for pilot and navigator allocations. Cadets receiving a pilot or navigator allocation will begin flight training after completion of their degree and commissioning as a second lieutenant. All cadets are eligible to fly with the Civil Air Patrol while enrolled in AFROTC.

USAF Nursing Programs

Qualified nursing students can compete for nursing scholarships. This scholarship can lead to a rewarding career as an Air Force officer, serving as a doctor or nurse. The prehealth scholarship pays for an undergraduate degree and medical school.

AFROTC Course Credit

AFROTC credit for graduation varies with each college. Students should contact the appropriate college for determination of credit.

Registration

The AFROTC program is offered through the University of Colorado-Boulder. Students at CU Denver may register for AFROTC classes (listed below) through the concurrent registration process. Contact your dean's office for the appropriate forms. AFROTC classes begin with the AIRR prefix.

Courses

AIRR 1010-1. The Air Force Today 1. One 1-hour lecture and one 2-hour lab per week. Introduces students to the U.S. Air Force and the USAF officer profession. Uses instructor lectures, films and videos, and group activities to examine Air Force issues, officership qualities, and military customs and courtesies. Emphasizes the communication skills necessary for an Air Force officer.
AIRR 1020-1. The Air Force Today 2. A continuation of AIRR 1010-1. One 1-hour lecture and one 2-hour lab per week.
AIRR 2010-1. Development of Air Power 1. One 1-hour lecture and one 2-hour lab per week. Studies air power from balloons and dirigibles through the jet age and historically reviews air power employment in military and nonmilitary operations in support of national objectives. Looks at the evolution of air power concepts and doctrine and introduces the development of communicative skills.
AIRR 2020-1. Development of Air Power 2. A continuation of AIRR 2010. One 1-hour lecture and one 2-hour lab per week.
AIRR 3010-3. Air Force Management and Leadership 1. Two 1 1/2-hour seminars plus one 2-hour lab per week. Provides an integrated management course emphasizing concepts and skills required by the successful manager and leader. Includes individual motivational and behavioral processes, leadership, communication, and group dynamics while providing foundation for the development of the junior officer's professional skills (officership). Emphasizes decision making and use of analytic aids in planning, organizing and controlling in a changing environment. Discusses organizational and personal values (ethics), management of change, organizational power, politics, managerial strategy, and tactics within the context of military organization. Uses actual Air Force case studies throughout the course to enhance the learning and communication process.
AIRR 3020-3. Air Force Management and Leadership 2. Two 1 1/2-hour seminars and one 2-hour lab per week. Continuation of AIRR 3010. Emphasizes basic managerial processes while employing group discussions, case studies, and role playing as learning devices. Continues to emphasize the development of communicative skills.
AIRR 4010-3. National Security Forces in Contemporary American Society 1. Two 1 1/2-hour seminars and one 2-hour lab per week. Studies U.S. national security policy which examines the formulation, organization, and implementation of national security policy; context of national security; evolution of strategy; management of conflict; and civil-military interaction. Also includes blocks of instruction on the military

profession/officership, the military justice system, and communicative skills. Provides future Air Force officers with the background of U.S. national security policy so they can effectively function in today's Air Force.
AIRR 4020-3. National Security Forces in Contemporary American Society 2. Two 1 1/2-hour seminars and one 2-hour lab per week. A continuation of AIRR 4010. Includes defense strategy conflict management, formulation/implementation of U.S. defense policy, and organizational factors and case studies in policy making, military law, uniform code of military justice, and communication skills.

Military Science - Army ROTC

Contact

UC Denver Office
MAJ Joshua Dalton
Auraria Campus
S. Classroom Bldg 213 A/B
Telephone: 303-352-7079, 303-352-7078
Fax: 303-556-2159

CU-Boulder Office
Nancy McMillin
Folsom Stadium, Gate 3, Room 215
Telephone: 303-492-6495
Website: www.Colorado.edu/AROTC
E-mail: arotc@colorado.edu

Mailing Address
AROTC
University of Colorado
370 UCB
Boulder, CO 80309-0370

At A Glance: Military Science (Army ROTC)

Military Science

The Department of Military Science is a leadership program leading to an officer's commission in the Active Army, Army Reserve or National Guard in conjunction with an undergraduate or graduate degree. Military science courses supplement a regular degree program and offer practical leadership and management experience. Scholarships are available for those who qualify. Additionally, financial benefits may be available for enlisted soldiers.

Four-Year Program

For college freshmen, the four-year program consists of two phases: the basic course (freshman and sophomore years) and the advanced course (junior and senior years).

Basic

The basic course (MSI and MSII) covers Army history and organization as well as military leadership and management. Labs provide the opportunity to develop leadership experience while learning basic military skills. Participating in the basic courses incur no military obligation, except for those receiving an Army scholarship.

Advanced

Advanced courses (MSIII and MSIV) cover leadership, tactics and unit operations, training techniques, military law and professional ethics. Additionally, a 35-day summer leadership camp at Fort Lewis, Washington, is a requirement between the junior and senior year and is a prerequisite for commissioning. Students enrolled in the advanced courses must have completed the basic courses (or the equivalent) and obtain permission from the professor of military science (PMS).

Two-Year Program

For college students entering as a sophomore, the two-year program consists of the advanced courses preceded by a four-week summer ROTC leadership training course (LTC) at Ft. Knox, Kentucky. Inquiries into LTC should be directed to the Department of Military Science prior to completing the sophomore year. LTC is a paid internship and the academic equivalent to the MSI/MSII basic courses.

Prior service and enlisted soldiers who have completed basic training may be eligible to enroll in the advance course without attending LTC or completion of the ROTC basic courses. Enlisted soldiers pursuing advanced placement must obtain permission from the PMS.

Scholarship Programs

College freshmen, sophomores and juniors may be eligible for four-, three- and two-year scholarships, regardless of academic major. Interested students must enroll in Army ROTC and meet eligibility requirements, including and Army physical fitness test.

High school scholarship applicants may be eligible for four- and three-year college scholarships. High school students can apply during their junior year and before January 10 of their senior year.

All scholarship recipients receive full tuition and laboratory fees, a $1,200 book allowance and a stipend of of $300-$500 per month during the academic year. Students interested in scholarships should contact the enrollment and scholarship officer at 303-492-3549 or 303-492-6495.

Simultaneous Membership Program

College sophomores and juniors who want additional leadership training may participate with an Army Reserve or Army National Guard unit as an officer trainee. Students participating in this program earn approximately $240 in monthly drill pay, plus a monthly ROTC stipend of $300-$500. Additionally, SMP participants receive Army National Guard or reserve tuition benefits of up to $4,500 per year. Enlisted and prior service students retain their authorized GI benefits.

Army Nursing Program

Qualified nursing students can compete for nursing scholarships. This scholarship can lead to a rewarding career as an Army Nurse Corps officer. Contact the Army ROTC enrollment officer at 303-492-3549 for information and benefits.

Activities and Leadership Laboratories

Students may participate in activities with the Buffalo Battalion’s Charlie Company located on the Auraria Campus, to include color guard, intramural sports, running club and ranger challenge. Weekly or Saturday leadership labs provide cadets with practical leadership experience and performance-oriented, hands-on instruction outside the classroom. Leadership labs are compulsory for enrolled cadets. PT is conducted three times a week with the purpose of developing muscular strength, endurance and cardio-respiratory endurance.

Army ROTC Course Credit

ROTC is an elective credit in most departments. Individual academic advisors verify if ROTC classes count toward the student's degree.

Registration

CU Denver students may register for the MILR classes, which are MSCD pooled courses, through UCDAccess. To search and enroll for these classes, you must look up

the "class number" located in the Schedule of Metro Pooled Courses and enter it in the class search inside of Student Center. For more information, contact the enrollment and scholarship officer at armyrotc@colorado.edu, 303-492-3459 or 303-492-6495. See also the AROTC website at www.colorado.edu/arotc.

Courses

Freshman Year

MILR 1011. Adventures in Leadership I (I) 2 credits. (freshman, fall). Introduces fundamentals of leadership and the U.S. Army. Examines Army organization, customs, and history as well as current relevance and purpose. Students also investigate basic leadership and management skills necessary to be successful in both military and civilian settings. Includes fundamentals of Army leadership doctrine, team-building concepts, time and stress management, cartography and land navigation, marksmanship, briefing techniques, and basic military tactics. 2 hours lecture, 2 hours lab, 3 hours PT, and 80 hours field training.

MILR 1021. Adventures in Leadership II (II) 2 credits. (freshman, spring). Covers leadership topics in small military organizations such as troop leading procedures, military first-aid and casualty evacuation concepts, ethical work climates, Army organizations and installations, and basic military tactics. Introduces students to effective military writing styles. 2 hours lecture, 2 hours lab, 3 hours PT, and 80 hours field training.

Sophomore Year

MILR 2031. METHODS OF LEADERSHIP AND MANAGEMENT I (I) 3 credits. (sophomore, fall). Comprehensive review of advanced leadership and management concepts, including motivation, attitudes, communication skills, problem solving, human needs and behavior, and leadership self development. Students continue to refine effective written and oral communications skills and to explore topics such as the basic branches of the Army, and officer and NCO duties. Students conduct classroom and practical exercises in small unit light infantry tactics and are prepared to perform as midlevel leaders in the cadet organization. 3 hours lecture, 2 hours lab, 3 hours PT, and 80 hours field training.

MILR 2041. METHODS OF LEADERSHIP AND MANAGEMENT II (II) 3 credits. (sophomore, spring). Focuses on leadership and management functions in military and corporate environments. Studies various components of Army leadership doctrine to include the four elements of leadership, leadership principles, risk management and planning theory, the be-know-do framework, and the Army leadership evaluation program. Continue to refine communication skills. Prerequisite: Consent of the professor of military science. 3 hour lecture, 2 hours lab, 3 hours PT, and 80 hours field training.

Junior Year

MILR 3052. MILITARY OPERATIONS AND TRAINING I (I) 3 credits. (junior, fall). Further explores the theory of managing and leading small military units with an emphasis on practical applications at the squad and platoon levels. Students examine various leadership styles and techniques as they relate to advanced small unit tactics. Familiarizes students with a variety of topics such as cartography, land navigation, field craft, and weapons systems. Involves multiple, evaluated leadership opportunities in field settings and hands-on experience with actual military equipment. Students are given maximum leadership opportunities in weekly labs. Prerequisite: Consent of the professor of military science. 3 hour lecture, 2 hours lab, 3 hours PT, and 80 hours field training.

MILR 3062. MILITARY OPERATIONS AND TRAINING II (II) 3 credits. (junior, spring). Studies theoretical and practical applications of small unit leadership principles. Focuses on managing personnel and resources, the military decision making process, the operations order, and oral communications. Exposes the student to tactical unit leadership in a variety of environments with a focus on preparation for the summer advance camp experience. Prerequisite: Consent of the professor of military science. 3 hour lecture, 2 hours lab, 3 hours PT, and 80 hours field training.

Senior Year

MILR 4072. OFFICER LEADERSHIP AND DEVELOPMENT I (I) 3 credits. (senior, fall). Examines management and leadership concepts and techniques associated with planning and executing military training and operations at company and higher echelons. Includes analyses of professional ethics and values, effective training principles and procedures, subordinate counseling, and effective staff officer briefing techniques. Also investigates other subjects such as counter terrorism, modern peacekeeping missions, and the impact of the information revolution on the art of land warfare. Conducted both in and out of classroom setting and with multiple practical leadership opportunities to organize cadet training and activities. Prerequisite: Consent of the professor of military science. 3 hour lecture, 2 hours lab, 3 hours PT, and 80 hours field training.

MILR 4082. OFFICER LEADERSHIP AND DEVELOPMENT II (II) 3 credits. (senior, spring). Continues MILR 4072 study of management and leadership concepts and techniques, providing practical leadership experiences in the classroom and during multiple cadet-run activities. Also, examines varied topics such as theory and practice of the military justice system, law of war, military-media relations, support mechanisms for soldiers and their families, operational security considerations, and historical case studies in military leadership in the context of 21st century land warfare. Prerequisite: Consent of the professor of military science. 3 hour lecture, 2 hours lab, 3 hours PT, and 80 hours field training.

Labs

In the fall, labs meet on Fridays from 8:30-9:50. In the spring, labs meet on three Saturdays.

Naval Studies – Naval ROTC (U.S. Navy and Marine Corps)

Contact: LT Ricardo Leyva
Office: CU-Boulder Folsom Stadium, Room 233
Telephone: 303-492-2576
Fax: 303-492-0543
Web site: www.colorado.edu/NROTC
E-mail: Ricardo.leyva@colorado.edu

Mailing Address:
NROTC Recruiting Officer
University of Colorado
374 UCB
Boulder, CO 80309-0374

The Reserve Officers' Training Corps (Air Force, Army, and Navy) programs….. as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty, and reserve. The Naval ROTC program offers the same, with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown campus.

At A Glance: Naval Studies (Naval ROTC)

Naval Studies

U.S. Naval ROTC provides several programs all leading to a commission in the U.S. Navy or U.S. Marine Corps upon receipt of a baccalaureate degree.

Standard Four-Year Program

Incoming freshmen can receive full tuition funding (8 semesters) for their undergraduate education. This is the "normal" pathway by which students enter the program.

Applications need to be completed online via the national NROTC Web site (www.nrotc.navy.mil) well before the student matriculates, typically the January prior to fall admission. Students are highly encouraged to apply early. Scholarships are awarded based on high school GPA, ACT/SAT scores and extracurricular activity levels. Students interested in engineering or nursing degrees may be eligible for up to nine semesters of funding. If interested in nursing, please contact the recruiting officer for more detail.

Two-Year Program

Students can apply for a four-semester scholarship in the spring semester of their sophomore year. Scholarships are awarded based on college GPA, personal interview and recommendation by the NROTC unit. Please contact the recruiting officer for more information.

College Program

The main prerequisite for joining the NROTC unit is that the student is currently admitted to UC Denver. Anyone in this status has a very good chance of being allowed to participate with the NROTC unit in a nonscholarship (a.k.a. college program) status, and to eventually commission as an officer in the U.S. Navy or Marine Corps. After participating in the NROTC unit in a nonscholarship status for at least one semester, the NROTC unit may recommend that students be considered for a full-tuition scholarship. A scholarship board is held at the end of each semester for these students. Chances for being awarded a full-tuition scholarship for as many as seven semesters are very good if the student has a cumulative college GPA of 3.0 or higher. High school GPA and ACT/SAT scores are not considered in the scholarship selection process. This is a great opportunity for students who either missed the deadline for applying to NROTC, who are already in college or who perhaps didn’t perform well enough in high school to earn a scholarship through the standard four-year program.

NROTC Course Credit

NROTC credit for graduation varies with each college. Students should contact the appropriate college for determination of credit.

Registration

The NROTC program is offered through the University of Colorado-Boulder. Students at the UC Denver Downtown Campus may register for NROTC classes through the

concurrent registration process. Contact your dean’s office for the appropriate forms. NROTC classes begin with the NAVR prefix.

Requirements

CU Denver Undergraduate Core Curriculum, gtPATHWAYS

Philosophy of the core: The core curriculum of CU Denver undergraduate students a high-quality general education based on a liberal arts foundation, while allowing students flexibility based on their individual backgrounds and specific career goals. A goal of the CU Denver core curriculum is to engage students in developing sensitivity to diversity and developing their place in an urban environment as well as in the rapidly changing global environment.

The following represents the CU Denver core curriculum as passed by the faculty in each of the undergraduate colleges, which became effective in fall 2006.

For help in selecting appropriate core courses, please see an academic advisor in your college. Scroll down to see curriculum requirements specific to your school or college. The core curriculum is a total of 34-38 semester hours compiled in each of the four following areas:

Intellectual Competencies (9-10 hours), Knowledge Areas (19-22 hours), Cultural Diversity (3 hours) and International Perspectives (3 hours). **Courses with a GT-Key suffix are courses approved for the CCHE gtPATHWAYS Transfer Program.**

Intellectual Competencies

Three lower division courses to develop reading, writing and quantitative proficiency. Specific core mathematics courses may be identified by a program to satisfy requirements in the major.

Intellectual competencies courses must earn a minimum letter grade of C- (1.7) to satisfy core curriculum requirements.

English

Both courses are required.

ENGL 1020 - Core Composition I **gtPATHWAYS:** GT-C01

ENGL 2030 - Core Composition II **gtPATHWAYS:** GT-C02

Mathematics

One course is required. Students in the Business School and the College of Engineering and Applied Science should check the notes below for specific requirements.

MATH 1010 - Mathematics for the Liberal Arts **gtPATHWAYS:** GT-MA1

MATH 1070 - Algebra for Social Sciences and Business **gtPATHWAYS:** GT-MA1

MATH 1080 - Polynomial Calculus **gtPATHWAYS:** GT-MA1

MATH 1110 - College Algebra **gtPATHWAYS:** GT-MA1

MATH 1120 - College Trigonometry **gtPATHWAYS:** GT-MA1

MATH 1130 - Precalculus Mathematics **gtPATHWAYS:** GT-MA1

MATH 1401 - Calculus I **gtPATHWAYS:** GT-MA1

MATH 2411 - Calculus II **gtPATHWAYS:** GT-MA1

MATH 2421 - Calculus III **gtPATHWAYS:** GT-MA1

MATH 2830 - Introductory Statistics **gtPATHWAYS:** GT-MA1

Total: 9-10 semester hours

Knowledge Areas

Specific knowledge area core courses may be identified by a program to satisfy requirements in the student's major. Restricted disciplines have courses that cross knowledge-area boundaries, and each core course is restricted to one specific area. Students may not use courses in the discipline(s) defined by their major(s) to satisfy knowledge area requirements.

Biological and Physical Sciences, Mathematics

Two courses are required. One of the two required courses must have a laboratory. Students in the College of Liberal Arts and Sciences and in the College of Engineering and Applied Science should check the notes below for specific requirements.

Science Courses with Labs

ANTH 1303 - Introduction to Biological Anthropology **gtPATHWAYS:** GT-SC1

BIOL 1550 - Basic Biology: Ecology and the Diversity of Life **gtPATHWAYS:** GT-SC1

BIOL 1560 - Basic Biology: From Cells to Organisms **gtPATHWAYS:** GT-SC1

CHEM 1474 - Core Chemistry: Chemistry For the Consumer **gtPATHWAYS:** GT-SC1

ENVS 1042 - Introduction to Environmental Sciences **gtPATHWAYS:** GT-SC1

GEOL 1072 - Physical Geology: Surface Processes **gtPATHWAYS:** GT-SC1

GEOL 1082 - Physical Geology: Internal Processes **gtPATHWAYS:** GT-SC1

PHYS 1052 - General Astronomy I **gtPATHWAYS:** GT-SC1

Science Courses with Co-requisite Labs

BIOL 2051 - General Biology I **gtPATHWAYS:** GT-SC1

BIOL 2071 - General Biology Laboratory I **gtPATHWAYS:** GT-SC1

BIOL 2061 - General Biology II **gtPATHWAYS:** GT-SC1

BIOL 2081 - General Biology Laboratory II **gtPATHWAYS:** GT-SC1

CHEM 2031 - General Chemistry I **gtPATHWAYS:** GT-SC1

CHEM 2038 - General Chemistry Laboratory I **gtPATHWAYS:** GT-SC1

CHEM 2061 - General Chemistry II **gtPATHWAYS:** GT-SC1

CHEM 2068 - General Chemistry Laboratory II **gtPATHWAYS:** GT-SC1

PHYS 2010 - College Physics I **gtPATHWAYS:** GT-SC1

PHYS 2030 - College Physics Lab I **gtPATHWAYS:** GT-SC1

PHYS 2020 - College Physics II **gtPATHWAYS:** GT-SC1

PHYS 2040 - College Physics Lab II **gtPATHWAYS:** GT-SC1

Science Courses Without Labs & Mathematics

GEOG 1202 - Introduction to Physical Geography **gtPATHWAYS:** GT-SC2

PHYS 1100 - Foundations of Physics **gtPATHWAYS:** GT-SC2

PSYC 2220 - Biological Basis of Behavior **gtPATHWAYS:** GT-SC2

MATH - A mathematics course taken to fulfill the biological and physical sciences, mathematics area, must be from the approved mathematics list excluding the course taken to fulfill the intellectual competencies requirement.

Arts and Humanities

Arts

One course from the list is required. Students in the College of Arts & Media should check the notes below for specific requirements.

FINE 1001 - Introduction to Art **gtPATHWAYS:** GT-AH1

PMUS 1001 - Music Appreciation **gtPATHWAYS:** GT-AH1

THTR 1001 - Introduction to Theatre **gtPATHWAYS:** GT-AH1

Humanities

One course is required. Students in the College of Arts & Media or humanities majors in the College of Liberal Arts and Sciences should check the notes below for specific requirements.

CHIN 1000 - China and the Chinese **gtPATHWAYS:** GT-AH1

ENGL 1601 - Telling Tales: Narrative Art in Literature and Film **gtPATHWAYS:** GT-AH2

ENGL 2600 - Great Works in British and American Literature **gtPATHWAYS:** GT-AH2

ETST 2155 - African American History **gtPATHWAYS:** GT-HI1

FREN 1000 - Introduction to Cultures of the French- Speaking World **gtPATHWAYS:** GT-AH1

GRMN 1000 - Germany and the Germans **gtPATHWAYS:** GT-AH1

HIST 1361 - U.S. History to 1876 **gtPATHWAYS:** GT-HI1

HIST 1362 - U.S. History Since 1876 **gtPATHWAYS:** GT-HI1

HIST 1381 - Paths to the Present I **gtPATHWAYS:** GT-HI1

HIST 1382 - Getting Here: Paths to the Present II **gtPATHWAYS:** GT-HI1

PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World **gtPATHWAYS:** GT-AH3

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community **gtPATHWAYS:** GT-AH3

PHIL 2441 - Logic and Language **gtPATHWAYS:** GT-AH3

RLST 1610 - Introduction to Religious Studies **gtPATHWAYS:** GT-AH3

RLST 2660 - World Religions **gtPATHWAYS:** GT-AH3

SPAN 1000 - Introduction to Cultures of the Spanish Speaking World **gtPATHWAYS:** GT-AH4

Behavioral and Social Sciences

Total: 6 semester hours

Behavioral Sciences

One course is required. Social science majors should check the College of Liberal Arts and Sciences notes below for specific requirements.

ANTH 1302 - Introduction to Archaeology **gtPATHWAYS:** GT-SS3

ANTH 2102 - Culture and the Human Experience **gtPATHWAYS:** GT-SS3

COMM 1011 - Fundamentals of Communication **gtPATHWAYS:** GT-SS3

COMM 1021 - Fundamentals of Mass Communication **gtPATHWAYS:** GT-SS3

PSYC 1000 - Introduction to Psychology I **gtPATHWAYS:** GT-SS3

PSYC 1005 - Introduction to Psychology II **gtPATHWAYS:** GT-SS3

Social Sciences

One course is required. Students in the Business School, the School of Public Affairs or behavioral science majors in the College of Liberal Arts and Sciences should check the notes below for specific requirements.

ECON 2012 - Principles of Economics: Macroeconomics **gtPATHWAYS:** GT-SS1

ECON 2022 - Principles of Economics: Microeconomics **gtPATHWAYS:** GT-SS1

ENVS 1342 - Introduction to Environment and Society **gtPATHWAYS:** GT-SS2

ETST 2000 - Introduction to Ethnic Studies **gtPATHWAYS:** GT-SS3

GEOG 1102 - World Regional Geography **gtPATHWAYS:** GT-SS2

GEOG 1602 - Introduction to Urban Studies **gtPATHWAYS:** GT-SS2

GEOG 2202 - Natural Hazards **gtPATHWAYS:** GT-SS2

HBSC 2001 - Understanding Community and Public Health **gtPATHWAYS:** GT-SS3

PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice **gtPATHWAYS:** GT-SS1

PSCI 1101 - American Political System **gtPATHWAYS:** GT-SS1

SJUS 2000 - Democratic Participation and Social Justice **gtPATHWAYS:**

SOCY 1001 - Introduction to Sociology **gtPATHWAYS:** GT-SS3

SOCY 2462 - Introduction to Social Psychology **gtPATHWAYS:** GT-SS3

Total: 19-22 semester hours

Cultural Diversity

One course is required.

Cultural diversity courses are restricted, requiring junior-level standing or the consent of the instructor prior to registration.

ANTH 3142 - Cultural Diversity in the Modern World **gtPATHWAYS:**

COMM 3271 - Communication and Diversity **gtPATHWAYS:**

ECON 3100 - Economics of Race and Gender **gtPATHWAYS:**

ENGL 3795 - Race and Ethnicity in American Literature **gtPATHWAYS:**

ENGR 3400 - Technology and Culture **gtPATHWAYS:**

ETST 3704 - Culture, Racism and Alienation **gtPATHWAYS:**

ETST 3794 - Ethnic Diversity in American Literature **gtPATHWAYS:**

HIST 3345 - Immigration and Ethnicity in American History **gtPATHWAYS:**

HIST 3349 - Social Movements in 20th Century America **gtPATHWAYS:**

MGMT 4100 - Managing Cultural Diversity **gtPATHWAYS:**

PHIL 3500 - Ideology and Culture: Racism and Sexism **gtPATHWAYS:**

PSCI 3034 - Race, Gender, Law and Public Policy **gtPATHWAYS:**

PSCI 3035 - Political Movements: Race and Gender **gtPATHWAYS:**

PSYC 4485 - Psychology of Cultural Diversity **gtPATHWAYS:**

RLST 4000 - Religion and Cultural Diversity **gtPATHWAYS:**

SOCY 3020 - Race and Ethnicity in the U.S. **gtPATHWAYS:**

THTR 3611 - Drama of Diversity **gtPATHWAYS:**

Total: 3 semester hours

International Perspectives

One course is required.

A semester abroad may satisfy this requirement if preapproved and in a country where the language is not the native language of the student.

ENGL 3798 - International Perspectives in Literature and Film **gtPATHWAYS:**

ENGR 3600 - International Dimensions of Technology and Culture **gtPATHWAYS:**

FREN 3200 - The Francophone World in the Post-Colonial Era **gtPATHWAYS:**

GRMN 3200 - Current German Society and Culture **gtPATHWAYS:**

HIST 3121 - The World at War, 1914-1945 **gtPATHWAYS:**

HIST 4032 - Globalization in World History Since 1945 **gtPATHWAYS:**

INTB 3000 - Global Perspectives **gtPATHWAYS:**

PSCI 3022 - Introduction to Comparative Politics **gtPATHWAYS:**

PSCI 3042 - Introduction to International Relations **gtPATHWAYS:**

Total: 3 semester hours

Core Total: 34-38 semester hours

Notes:

gtPATHWAYS Categories Key

Specific Core Requirements, College of Liberal Arts and Sciences

Specific Core Requirements, College of Arts & Media

Specific Core Requirements, Business School

Specific Core Requirements, College of Engineering and Applied Science

Specific Core Requirements, School of Public Affairs

SEHD Degree Programs and Associated State Licenses

School of Education and Human Development Degree Programs and Associated State Licenses

Programs	Approved Degrees	Licenses and Endorsements
Administrative Leadership and Policy Studies	**Master of Arts:** Administrative Leadership and Policy Studies **Educational Specialist (EdS):** Administrative Leadership and Policy Studies	Principal License Administrator License

Counseling Psychology and Counselor Education	**Master of Arts:** Counseling Psychology and Counselor Education	**Public School Counselor License:** 0–21 **Encouraged to apply for licensure from the State of Colorado:** Couples and Family Therapy Clinical Mental Health Counseling –Interdisciplinary Clinical Mental Health Counseling – Multicultural
Curriculum and Pedagogy	**Master of Arts:** Curriculum and Instruction	Emphasis: • Elementary Math/Science • Secondary Math or Science
Doctoral Studies in Education	**Doctor of Education (EdD)** in Leadership for Educational Equity **Doctor of Philosopy (PhD)** in Educational Studies and Research	EdD emphases: Instructional Leadership Executive Leadership
Early Childhood Education	**Master of Arts:** Early Childhood Education	Early Childhood Special Education Specialist Birth -8
Educational Psychology	**Master of Arts:** Educational Psychology	Emphases: Human Learning Human Development Research & Evaluation Educational Assessment Individualized Programs
Graduate and Undergraduate Teacher Licensure	**Master of Arts:** Curriculum and Instruction Educational Psychology Special Eduation **College of Liberal Arts Degrees:** **Bachelor of Arts** **Bachelor of Science**	**Graduate Teacher Licensure:** Elementary Education Secondary Education: Math, Science, Social Studies, English, Foreign Language Special Education: Generalist–K–12 **Undergraduate Teacher**

		Licensure: Elementary Education Secondary Education: Math, English, Science, Social Studies, Foreign Language
Information and Learning Technologies	**Master of Arts:** Information and LearningTechnologies	Endorsements/emphases: • Adult Learning & Instructional Design • E-Learning Design and Implementarion • K-12 Instructional Technology Teacher and Instructional Technology Specialist • School and Teacher Librarian
Linguistically Diverse Education	**Master of Arts:** Curriculum and Instruction	Endorsement/emphasis: • Linguistically Diverse Education
Literacy, Language and Culturally Responsive Teaching	**Master of Arts:** Curriculum and Instruction	Endorsements/emphases: • Reading Teacher: K–6, 7–12 • Secondary English Education
Special Education	**Master of Arts:** Special Education	Special Education Generalist K-12
School Psychology	**Educational Specialist (EdS):** School Psychology	School Psychology Birth - 21

Courses

ACCT 2200 - Financial Accounting and Financial Statement Analysis

ACCT 2220 - Managerial Accounting and Professional Issues

ACCT 2550 - Introductory Accounting for Entrepreneurs and the Arts

ACCT 3220 - Intermediate Financial Accounting I

ACCT 3230 - Intermediate Financial Accounting II

ACCT 3320 - Intermediate Cost Accounting

ACCT 3939 - Internship

ACCT 4030 - Financial Accounting

ACCT 4054 - Accounting Systems and Data Processing

ACCT 4070 - Management Accounting

ACCT 4240 - Advanced Financial Accounting

ACCT 4330 - Managerial Accounting Problems and Cases

ACCT 4370 - International Accounting

ACCT 4410 - Income Tax Accounting

ACCT 4490 - Experiential Learning

ACCT 4520 - Oil and Gas Accounting

ACCT 4620 - Auditing

ACCT 4780 - Accounting and Information Systems Processes and Controls

ACCT 4800 - Accounting for Government and Nonprofit Organizations

ACCT 4840 - Independent Study

ACCT 4915 - Accounting for the Public Interest

ACCT 4950 - Special Topics

ACCT 5939 - Internship

ACCT 6015 - Accounting for the Public Interest

ACCT 6020 - Auditing

ACCT 6024 - Advanced Financial Accounting

ACCT 6030 - Financial Accounting

ACCT 6033 - Advanced Managerial Accounting

ACCT 6054 - Accounting Systems and Data Processing

ACCT 6070 - Management Accounting

ACCT 6080 - Accounting for Government and Nonprofit Organizations

ACCT 6140 - Tax Planning for Managers

ACCT 6250 - Seminar: Financial Accounting

ACCT 6260 - Seminar: Managerial Accounting

ACCT 6280 - Professional Judgment and Decision Making in Accounting

ACCT 6290 - Management Control Systems

ACCT 6340 - Financial Statement Analysis

ACCT 6350 - Current Issues in Professional Accounting

ACCT 6360 - Fraud Examination

ACCT 6370 - International Accounting

ACCT 6380 - Forensic Accounting

ACCT 6400 - Taxation of Corporations and Shareholders

ACCT 6410 - Advanced Tax For Individuals

ACCT 6420 - Taxation of Estates and Gifts

ACCT 6430 - International Taxation

ACCT 6440 - Tax Practice and Procedures

ACCT 6450 - Research Problems In Taxation

ACCT 6460 - Advance Topics in Taxation

ACCT 6470 - Internal Auditing

ACCT 6480 - Partnership Taxation

ACCT 6490 - Experiential Learning

ACCT 6500 - Advanced Corporate Taxation

ACCT 6510 - Accounting and Information Systems Processes and Controls

ACCT 6520 - Issues in Oil and Gas Accounting

ACCT 6620 - Advanced Auditing

ACCT 6800 - Special Topics

ACCT 6840 - Independent Study

ACCT 6939 - Internship/Cooperative Education

ACCT 6950 - Master's Thesis

ACPC 5110 - Group Counseling

ACPC 5400 - Career Development

ACPC 5820 - Strategies in Agency Counseling

ANTH 1000 - Anthropology: Past and Present

ANTH 1111 - Freshman Seminar

ANTH 1302 - Introduction to Archaeology

ANTH 1303 - Introduction to Biological Anthropology

ANTH 2102 - Culture and the Human Experience

ANTH 2840 - Independent Study

ANTH 2939 - Internship

ANTH 3000 - Globalization

ANTH 3006 - Sustainable Development and Equity

ANTH 3008 - Contemporary World Problems: An Anthropological Perspective

ANTH 3101 - Foundations of Cultural Anthropology

ANTH 3121 - Language, Culture, and Communication

ANTH 3142 - Cultural Diversity in the Modern World

ANTH 3150 - Special Topics in Medical Anthropology

ANTH 3200 - Human Migration: Nomads, Sojourners, and Settlers

ANTH 3210 - Urban Food Systems and Sustainability

ANTH 3301 - World Prehistory

ANTH 3310 - Colorado Archaeology

ANTH 3330 - Topics in Archaeology

ANTH 3400 - Video and Social Change

ANTH 3410 - Anthropology of Work

ANTH 3420 - Anthropology and Politics of the Global Tobacco Epidemic

ANTH 3500 - Human Osteology

ANTH 3512 - Human Evolution

ANTH 3666 - Anthropology of Death

ANTH 3700 - Current Topics in Anthropology

ANTH 3910 - Cross-Cultural Field Experience

ANTH 3939 - Internship

ANTH 4000 - Special Topics in Anthropology

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health

ANTH 4030 - Ethnobiology

ANTH 4040 - Anthropology of Food and Nutrition

ANTH 4050 - Quantitative Methods in Anthropology

ANTH 4060 - Evolutionary Medicine

ANTH 4070 - Culture of Development and Globalization

ANTH 4080 - Global Health Practice

ANTH 4090 - Political Economy of Drugs

ANTH 4101 - Applied Statistics Using SAS and SPSS I

ANTH 4102 - Applied Statistics Using SAS and SPSS II

ANTH 4130 - Comparative Religious Systems

ANTH 4140 - Principles of Economic Anthropology

ANTH 4150 - Human Biocultural Adaptability

ANTH 4160 - Topics in Language, Society and Culture

ANTH 4170 - Culture and the Environment

ANTH 4180 - The Nature of Power

ANTH 4190 - Ethnicity and Nationalism

ANTH 4200 - Gender in Cross-Cultural Perspective

ANTH 4210 - Archaeology of the American Southwest

ANTH 4220 - Community in Global Context

ANTH 4230 - Anthropology and Community Based Participatory Research

ANTH 4250 - Culture Change in the Modern World

ANTH 4260 - Human Reproductive Ecology

ANTH 4290 - Anthropology and Public Health

ANTH 4300 - Migrant Health

ANTH 4320 - Archaeology of Mexico and Central America

ANTH 4330 - Lithic Analysis

ANTH 4380 - Archaeology of Hunters-Gatherers

ANTH 4390 - Laboratory Methods in Archaeology

ANTH 4400 - Archaeology of Power and Inequality

ANTH 4450 - Development and Conservation: Contemporary Issues

ANTH 4460 - Development and Conservation: Theory and Practice

ANTH 4500 - Advanced Issues in Human Evolution

ANTH 4520 - Human Biological Variation

ANTH 4540 - Forensic Anthropology

ANTH 4550 - Primate Comparative Anatomy

ANTH 4560 - Human Ecology

ANTH 4570 - Landscape Archaeology

ANTH 4580 - Neanderthals and the Origin of Modern Humans

ANTH 4590 - Primate Behavior

ANTH 4600 - Medical Anthropology

ANTH 4640 - Darwinian Approach to Human Behavior

ANTH 4730 - Peoples and Cultures of Sub-Saharan Africa

ANTH 4740 - Ethnography of Mexico and Central America

ANTH 4800 - Special Topics in Medical Anthropology

ANTH 4810 - Integrating Anthropology

ANTH 4840 - Independent Study

ANTH 4910 - Field Experience in Archaeology

ANTH 4995 - Travel Study

ANTH 5000 - Special Topics in Anthropology

ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health

ANTH 5030 - Ethnobiology

ANTH 5040 - Anthropology of Food and Nutrition

ANTH 5053 - Quantitative Methods in Anthropology

ANTH 5060 - Evolutionary Medicine

ANTH 5070 - Culture of Development and Globalization

ANTH 5080 - Global Health Practice

ANTH 5090 - Political Economy of Drugs

ANTH 5130 - Comparative Religious Systems

ANTH 5140 - Principles of Economic Anthropology

ANTH 5150 - Human Biocultural Adaptability

ANTH 5160 - Topics in Language, Society and Culture

ANTH 5170 - Culture and the Environment

ANTH 5180 - The Nature of Power

ANTH 5190 - Ethnicity and Nationalism

ANTH 5200 - Gender in Cross-Cultural Perspective

ANTH 5210 - Archaeology of the American Southwest

ANTH 5220 - Community in Global Context

ANTH 5230 - Anthropology and Community Based Participatory Research

ANTH 5260 - Human Reproductive Ecology

ANTH 5290 - Anthropology and Public Health

ANTH 5300 - Migrant Health

ANTH 5320 - Archaeology of Mexico and Central America

ANTH 5330 - Lithic Analysis

ANTH 5380 - Archaeology of Hunters-Gatherers

ANTH 5400 - Archaeology of Power and Inequality

ANTH 5450 - Development and Conservation: Contemporary Issues

ANTH 5460 - Development and Conservation: Theory and Practice

ANTH 5500 - Advanced Issues in Human Evolution

ANTH 5520 - Human Biological Variation

ANTH 5530 - Anthropological Genetics

ANTH 5540 - Forensic Anthropology

ANTH 5550 - Primate Comparative Anatomy

ANTH 5560 - Human Ecology

ANTH 5570 - Landscape Archaeology

ANTH 5580 - Neanderthals and the Origin of Modern Humans

ANTH 5590 - Primate Behavior

ANTH 5600 - Medical Anthropology

ANTH 5640 - Darwinian Approach to Human Behavior

ANTH 5730 - Peoples and Cultures of Sub-Saharan Africa

ANTH 5740 - Ethnography of Mexico and Central America

ANTH 5800 - Special Topics in Medical Anthropology

ANTH 5810 - Integrating Anthropology

ANTH 5840 - Independent Study

ANTH 5910 - Field Experience in Archaeology

ANTH 5939 - Internship

ANTH 5995 - Travel Study

ANTH 6000 - Seminar in Current Research Topics

ANTH 6040 - Advanced Topics in Medical Anthropology

ANTH 6041 - Human Genetics: Legal, Ethical and Social Issues

ANTH 6063 - Qualitative Research Design and Methods

ANTH 6103 - Current Theory in Ethnography

ANTH 6133 - Anthropological Perspectives on Language

ANTH 6307 - Contemporary Perspectives in Archaeology

ANTH 6317 - Archaeological Research Design and Analysis

ANTH 6503 - Biological Anthropology Core: The Fossil Record

ANTH 6513 - Biological Anthropology Core: Modern Human Variation

ANTH 6520 - Seminar: Selected Topics in Physical Anthropology

ANTH 6840 - Independent Study: Anth

ANTH 6950 - Master's Thesis

ARCH 5000 - Math and Physics for Architects

ARCH 5110 - Design Studio I

ARCH 5111 - Introduction to Drawing

ARCH 5120 - Design Studio II

ARCH 5121 - Design Seminar II

ARCH 5130 - Design Studio III

ARCH 5131 - Design Seminar III

ARCH 5140 - Design Studio IV

ARCH 5141 - Design Seminar IV

ARCH 5210 - Introduction to Architecture

ARCH 5220 - History of Architecture I

ARCH 5230 - History of Architecture II

ARCH 5240 - Human Factors in Design

ARCH 5310 - Introduction to Building Technology

ARCH 5320 - Building Construction and Methods

ARCH 5330 - Environmental Control Systems I

ARCH 5340 - Environmental Control Systems II

ARCH 5350 - Structures I

ARCH 5360 - Structures II

ARCH 5410 - Professional Practice

ARCH 6150 - Comprehensive Design Studio

ARCH 6151 - Comprehensive Design Seminar

ARCH 6170 - Advanced Design Studio

ARCH 6171 - Advanced Design Seminar

ARCH 6190 - Special Topics in Design Studies

ARCH 6210 - History of American Architecture

ARCH 6212 - History of Modern Architecture

ARCH 6220 - History of Architectural Theory

ARCH 6221 - Post-Structuralist Architecture

ARCH 6250 - Drawing from Barragan

ARCH 6251 - Neuro Science and Design

ARCH 6252 - Land/ARCH

ARCH 6253 - Nature of Nature

ARCH 6290 - Special Topics in Cultural Studies

ARCH 6310 - Greenbuilding Tech

ARCH 6350 - Regionalisms & the Vernacular

ARCH 6351 - Building Conservation

ARCH 6370 - Introduction To Design Build

ARCH 6373 - Construction in Design Build

ARCH 6390 - Special Topics in Technology

ARCH 6412 - Construction Documents

ARCH 6450 - Pre-Design

ARCH 6451 - Digital Applications

ARCH 6452 - Digital Portfolio Design

ARCH 6460 - Architecture Photography

ARCH 6461 - Architectural Precedents

ARCH 6462 - Furniture Design

ARCH 6463 - Beginning Revit

ARCH 6464 - Intermediate Revit

ARCH 6465 - Advanced Revit

ARCH 6470 - ACE Mentoring

ARCH 6471 - Managing Quality & Risks

ARCH 6472 - Architecture in a Single Source Project Delivery

ARCH 6473 - Research Tools & Methods

ARCH 6490 - Special Topics in Professional Studies

ARCH 6520 - Architecture in Other Cultures

ARCH 6624 - The Built Environment in Other Cultures I: Research Design

ARCH 6775 - Bluff General Elective

ARCH 6840 - Independent Study

ARCH 6910 - Teaching Assistantship

ARCH 6930 - Architecture Internship

ARCH 6931 - Architecture Internship

ARCH 6950 - Thesis Preparation

ARCH 6951 - Architecture Thesis

ARCH 7840 - Independent Study

ARTS 1000 - Arts In Our Time

ARTS 1111 - Freshman Seminar

ARTS 1150 - Topics in Cross-Disciplinary Arts I

ARTS 1400 - The Horror Film

ARTS 1450 - Visual Culture: Ways of Seeing

ARTS 2150 - Topics in Cross-Disciplinary Arts II

ARTS 3150 - Topics in Cross-Disciplinary Arts III

ARTS 3400 - World Cinema

ARTS 3939 - Internship

ARTS 4150 - Topics in Cross-Disciplinary Arts IV

ARTS 5000 - Topics

ARTS 5150 - Topics In Cross-Disciplinary Arts

BIOE 5010 - LifeSciences for Engineers I

BIOE 5011 - LifeSciences for Engineers II

BIOE 5020 - Quantitative Methods for Bioengineers I

BIOE 5021 - Quantitative Methods for Bioengineers II

BIOE 5030 - Technology for Bioengineers I

BIOE 5031 - Technology for Bioengineers II

BIOE 5420 - Special Topics in Bioengineering

BIOE 5840 - Independent Study in Bioengineering

BIOL 1111 - Freshman Seminar

BIOL 1136 - Human Biology

BIOL 1550 - Basic Biology: Ecology and the Diversity of Life

BIOL 1560 - Basic Biology: From Cells to Organisms

BIOL 2051 - General Biology I

BIOL 2061 - General Biology II

BIOL 2071 - General Biology Laboratory I

BIOL 2081 - General Biology Laboratory II

BIOL 2091 - General Biology Lab for Secondary Teacher Licensure

BIOL 2750 - Introduction to Molecular Research Techniques

BIOL 2840 - Independent Study

BIOL 2939 - Internship

BIOL 3104 - Behavioral Genetics

BIOL 3124 - Introduction to Molecular Biology

BIOL 3134 - Advanced Topics

BIOL 3225 - Human Physiology

BIOL 3244 - Human Anatomy

BIOL 3330 - Plant Diversity

BIOL 3411 - Principles of Ecology

BIOL 3412 - Fundamentals of Applied Ecology

BIOL 3413 - Ecology Laboratory

BIOL 3520 - Invertebrate Zoology

BIOL 3521 - Vertebrate Biology

BIOL 3611 - General Cell Biology

BIOL 3612 - Cell Biology Laboratory

BIOL 3621 - Introduction to Immunology

BIOL 3654 - General Microbiology

BIOL 3832 - General Genetics

BIOL 3840 - Independent Study

BIOL 3939 - Internship

BIOL 4024 - Introduction to Biotechnology

BIOL 4050 - Advanced Biology Topics

BIOL 4051 - Advanced Topics In Microbiology

BIOL 4052 - Advanced Ecology

BIOL 4053 - Disease Ecology

BIOL 4054 - Developmental Biology

BIOL 4064 - Advanced Cell Biology

BIOL 4074 - Human Reproductive Biology

BIOL 4125 - Molecular Biology Laboratory

BIOL 4126 - Molecular Genetics

BIOL 4128 - Topics in Molecular Biology

BIOL 4134 - Human Genetics

BIOL 4144 - Medical Microbiology

BIOL 4154 - Conservation Biology

BIOL 4165 - Neurobiology

BIOL 4250 - Mechanisms of Animal Behavior

BIOL 4315 - Plant Systematics

BIOL 4335 - Plant Science

BIOL 4345 - Flora of Colorado

BIOL 4415 - Microbial Ecology

BIOL 4416 - Aquatic Ecology

BIOL 4425 - Biogeography

BIOL 4450 - Marine Biology

BIOL 4455 - Comparative Environmental Physiology

BIOL 4460 - Environmental Toxicology

BIOL 4474 - Ecological Methods

BIOL 4475 - Mechanisms of Human Pathology

BIOL 4494 - Population and Evolutionary Genetics

BIOL 4550 - Cell Signaling

BIOL 4560 - Seminar: Nervous System Disorders

BIOL 4621 - Immunology

BIOL 4622 - Topics in Immunology

BIOL 4634 - Biology of Cancer

BIOL 4640 - Mammalogy

BIOL 4644 - Advanced Human Anatomy Laboratory

BIOL 4674 - Endocrinology

BIOL 4705 - Introduction to Research

BIOL 4750 - Technology Transfer and Biotechnology

BIOL 4764 - Biostatistics

BIOL 4840 - Independent Study

BIOL 4910 - Field Studies

BIOL 4974 - Evolution

BIOL 4990 - Undergraduate Research Seminar

BIOL 5001 - RM-MSMSP: Cells, Human Systems and Heredity

BIOL 5002 - RM-MSMSP: Ecology, Biodiversity and Adaptation

BIOL 5003 - RM-MSMSP: The Biology of Life: Integrated Perspectives

BIOL 5004 - Research Experience for Teachers - Biology Cohort

BIOL 5024 - Introduction to Biotechnology

BIOL 5050 - Advanced Biology Topics

BIOL 5051 - Advanced Topics In Microbiology

BIOL 5052 - Advanced Ecology

BIOL 5053 - Disease Ecology

BIOL 5054 - Developmental Biology

BIOL 5064 - Advanced Cell Biology

BIOL 5074 - Human Reproductive Biology

BIOL 5099 - Biology For Computer Scientists, Engineers and Mathematicians

BIOL 5125 - Molecular Biology Lab

BIOL 5126 - Molecular Genetics

BIOL 5128 - Topics in Molecular Biology

BIOL 5134 - Human Genetics

BIOL 5144 - Medical Microbiology

BIOL 5154 - Conservation Biology

BIOL 5165 - Neurobiology

BIOL 5250 - Mechanisms of Animal Behavior

BIOL 5315 - Plant Systematics

BIOL 5330 - Evolution and Diversification of Plants

BIOL 5335 - Plant Science

BIOL 5345 - Flora of Colorado

BIOL 5415 - Microbial Ecology

BIOL 5416 - Aquatic Ecology

BIOL 5425 - Biogeography

BIOL 5445 - Applied Environmental Biology

BIOL 5450 - Marine Biology

BIOL 5455 - Comparative Environmental Physiology

BIOL 5460 - Environmental Toxicology

BIOL 5474 - Ecological Methods

BIOL 5475 - Mechanisms of Human Pathology

BIOL 5494 - Population and Evolutionary Genetics

BIOL 5550 - Cell Signaling

BIOL 5560 - Seminar: Nervous System Disorders

BIOL 5621 - Immunology

BIOL 5622 - Topics in Immunology

BIOL 5634 - Biology of Cancer

BIOL 5640 - Mammalogy

BIOL 5644 - Advanced Human Anatomy Laboratory

BIOL 5674 - Endocrinology

BIOL 5705 - Introduction to Research

BIOL 5750 - Technology Transfer and Biotechnology

BIOL 5764 - Biostatistics

BIOL 5840 - Independent Study: BIOL

BIOL 5910 - Field Studies

BIOL 5939 - Internship

BIOL 5974 - Evolution

BIOL 6655 - Seminar

BIOL 6950 - Master's Thesis

BIOL 9000 - INTC: Special Topics

BLAW 3000 - Legal and Ethical Environments of Business I

BLAW 4120 - Legal Issues for Entrepreneurs

BLAW 6500 - Legal Issues for CPA's

BUSN 5939 - Internship

BUSN 6520 - Managing Individuals and Teams

BUSN 6521 - Managing Individuals and Teams (Health Section)

BUSN 6530 - Data Analysis for Managers

BUSN 6540 - Legal and Ethical Environment of Business

BUSN 6541 - Legal and Ethical Environment of Business (Health Section)

BUSN 6550 - Analyzing and Interpreting Accounting Information

BUSN 6560 - Marketing Management

BUSN 6610 - Information Systems Management and Strategy

BUSN 6620 - Applied Economics for Managers

BUSN 6621 - Applied Economics for Managers (Health Section)

BUSN 6630 - Management of Operations

BUSN 6631 - Management of Operations (Health Section)

BUSN 6640 - Financial Management

BUSN 6710 - Strategic Management

BUSN 6711 - Strategic Management (Health Section)

BUSN 6800 - Topics In Business

BUSN 6811 - IT and New Business Paradigms

BUSN 6820 - Project Management

BUSN 6822 - Services Operations

BUSN 6824 - Business Forecasting

BUSN 6826 - Supply Chain Management

BUSN 6828 - Business Applications of Data Mining

BUSN 6830 - Business and the Natural Environment

BUSN 6832 - Quality and Process Improvement

BUSN 6834 - Simulation Modeling

BUSN 6836 - Decision Analysis

BUSN 6840 - Independent Study

BUSN 6850 - Accounting and Finance for Sustainability

BUSN 6860 - Finance in the Sports Entertainment Industries

BUSN 6870 - Global Climate Change

CAND 5940 - Candidate for Degree

CHEM 1000 - Foundations for General Chemistry

CHEM 1111 - Freshman Seminar

CHEM 1115 - Chemistry Content

CHEM 1130 - Engineering General Chemistry

CHEM 1474 - Core Chemistry: Chemistry For the Consumer

CHEM 2031 - General Chemistry I

CHEM 2038 - General Chemistry Laboratory I

CHEM 2061 - General Chemistry II

CHEM 2068 - General Chemistry Laboratory II

CHEM 2300 - Nutritional Chemistry

CHEM 2840 - Independent Study: Chem

CHEM 2939 - Internship

CHEM 3011 - Inorganic Chemistry

CHEM 3018 - Inorganic Chemistry Laboratory

CHEM 3111 - Analytical Chemistry

CHEM 3118 - Analytical Chemistry Laboratory

CHEM 3411 - Organic Chemistry I

CHEM 3418 - Organic Chemistry Laboratory I

CHEM 3421 - Organic Chemistry II

CHEM 3428 - Organic Chemistry Laboratory II

CHEM 3491 - Honors Organic Chemistry II

CHEM 3498 - Honors Organic Chemistry Laboratory II

CHEM 3810 - Biochemistry

CHEM 3840 - Independent Study

CHEM 3939 - Internship

CHEM 4121 - Instrumental Analysis

CHEM 4128 - Instrumental Analysis Laboratory

CHEM 4511 - Physical Chemistry I

CHEM 4518 - Physical Chemistry Laboratory I

CHEM 4521 - Physical Chemistry II

CHEM 4538 - Physical Chemistry II Laboratory

CHEM 4700 - Environmental Chemistry

CHEM 4810 - General Biochemistry I

CHEM 4820 - General Biochemistry II

CHEM 4828 - Biochemistry Lab

CHEM 4835 - Biochemistry of Cancer

CHEM 4840 - Independent Study: Chem

CHEM 5010 - Advanced Inorganic Chemistry

CHEM 5071 - RM-MSMSP: Atoms and Properties of Matter

CHEM 5072 - RM-MSMSP: Interactions of Elements and Compounds

CHEM 5073 - RM-MSMSP Research Experience for Teachers - Chemistry Cohort

CHEM 5110 - Advanced Analytical Chemistry

CHEM 5130 - Surface Analytical Techniques

CHEM 5250 - Chemometrics: Data Analysis

CHEM 5310 - Advanced Organic Chemistry

CHEM 5510 - Computational Chemistry

CHEM 5520 - Molecular Structure and Spectra

CHEM 5530 - Advanced Physical Chemistry

CHEM 5550 - Applications of Group Theory in Chemistry

CHEM 5600 - Topics in Chemistry

CHEM 5700 - Environmental Chemistry

CHEM 5710 - Air Pollution Chemistry

CHEM 5720 - Atmospheric Sampling and Analysis

CHEM 5810 - General Biochemistry I

CHEM 5820 - General Biochemistry II

CHEM 5835 - Biochemistry of Cancer

CHEM 5840 - Independent Study

CHEM 5939 - Internship

CHEM 5950 - Master's Thesis

CHEM 6000 - Chemistry Seminar

CHEM 6001 - Master's Research Seminar

CHEM 6002 - Chemistry Seminar I

CHEM 6003 - Chemistry Seminar II

CHEM 6840 - Independent Study: Chem

CHEM 6950 - Master's Thesis

CHEM 6960 - Master's Report

CHIN 1000 - China and the Chinese

CHIN 1010 - Beginning Chinese I

CHIN 1020 - Beginning Chinese II

CHIN 1071 - Mandarin Chinese for the Professions

CHIN 1111 - Freshman Seminar

CHIN 2110 - Second Year Chinese I

CHIN 2120 - Second Year Chinese II

CHIN 2840 - Independent Study

CHIN 2939 - Internship

CHIN 2970 - Contemporary Chinese Cinema

CHIN 3200 - Contemporary Chinese Society and Culture

CHIN 3300 - Special Topics on Chinese Film

CHIN 3840 - Independent Study: CHIN

CHIN 3995 - Travel Study

CLAS 2939 - Internship

CLAS 3939 - Internship

CLAS 4840 - Independent Study: CLAS

CLDE 4810 - Orientation to Bilingual Education

CLDE 4820 - Language Development and Acquisition

CLDE 4825 - Techniques in Teaching English as a Second Language

CLDE 4830 - Instructional Delivery Methods for Second Language Learners

CLDE 4910 - CO-TOP Practicum

CLDE 5010 - Foundations of Language, Literacy and Culture

CLDE 5030 - Language/Literacy Acquisition Part I

CLDE 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II

CLDE 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction

CLDE 5070 - Linguistic Analysis of English: Implications for Teaching

CLDE 5140 - Multicultural Education

CLDE 5150 - Culture of the Classroom

CLDE 5160 - Historical and Legal Foundations of Bilingual Education

CLDE 5170 - Race, Class and Culture in Public Schools

CLDE 5180 - Working with Communities and Families

CLDE 5190 - Culturally Responsive Pedagogy and Practices

CLDE 5430 - Gender as Culture

CLDE 5800 - Sociolinguistics: Language Variation and Implications for Teaching

CLDE 5820 - Techniques in Teaching English as a Second Language

CLDE 5821 - English Phonology for TESOL

CLDE 5822 - Internet for ESL Teachers

CLDE 5825 - Methods and Materials of Language Teaching

CLDE 5826 - Language Teaching Lab

CLDE 5830 - Workshop in Multicultural Education

CLDE 5835 - Special Topics: Literacy and Language

CLDE 5840 - Independent Study: CLDE

CLDE 5920 - Readings in Multicultural Education

CLDE 6090 - Research Seminar

CLDE 6713 - Introduction to Language Policy

CLDE 6840 - Independent Study: CLDE

CLDE 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education

CLDE 6950 - Master's Thesis

CLDE 7410 - Communication and Control in Systems Change

CNST 4000 - Senior Seminar in Chinese Studies

COMM 1011 - Fundamentals of Communication

COMM 1021 - Fundamentals of Mass Communication

COMM 1051 - Topics in Communication

COMM 1111 - Freshman Seminar

COMM 2020 - Communication, Citizenship, and Social Justice

COMM 2041 - Interpersonal Communication

COMM 2045 - Workplace Communication

COMM 2050 - Business and Professional Speaking

COMM 2101 - Presentational Speaking

COMM 2800 - Technology for Workplace Communication

COMM 2939 - Internship

COMM 3120 - Technical Communication

COMM 3271 - Communication and Diversity

COMM 3620 - Television Production

COMM 3650 - Mass Communication and Society

COMM 3680 - Mass Communication Skills

COMM 3840 - Independent Study

COMM 3939 - Internship

COMM 4011 - Research Methods: Quantitative

COMM 4015 - Communication and Civility

COMM 4020 - Feminist Perspectives on Communication

COMM 4021 - Perspectives on Rhetoric

COMM 4022 - Critical Analysis of Communication

COMM 4031 - Perspectives on Communication

COMM 4040 - Communication, Prisons, and Social Justice

COMM 4041 - Theories and Methods in Interpersonal Communication

COMM 4045 - Female-Male Friendships

COMM 4111 - Theories of Leadership

COMM 4120 - Writing Technical Reports

COMM 4130 - User Interface Design and Analysis

COMM 4140 - Argumentation

COMM 4151 - Group Communication

COMM 4200 - Persuasion

COMM 4210 - Communication and Discourse Analysis

COMM 4212 - Software Documentation

COMM 4215 - Ethics in Communication

COMM 4220 - Human Information Processing

COMM 4221 - Research Methods: Qualitative

COMM 4222 - Professional Communication

COMM 4230 - Nonverbal Communication

COMM 4240 - Organizational Communication

COMM 4245 - Advanced Organizational Communication

COMM 4255 - Negotiations and Bargaining

COMM 4260 - Communication and Conflict

COMM 4262 - Mediation

COMM 4265 - Gender and Communication

COMM 4268 - Communication and Diversity in U.S. History

COMM 4270 - Intercultural Communication

COMM 4275 - Family Communication

COMM 4280 - Communication and Change

COMM 4282 - Environmental Communication

COMM 4285 - Communication Processes in Technology Transfer

COMM 4290 - Web Design

COMM 4300 - Multimedia Authoring

COMM 4310 - Advanced Multimedia Authoring

COMM 4320 - Content Management

COMM 4330 - Dynamic Web Design Workshop

COMM 4340 - Advanced Web Design

COMM 4410 - Science Writing

COMM 4500 - Health Communication

COMM 4510 - Usability Testing

COMM 4550 - Rhetorics of Medicine & Health

COMM 4605 - Rhetorical Theory for Technical Communication

COMM 4620 - Health Risk Communication

COMM 4621 - Visual Communication

COMM 4635 - Principles of Public Relations

COMM 4640 - Advanced Public Relations

COMM 4665 - Principles of Advertising

COMM 4680 - Mass Communication Law and Policy

COMM 4681 - Communication Issues in Trial Court Practices and Processes

COMM 4682 - Political Communication

COMM 4683 - Media in the Courtroom

COMM 4688 - Senior Seminar: Transitioning from College to Career

COMM 4690 - Applied Communication

COMM 4710 - Topics in Communication

COMM 4750 - Legal Reasoning and Writing

COMM 4755 - Universal Internet Usability

COMM 4760 - Computer-Mediated Communication

COMM 4805 - Graphics

COMM 4830 - Visual Principles in Technical Communication

COMM 4840 - Independent Study

COMM 4995 - Travel Study

COMM 5011 - Research Methods: Quantitative

COMM 5015 - Communication and Civility

COMM 5020 - Feminist Perspectives on Communication

COMM 5021 - Perspectives on Rhetoric

COMM 5022 - Critical Analysis of Communication

COMM 5025 - Philosophy of Communication

COMM 5040 - Communication, Prisons, and Social Justice

COMM 5041 - Theories and Methods in Interpersonal Communication

COMM 5045 - Female-Male Friendships

COMM 5111 - Theories of Leadership

COMM 5120 - Writing Technical Reports

COMM 5130 - User Interface Design and Analysis

COMM 5140 - Argumentation

COMM 5151 - Group Communication

COMM 5205 - Empirical Research Methods for Communication

COMM 5210 - Communication and Discourse Analysis

COMM 5212 - Software Documentation

COMM 5215 - Ethics in Communication

COMM 5220 - Human Information Processing

COMM 5221 - Research Methods: Qualitative

COMM 5222 - Professional Communication

COMM 5230 - Nonverbal Communication

COMM 5240 - Organizational Communication

COMM 5245 - Advanced Organizational Communication

COMM 5250 - Difference Matters and Organizational Communication

COMM 5255 - Negotiations and Bargaining

COMM 5260 - Communication and Conflict

COMM 5262 - Mediation

COMM 5265 - Gender and Communication

COMM 5268 - Communication and Diversity in U.S. History

COMM 5270 - Intercultural Communication

COMM 5275 - Family Communication

COMM 5280 - Communication and Change

COMM 5282 - Environmental Communication

COMM 5285 - Communication Processes in Technology Transfer

COMM 5290 - Web Design

COMM 5300 - Multimedia Authoring

COMM 5310 - Advanced Multimedia Authoring

COMM 5320 - Content Management

COMM 5330 - Dynamic Web Design Workshop

COMM 5340 - Advanced Web Design

COMM 5405 - Technical Communication: Writing

COMM 5410 - Science Writing

COMM 5500 - Health Communication

COMM 5505 - Technical Communication: Editing

COMM 5510 - Usability Testing

COMM 5550 - Rhetorics of Medicine & Health

COMM 5605 - Rhetorical Theory for Technical Communication

COMM 5620 - Health Risk Communication

COMM 5621 - Visual Communication

COMM 5635 - Principles of Public Relations

COMM 5640 - Advanced Public Relations

COMM 5665 - Principles of Advertising

COMM 5680 - Mass Communication Law and Policy

COMM 5681 - Communication Issues in Trial Court Practices and Processes

COMM 5682 - Political Communication

COMM 5710 - Topics in Communication

COMM 5750 - Legal Reasoning and Writing

COMM 5755 - Universal Internet Usability

COMM 5760 - Computer-Mediated Communication

COMM 5805 - Graphics

COMM 5830 - Visual Principles in Technical Communication

COMM 5840 - Independent Study

COMM 5939 - Internship

COMM 5995 - Travel Study

COMM 6013 - Introduction to Graduate Work in Communication

COMM 6300 - Educational Perspectives on Communication

COMM 6410 - Usability Test Design Project

COMM 6950 - Master's Thesis

COMM 6960 - Master's Project

CPCE 5010 - Counseling Theories

CPCE 5100 - Techniques of Counseling

CPCE 5110 - Group Counseling

CPCE 5150 - Family Therapy Theory

CPCE 5160 - Techniques in Family Therapy

CPCE 5170 - Issues In Family Studies

CPCE 5180 - Counseling Couples

CPCE 5280 - Addictions Counseling

CPCE 5330 - Counseling Issues and Ethics

CPCE 5400 - Career Development

CPCE 5425 - Developing & Implementing a School Counseling Program: ASCA

CPCE 5810 - Multicultural Counseling Issues for Individuals and Families

CPCE 5815 - Introduction to School Counseling

CPCE 5820 - Strategies of Agency Counseling

CPCE 5830 - Special Topics

CPCE 5840 - Independent Study: CPCE

CPCE 5910 - Practicum in CPCE

CPCE 5915 - Practicum in School Counseling

CPCE 5917 - School Counseling Practicum

CPCE 5930 - Internship in Counseling

CPCE 6000 - Introduction to Sex Therapy

CPCE 6100 - Spiritual Dimensions of Counseling

CPCE 6140 - Counseling Children, Adolescents and Their Parents

CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems

CPCE 6220 - Youth Challenges and Resiliency

CPCE 6230 - Developmental Counseling in Schools: Prevention & Intervention

CPCE 6240 - Consultation Strategies

CPCE 6250 - Mental Health Diagnosis

CPCE 6330 - Advanced Seminar in Counseling and Psychotherapy

CPCE 6350 - Theories of Personality Development and Change

CPCE 6810 - Advanced Multicultural Counseling

CPCE 6840 - Independent Study

CPCE 6910 - Advanced Practicum in Counseling

CPCE 6950 - Master's Thesis

CPCE 7100 - Advanced Theories and Techniques in Psychotherapy

CPCE 7800 - Supervision in Counseling and Psychotherapy

CRJU 1001 - Introduction to Criminal Justice

CRJU 1111 - Law and Order: Anatomy of the Criminal Justice System

CRJU 2041 - Crime Theory and Causes

CRJU 3100 - Criminal Justice Research Methods

CRJU 3150 - Statistics for Criminal Justice

CRJU 3160 - White-Collar Crime

CRJU 3220 - Community-Based Corrections

CRJU 3250 - Violence in Society

CRJU 3251 - Crime and Media

CRJU 3252 - Violent Offenders

CRJU 3310 - Police in Contemporary Society

CRJU 3320 - Police-Community Relations

CRJU 3410 - Probation and Parole

CRJU 3420 - Pleas, Trials and Sentences

CRJU 3510 - Drugs, Alcohol and Crime

CRJU 3520 - Juvenile Justice Administration

CRJU 3540 - Crime and Delinquency Prevention

CRJU 4042 - Corrections

CRJU 4043 - Law Enforcement

CRJU 4044 - Courts and Judicial Process

CRJU 4120 - Race, Class and Crime

CRJU 4121 - Ethics in Criminal Justice

CRJU 4130 - Poverty and Crime

CRJU 4140 - Domestic Violence and Crime

CRJU 4170 - Victim Studies

CRJU 4171 - Murder In America

CRJU 4180 - Comparative Study of Criminal Justice Systems

CRJU 4190 - Women and Crime

CRJU 4230 - Corrections and Treatment

CRJU 4252 - Criminal Offenders

CRJU 4310 - Leadership Roles in Criminal Justice

CRJU 4410 - Criminal Law and Constitutional Procedures

CRJU 4430 - Law and Society

CRJU 4440 - Courts and Social Policy

CRJU 4520 - Gangs and Criminal Organizations

CRJU 4530 - Families and Intergenerational Crime

CRJU 4600 - Special Topics in Criminal Justice

CRJU 4840 - Independent Study: CRJU

CRJU 4939 - Internship

CRJU 5000 - Law and Social Control

CRJU 5100 - Administration of Criminal Justice

CRJU 5120 - Nature and Causes of Crime

CRJU 5200 - Wrongful Convictions

CRJU 5210 - Prisoner Reentry

CRJU 5220 - The American Jury System

CRJU 5230 - Gun Rights and Gun Control

CRJU 5250 - Criminal Offenders

CRJU 5260 - Crime and Literature

CRJU 5270 - Case Studies in Crim Justice

CRJU 5280 - Computer Crime

CRJU 5301 - Crime and Media

CRJU 5320 - Police Administration

CRJU 5321 - Research Methods

CRJU 5325 - Qualitative Methods for Criminal Justice

CRJU 5330 - Gangs and Criminal Organizations

CRJU 5391 - Sex Offenders and Offenses

CRJU 5410 - Victimology

CRJU 5420 - Violence in Society

CRJU 5430 - Drugs, Alcohol and Crime

CRJU 5510 - Contemporary Issues in Law Enforcement

CRJU 5520 - Corrections

CRJU 5530 - Community Corrections

CRJU 5540 - Juvenile Justice Administration

CRJU 5550 - Criminal Justice Policy and Planning

CRJU 5551 - Judicial Administration

CRJU 5552 - Criminal Justice Ethics

CRJU 5553 - Women and Crime

CRJU 5554 - Criminal Justice Reform

CRJU 5561 - Capstone Seminar

CRJU 5571 - The Social Organization of Crime

CRJU 5572 - Race, Crime and Justice

CRJU 5574 - White Collar Crime

CRJU 5575 - The Mentally Disordered Offender

CRJU 5576 - Social Science in the Criminal Justice System

CRJU 5910 - Women and Violence: a Sociological Perspective

CRJU 5920 - Psychology of Violence Against Women

CRJU 5930 - Battered Women and The Legal System

CRJU 5940 - Domestic Violence Social Change and Advocacy

CRJU 6600 - Special Topics in Criminal Justice

CRJU 6840 - Independent Study

CRJU 6910 - Field Study in Criminal Justice

CRJU 6950 - Master's Thesis

CRJU 7000 - Law and Social Control

CRJU 7100 - Administration of Criminal Justice

CRJU 7120 - Nature and Causes of Crime

CRJU 7200 - Wrongful Convictions

CRJU 7210 - Prisoner Reentry

CRJU 7220 - The American Jury System

CRJU 7230 - Gun Rights and Gun Control

CRJU 7250 - Criminal Offenders

CRJU 7260 - Crime and Literature

CRJU 7270 - Case Studies in Criminal Justice

CRJU 7280 - Leadership in the Modern Criminal Justice System

CRJU 7301 - Crime and Media

CRJU 7320 - Seminar: Police Administration

CRJU 7321 - Research Methods in Criminal Justice

CRJU 7325 - Qualitative Methods for Criminal Justice

CRJU 7330 - Gangs and Criminal Organizations

CRJU 7391 - Sex Offenders and Offenses

CRJU 7410 - Victimology

CRJU 7420 - Violence in Society

CRJU 7430 - Drugs, Alcohol and Crime

CRJU 7510 - Seminar: Contemporary Issues in Law Enforcement

CRJU 7520 - Seminar: Corrections

CRJU 7530 - Seminar: Community Corrections

CRJU 7540 - Seminar: Juvenile Justice Administration

CRJU 7550 - Seminar: Criminal Justice Policy Analysis

CRJU 7551 - Seminar: Judicial Administration

CRJU 7552 - Seminar: Criminal Justice Ethics

CRJU 7553 - Seminar: Women and Criminal Justice

CRJU 7554 - Seminar: Criminal Justice Reform

CRJU 7571 - Advanced Seminar: The Social Organization of Crime

CRJU 7572 - Advanced Seminar: Race, Crime and Justice

CRJU 7574 - Advanced Seminar: White Collar Crime

CRJU 7575 - Advanced Seminar: The Mentally Disordered Offender

CRJU 7576 - Advanced Seminar: Social Science in the Criminal Justice System

CRJU 7600 - Special Topics in Criminal Justice

CRJU 7910 - Women and Violence: a Sociological Perspective

CRJU 7920 - Psychology of Violence Against Women

CRJU 7930 - Battered Women and the Legal System

CRJU 7940 - Domestic Violence Social Change and Advocacy

CRJU 8840 - Independent Study

CRJU 8990 - Doctoral Dissertation

CSCI 1320 - Introduction to Computing

CSCI 1410 - Fundamentals of Computing

CSCI 1411 - Fundamentals of Computing Laboratory

CSCI 1510 - Logic Design

CSCI 1800 - Special Topics

CSCI 2132 - Circuits and Electronics

CSCI 2312 - Intermediate Programming

CSCI 2421 - Data Structures and Program Design

CSCI 2511 - Discrete Structures

CSCI 2525 - Assembly Language and Computer Organization

CSCI 2571 - Fundamentals of UNIX

CSCI 2800 - Special Topics

CSCI 3287 - Database System Concepts

CSCI 3320 - Advanced Programming

CSCI 3412 - Algorithms

CSCI 3415 - Principles of Programming Languages

CSCI 3453 - Operating System Concepts

CSCI 3508 - Introduction to Software Engineering

CSCI 3511 - Hardware-Software Interface

CSCI 3560 - Probability and Computing

CSCI 3800 - Special Topics

CSCI 3800 - Special Topics

CSCI 3840 - Independent Study: CSCI

CSCI 3920 - Java Applications

CSCI 3920 - Java Applications

CSCI 3963 - Network Structures

CSCI 4034 - Theoretical Foundations of Computer Science

CSCI 4202 - Introduction to Artificial Intelligence

CSCI 4287 - Embedded Systems Programming

CSCI 4408 - Applied Graph Theory

CSCI 4411 - Computational Geometry

CSCI 4501 - Java

CSCI 4555 - Compiler Design

CSCI 4565 - Introduction to Computer Graphics

CSCI 4591 - Computer Architecture

CSCI 4630 - Linguistic Geometry

CSCI 4640 - Universal Compiler: Theory and Construction

CSCI 4650 - Numerical Analysis I

CSCI 4660 - Numerical Analysis II

CSCI 4738 - Senior Design I

CSCI 4739 - Senior Design II

CSCI 4740 - Computer Security

CSCI 4761 - Introduction to Computer Networks

CSCI 4771 - Introduction to Mobile Computing

CSCI 4788 - Bioinformatics

CSCI 4800 - Special Topics

CSCI 4840 - Independent Study

CSCI 4910 - User Experience Design

CSCI 4920 - Computer Game Design and Programming

CSCI 4939 - Internship

CSCI 5098 - Computer Science for Bioscientists

CSCI 5217 - Information Theory

CSCI 5255 - Object Oriented Design

CSCI 5408 - Applied Graph Theory

CSCI 5409 - Graph Theory and Graph Algorithms

CSCI 5411 - Computational Geometry

CSCI 5446 - Theory of Automata

CSCI 5451 - Algorithms

CSCI 5542 - Neural Networks

CSCI 5551 - Parallel and Distributed Systems

CSCI 5552 - Advanced Topics in Parallel Processing

CSCI 5559 - Database Systems

CSCI 5565 - Introduction to Computer Graphics

CSCI 5573 - Operating Systems

CSCI 5574 - Advanced Topics in Operating Systems

CSCI 5582 - Artificial Intelligence

CSCI 5585 - Advanced Computer Graphics

CSCI 5593 - Advanced Computer Architecture

CSCI 5595 - Computer Animation

CSCI 5595 - Computer Animation

CSCI 5610 - Computational Biology

CSCI 5619 - Complex Intelligent Systems

CSCI 5630 - Linguistic Geometry

CSCI 5640 - Universal Compiler: Theory and Construction

CSCI 5654 - Algorithms for Communication Networks

CSCI 5660 - Numerical Analysis I

CSCI 5661 - Numerical Analysis II

CSCI 5667 - Introduction to Approximation Theory

CSCI 5682 - Expert Systems

CSCI 5690 - Knowledge Representation for Intelligent Systems

CSCI 5701 - High-Performance Communication Systems and Network Analysis

CSCI 5702 - Data Mining

CSCI 5704 - Introduction to Distributed Systems

CSCI 5728 - Software Engineering

CSCI 5765 - Computer Networks

CSCI 5771 - Introduction to Mobile Computing

CSCI 5780 - Theory of Distributed Computing

CSCI 5799 - Topics in Networked Computing

CSCI 5800 - Special Topics

CSCI 5840 - Independent Study

CSCI 5941 - Directed Study: Programming Project

CSCI 6595 - Computational Methods in Nonlinear Programming

CSCI 6664 - Numerical Linear Algebra

CSCI 6950 - Master's Thesis

CSCI 6960 - Master's Report

CSCI 7002 - Computer Security

CSCI 7200 - Advances in Management Information Systems

CSCI 7210 - Topics in Analytical Research in Management Information Systems

CSCI 7211 - Topics in Behavioral-Organizational Research in Management Information Systems

CSCI 7502 - Research Methods

CSCI 7551 - Parallel and Distributed Systems

CSCI 7552 - Advanced Topics in Parallel Processing

CSCI 7574 - Advanced Topics in Operating Systems

CSCI 7582 - Artificial Intelligence

CSCI 7595 - Computer Animation

CSCI 7595 - Computer Animation

CSCI 7654 - Algorithms for Communication Networks

CSCI 7711 - Bioinformatics I

CSCI 7712 - Bioinformatics II

CSCI 7765 - Computer Networks

CSCI 7799 - Topics in Network Computing

CSCI 7800 - Special Topics

CSCI 7840 - Independent Study

CSCI 8990 - Doctoral Dissertation

CSCI 8991 - Doctoral Dissertation

CSCI 8992 - Doctoral Dissertation

CSCI 8993 - Doctoral Dissertation

CSCI 8994 - Doctoral Dissertation

CSCI 8995 - Doctoral Dissertation

CSCI 8996 - Doctoral Dissertation

CSCI 8997 - Doctoral Dissertation

CSCI 8998 - Doctoral Dissertation

CSCI 8999 - Doctoral Dissertation

CVEN 1025 - Civil Engineering Graphics and Computer Aided Design

CVEN 1800 - Special Topics

CVEN 1840 - Independent Study

CVEN 2121 - Analytical Mechanics I

CVEN 2200 - Computing Methods in Civil Engineering

CVEN 2212 - Plane Surveying

CVEN 2800 - Special Topics 2800-283X

CVEN 2840 - Independent Study

CVEN 3111 - Analytical Mechanics II

CVEN 3121 - Mechanics of Materials

CVEN 3131 - Applied Mechanics

CVEN 3141 - Introduction to Structural Materials

CVEN 3154 - Water Quality Laboratory

CVEN 3212 - Advanced Plane Surveying

CVEN 3313 - Theoretical Fluid Mechanics

CVEN 3323 - Applied Fluid Mechanics

CVEN 3401 - Introduction to Environmental Engineering

CVEN 3414 - Design of Water and Wastewater Systems

CVEN 3505 - Structural Analysis

CVEN 3602 - Transportation Engineering

CVEN 3708 - Introduction to Geotechnical Engineering

CVEN 3800 - Special Topics: 3800-3839

CVEN 3840 - Independent Study

CVEN 3842 - Independent Study

CVEN 4000 - Senior Seminar

CVEN 4067 - Senior Design Projects

CVEN 4077 - Engineering Economy

CVEN 4087 - Engineering Contracts

CVEN 4388 - Site Engineering

CVEN 4405 - Environmental and Water Systems Analysis

CVEN 4427 - Storm Water System Design

CVEN 4537 - Numerical Methods for Engineers

CVEN 4565 - Timber Structure Design

CVEN 4575 - Structural Steel Design

CVEN 4585 - Reinforced Concrete Design

CVEN 4602 - Highway Engineering

CVEN 4718 - Intermediate Soils Engineering

CVEN 4738 - Intermediate Foundation Engineering

CVEN 4780 - Engineering Geology

CVEN 4800 - Special Topics: 4800-4839

CVEN 4840 - Independent Study

CVEN 5111 - Structural Dynamics

CVEN 5121 - Intermediate Mechanics of Materials

CVEN 5333 - Applied Hydrology

CVEN 5334 - Groundwater Hydrology

CVEN 5336 - Urban Runoff Quality and Quantity Modeling

CVEN 5343 - Open Channel Hydraulics

CVEN 5344 - Unsteady Open Channel Hydraulics

CVEN 5345 - Computational Methods for Water Resources

CVEN 5381 - Introduction to Geographic Information Systems

CVEN 5382 - GIS Spatial Database Development

CVEN 5383 - GIS Analysis -- Theory and Practice

CVEN 5384 - GIS Management and Policies

CVEN 5385 - GIS Relational Database Systems

CVEN 5386 - GIS Laboratory

CVEN 5387 - Advanced Remote Sensing

CVEN 5388 - Site Engineering

CVEN 5393 - Water Resources Development and Management

CVEN 5394 - Water Resources Systems

CVEN 5401 - Introduction to Environmental Engineering

CVEN 5402 - Integrated Environmental Modeling

CVEN 5403 - Environmental Regulations and Management Systems

CVEN 5404 - Sustainable Water Systems: Physical & Chemical Processes

CVEN 5405 - Systems Analysis for Environment and Sustainability

CVEN 5427 - Storm Water System Design

CVEN 5434 - Sustainable Water Systems: Biological Processes

CVEN 5444 - Design of Solid Residuals and Natural Treatment Systems

CVEN 5456 - Engineering Practice

CVEN 5457 - Administration of Public Works

CVEN 5460 - Introduction to Sustainable Urban Infrastructure

CVEN 5461 - Defining and Measuring Sustainability

CVEN 5462 - Theories of Sustainable Infrastructure Management

CVEN 5480 - Hazardous Wastes and Site Remediation

CVEN 5481 - Sustainable Water Systems Policy and Planning

CVEN 5494 - Risk Assessment in Environmental Engineering

CVEN 5514 - Matrix Analysis of Structures

CVEN 5515 - Introduction to Finite Element Analysis

CVEN 5537 - Numerical Methods in Civil Engineering

CVEN 5565 - Advanced Timber Structure Design

CVEN 5575 - Advanced Topics in Structural Steel Design

CVEN 5585 - Advanced Topics in Reinforced Concrete

CVEN 5602 - Advanced Highway Design

CVEN 5611 - Traffic and Safety Data Analysis

CVEN 5612 - Traffic Impact Assessment

CVEN 5613 - Traffic Flow Theory and Fundamentals

CVEN 5621 - Highway Capacity Analysis

CVEN 5622 - Traffic Operations and Control

CVEN 5631 - Transportation Planning Methods

CVEN 5632 - Urban Transportation Modeling

CVEN 5652 - Airport Planning and Design

CVEN 5662 - Transportation System Safety

CVEN 5682 - Pavement Design

CVEN 5692 - Urban Traffic Workshop

CVEN 5708 - Advanced Soils Engineering

CVEN 5709 - Settlement Analysis

CVEN 5718 - Engineering Properties of Soils

CVEN 5719 - Design and Construction of Geosynthetic-Reinforced Soil Structures

CVEN 5728 - Groundwater and Seepage

CVEN 5738 - Foundation Engineering

CVEN 5748 - Design of Earth Embankment Dams

CVEN 5758 - Foundations on Expansive Soils

CVEN 5768 - Introduction to Rock Engineering

CVEN 5778 - Applied and Experimental Rock Mechanics

CVEN 5780 - Engineering Geology

CVEN 5788 - Design and Construction of Municipal Solid Waste Disposal Facilities

CVEN 5798 - Dynamics of Soils and Foundations

CVEN 5800 - Special Topics

CVEN 5835 - Advanced Timber Structure Design

CVEN 5835 - Advanced Timber Structure Design

CVEN 5840 - Independent Study

CVEN 5950 - Master's Thesis

CVEN 5960 - Master's Report

CVEN 6110 - PhD Seminar

CVEN 6111 - Dynamics of Structures

CVEN 6131 - Theory of Elasticity

CVEN 6165 - Buckling in Structures

CVEN 6336 - Urban Flood Control System Design

CVEN 6353 - Hydraulic Design

CVEN 6515 - Advanced Theory of Structures

CVEN 6738 - Finite Element Method in Geotechnical Engineering

CVEN 6840 - Independent Study

CVEN 7800 - Special Topics

CVEN 7801 - Special Topics

CVEN 7840 - Independent Study

CVEN 7990 - Doctoral Dissertation

CVEN 8990 - Doctoral Dissertation

DSCI 2010 - Business Statistics

DSCI 3000 - Operations Management

DSCI 3780 - Supply Chain Management

DSCI 4840 - Independent Study

DSCI 4950 - Special Topics in Decision Sciences

DSCI 5939 - Internship

DSCI 6010 - Deterministic Models

DSCI 6020 - Stochastic Models

DSCI 6220 - Research methods: Design and Analysis

DSCI 6230 - Business Forecasting

DSCI 6440 - Quality and Process Improvement

DSCI 6460 - Decision Analysis

DSCI 6480 - Simulation Modeling

DSCI 6600 - Purchasing, Materials Management and Negotiation

DSCI 6800 - Special Topics

DSCI 6820 - Project Management

DSCI 6822 - Services Operations

DSCI 6826 - Supply Chain Management

DSCI 6828 - Business Applications of Data Mining

DSCI 6840 - Independent Study

DSCI 6910 - Decision Sciences Practicum

DSEP 6000 - Academic Writing for Doctoral Students

DSEP 6010 - APA Conventions in Academic Writing

DSEP 6020 - Advanced Academic Writing for Doctoral Students

DSEP 6994 - Introduction to Academic Discourse

DSEP 7000 - Doctoral Seminar in Research Methods

DSEP 7010 - Dissertation Planning and Design

DSEP 7100 - Leadership/Innovation in Education

DSEP 7200 - Administrative Leadership and Values Appraisals

DSEP 7210 - Education Policy Making in a Democratic Society

DSEP 7220 - Leadership and Power

DSEP 7230 - Organizational Performance in Schools

DSEP 7240 - Problems/Practices in Integrated Services

DSEP 7250 - Nature of Work in Schools

DSEP 7260 - Managing Integrated Services

DSEP 7300 - Individual and Organizational Change

DSEP 7410 - Power and Privilege: The Social Construction of Difference

DSEP 7420 - Foundations of Education in Urban and Diverse Communities

DSEP 7430 - Working with Families and Communities

DSEP 7500 - Strategic Human Capital Development

DSEP 7510 - Strategic Organizational Management

DSEP 7520 - Strategic System Improvement

DSEP 7700 - Doctoral Pro Seminar

DSEP 7710 - Theorectical Bases of Instructional Technology

DSEP 7711 - Curriculum Reform in a Democracy

DSEP 7712 - Seminar: Learning Theory and Learners

DSEP 7830 - Special Topics: 7830-7832

DSEP 7833 - Culture and Critical Theory

DSEP 7834 - Divergent Scholarly Work on Identity & Voice

DSEP 7840 - Independent Study: DSEP

DSEP 7930 - Doctoral Internship: Aspiring

DSEP 7931 - Doctoral Internship: Complementary

DSPL 7011 - Research Design

DSPL 7012 - Theories of Planning

DSPL 7013 - Environment and Behavior

DSPL 7014 - Colloquium

DSPL 7015 - Historiography and Architecture

DSPL 7016 - Architecture, in Theory

DSPL 7017 - Pro-Seminar

DSPL 7686 - Special Topics in Design and Planning

DSPL 7840 - Independent Study: DSPL

DSPL 7950 - Doctoral Thesis Research

ECED 5000 - The Early Childhood Profession

ECED 5010 - Curriculum and Program Development in Early Childhood Education

ECED 5020 - Approaches to Young Children's Learning

ECED 5030 - Directing Programs for Young Children

ECED 5040 - Administrative Seminar

ECED 5060 - Working with Parents and Families

ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children

ECED 5080 - Language and Literacy in Young Children

ECED 5090 - Neuromotor Development and Disorders in Young Children

ECED 5102 - Introduction to Developmentally Appropriate Curriculum

ECED 5104 - Advanced Developmentally Appropriate Curriculum

ECED 5140 - Measurement and Evaluation in Early Childhood Education

ECED 5200 - Screening and Assessment of Young Children

ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives

ECED 5204 - Early Childhood Mental Health

ECED 5800 - Workshop: Topics in Early Childhood Education

ECED 5840 - Independent Study

ECED 5911 - Educational and Observational Practicum in Early Childhood Education

ECED 5920 - Readings in Early Childhood Education

ECED 6010 - Literacy and Mathematics K-2

ECED 6100 - Medical and Physiological Aspects of Developmental Disabilities

ECED 6110 - Intervention Strategies for Children with Disabilities and At-Risk Infants

ECED 6200 - Early Intervention Strategies

ECED 6600 - Seminar: Early Childhood Education Practices and Issues

ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education

ECED 6910 - Infant/Toddler Practicum in ECSE

ECED 6911 - Practicum in Early Childhood Education

ECED 6912 - Preschool Practicum in ECSE

ECED 6913 - Practicum in Working with Parents and Families

ECED 6914 - Primary Practicum in ECSE

ECED 6950 - Master's Thesis

ECON 1010 - Economics of Social Issues

ECON 1111 - Freshman Seminar

ECON 2012 - Principles of Economics: Macroeconomics

ECON 2022 - Principles of Economics: Microeconomics

ECON 2939 - Internship

ECON 3100 - Economics of Race and Gender

ECON 3300 - Economics of Crime and Punishment

ECON 3366 - Managerial Economics

ECON 3400 - Economics of Sex and Drugs

ECON 3801 - Introduction to Mathematical Economics

ECON 3811 - Statistics with Computer Applications

ECON 3939 - Internship

ECON 4001 - Topics in Economics

ECON 4030 - Data Analysis with SAS

ECON 4050 - Special Economic Problems

ECON 4071 - Intermediate Microeconomic Theory

ECON 4081 - Intermediate Macroeconomic Theory

ECON 4091 - History of Economic Thought

ECON 4101 - Applied Statistics Using SAS and SPSS I

ECON 4102 - Applied Statistics Using SAS and SPSS II

ECON 4110 - Money and Banking

ECON 4150 - Economic Forecasting

ECON 4210 - Public Finance

ECON 4230 - Law and Economics

ECON 4240 - Economic Policy Analysis

ECON 4310 - Managerial Economics

ECON 4320 - Financial Economics

ECON 4410 - International Trade

ECON 4420 - International Finance

ECON 4430 - Economic Growth

ECON 4530 - Economics of Natural Resources

ECON 4540 - Environmental Economics

ECON 4550 - Game Theory and Economic Applications

ECON 4610 - Labor Economics

ECON 4640 - Sports Economics

ECON 4716 - Comparative Economic Systems

ECON 4740 - Industrial Organization

ECON 4770 - Economic Development--Theory and Problems

ECON 4811 - Introduction to Econometrics

ECON 4840 - Independent Study: ECON

ECON 4850 - Honors Independent Study: ECON

ECON 5030 - Data Analysis with SAS

ECON 5050 - Special Economic Problems

ECON 5051 - Data Analysis and Research Methodology

ECON 5052 - Data Analysis and Research Methodology II

ECON 5073 - Microeconomic Theory

ECON 5083 - Macroeconomic Theory

ECON 5090 - History of Economic Thought

ECON 5150 - Economic Forecasting

ECON 5310 - Managerial Economics

ECON 5320 - Financial Economics

ECON 5410 - International Trade

ECON 5530 - Economics of Natural Resources

ECON 5540 - Environmental Economics

ECON 5660 - Health Economics

ECON 5740 - Industrial Organization

ECON 5800 - Special Topics

ECON 5803 - Mathematical Economics

ECON 5813 - Econometrics I

ECON 5823 - Econometrics II

ECON 5840 - Independent Study

ECON 5939 - Internship

ECON 5950 - Master's Thesis

ECON 6010 - Advanced Microeconomic Theory

ECON 6020 - Advanced Macroeconomic Theory

ECON 6053 - Seminar In Applied Economics

ECON 6054 - Seminar In Applied Economics II

ECON 6060 - Special Topics

ECON 6073 - Research Seminar

ECON 6110 - Money and Central Banking

ECON 6210 - Public Finance

ECON 6410 - International Trade

ECON 6420 - International Finance

ECON 6610 - Labor Economics

ECON 6770 - Economic Growth and Development

ECON 6801 - Advanced Mathematical Economics

ECON 6810 - Econometrics and Forecasting

ECON 6840 - Independent Study

ECON 6950 - Master's Thesis

EDLI 8994 - Doctoral Dissertation PhD

EDUC 5000 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5001 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5002 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5003 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5004 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5005 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5006 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5007 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5008 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5009 - Special Topics: Administrative Leadership and Policy Studies

EDUC 5010 - Paraeducator Supervision Academy

EDUC 5015 - Developmental Intervention Supervisor Academy (DISA)

EDUC 5020 - Trainers of Paraeducator Academy

EDUC 5025 - Developmental Intervention Trainers Academy (DITA)

EDUC 5030 - Top Cadre of Trainers (TOPCAT) Seminar

EDUC 5040 - Mentoring Novice and Pre-Service Teachers

EDUC 5050 - Computer Application for Educational Management

EDUC 5070 - Elementary School Curriculum

EDUC 5090 - Senior High School Curriculum

EDUC 5100 - Curriculum and Program Development and Evaluation

EDUC 5400 - Special Education Seminar for Principals

EDUC 5700 - Administrative Leadership in Educational Organizations

EDUC 5710 - Administering the Environment of Public Schools

EDUC 5720 - Supervision of the Curricular and Instructional Program of the School

EDUC 5730 - Administering the School Improvement Process

EDUC 5751 - Principal/Administrator Licensing I

EDUC 5752 - Principal Administrator Licensing II

EDUC 5753 - Principal/Administrator Licensing III

EDUC 5754 - Principal or Administrator Licensing IV

EDUC 5830 - Governance and Administration of Education

EDUC 5831 - School Law

EDUC 5832 - Group Development and Training

EDUC 5833 - School Business Management

EDUC 5834 - Seminar in School Administration

EDUC 5835 - Supervision of Instruction

EDUC 5836 - Workshop: Educational Administration, Curriculum and Supervision

EDUC 5840 - Independent Study: EDUC

EDUC 5930 - Clinical Practice in Administrative Leadership

EDUC 5931 - Internship in Curriculum

EDUC 5950 - Master's Thesis

EDUC 6000 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6001 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6002 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6003 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6004 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6005 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6006 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6007 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6008 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6009 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6010 - Special Topics: Administrative Leadership and Policy Studies

EDUC 6101 - Initial Portfolio Analysis for Administrator Licensure

EDUC 6102 - Initial Portfolio Analysis for Principal Licensure

EDUC 6103 - Portfolio Product Development for Administrative Licensure

EDUC 6104 - Portfolio Product Development for Principal Licensure

EDUC 6105 - Portfolio Evaluation for Administrative Licensure

EDUC 6106 - Portfolio Evaluation for Principal Licensure

EDUC 6840 - Independent Study

EDUC 6930 - Clinical Practice for Administrative Leadership

EDUC 6951 - Master's Thesis

EDUC 7000 - Special Topics in Administration, Supervision, and Curriculum Development

EDUC 7120 - Curriculum of Middle Level School

EDUC 7140 - Student Activities Curriculum

EDUC 7150 - Doctoral Seminar in Curricular Theories

EDUC 7160 - Processes and Materials in Curriculum Appraisal

EDUC 7340 - Doctoral Seminar: Problems and Trends in Education

EDUC 7350 - Elementary Principalship

EDUC 7360 - Administration and Supervision of Elementary School

EDUC 7370 - Administration and Supervision of Senior High School

EDUC 7380 - Doctoral Seminar: Theory of Educational Administration

EDUC 7400 - Doctoral Seminar in School Finance

EDUC 7410 - Educational Facilities Planning

EDUC 7420 - Personnel Development and Training

EDUC 7430 - School and Community Relations

EDUC 7490 - Doctoral Seminar

EDUC 7500 - Strategic Human Capital Development

EDUC 7510 - Strategic Organizational Management

EDUC 7520 - Strategic System Improvement

EDUC 7530 - Leadership Development

EDUC 7560 - Administration and Supervision in the Junior High School and Middle School

EDUC 7630 - Doctoral Seminar: Junior and/or Senior High School Education

EDUC 7700 - Doctoral Pro Seminar

EDUC 7800 - Doctoral Research Seminar: Education Administration, Curriculum-Supervision

EDUC 7810 - Doctoral Seminar in School Law

EDUC 7820 - Doctoral Seminar in Curriculum

EDUC 7823 - Doctoral Seminar in Educational Supervision

EDUC 7825 - Doctoral Seminar in Educational Leadership

EDUC 7840 - Independent Study: EDUC

EDUC 7911 - Practicum in Education Administration, Supervision and Curriculum

EDUC 7921 - Readings in Education Administration, Curriculum and Supervision

EDUC 7931 - Internship in Educational Administration and Supervision

EDUC 7932 - Internship in Curriculum

EDUC 8997 - Doctoral Dissertation Ed D

ELEC 1201 - Introduction to Electrical Engineering

ELEC 1510 - Logic Design

ELEC 1520 - Embedded Systems Engineering I

ELEC 2132 - Circuit Analysis I

ELEC 2142 - Circuit Analysis II

ELEC 2520 - Embedded Systems Engineering 2

ELEC 2531 - Logic Laboratory

ELEC 2552 - Sophomore Circuits Laboratory

ELEC 3030 - Electric Circuits and Systems

ELEC 3133 - Electromagnetic Fields

ELEC 3164 - Energy Conversion

ELEC 3215 - Electronics I

ELEC 3225 - Electronics II

ELEC 3316 - Linear Systems Theory

ELEC 3651 - Digital Hardware Design

ELEC 3715 - Electronics Laboratory

ELEC 3724 - Energy Conversion Laboratory

ELEC 3735 - Junior Laboratory

ELEC 3817 - Engineering Probability and Statistics

ELEC 3939 - Internship

ELEC 4025 - Device Electronics

ELEC 4133 - Advanced Electromagnetic Fields

ELEC 4136 - Control Systems Analysis

ELEC 4164 - Electric Drive Systems

ELEC 4170 - Electric Drive Systems Laboratory

ELEC 4170 - Electric Drive Systems Laboratory

ELEC 4174 - Power Electronic Systems

ELEC 4184 - Power Systems Analysis

ELEC 4225 - Advanced Electronics

ELEC 4247 - Communication Theory

ELEC 4248 - Digital Communication Systems

ELEC 4249 - Space Communications Systems

ELEC 4276 - Digital Control Systems

ELEC 4309 - Senior Design Project I

ELEC 4319 - Senior Design Project II

ELEC 4373 - Optical Engineering

ELEC 4406 - Control Systems Laboratory

ELEC 4423 - Microwave Laboratory

ELEC 4435 - Advanced Electronics Laboratory

ELEC 4444 - Power Systems Laboratory

ELEC 4466 - Adaptive Control System Design

ELEC 4467 - Communications Laboratory

ELEC 4501 - Microprocessor Based Design

ELEC 4511 - Hardware-Software Interface

ELEC 4521 - Microprocessor Laboratory

ELEC 4555 - VLSI Circuit Simulation

ELEC 4561 - Hardware-Software Lab

ELEC 4637 - Digital Signal Processing

ELEC 4644 - Introduction to Biomedical Imaging

ELEC 4678 - Quantum Electronics

ELEC 4688 - Introduction to Nondestructive Testing

ELEC 4723 - High Performance Computer Architecture

ELEC 4755 - Renewable Energy Systems

ELEC 4800 - Special Topics: 4800-4839

ELEC 4840 - Independent Study: ELEC

ELEC 5005 - VLSI Device Modeling

ELEC 5025 - Device Electronics

ELEC 5033 - Advanced Electromagnetic Fields

ELEC 5133 - Electromagnetic Radiation and Antenna

ELEC 5164 - Electric Drive Systems

ELEC 5170 - Advanced Electric Drive Systems

ELEC 5170 - Advanced Electric Drive Systems

ELEC 5174 - Power Electronic Systems

ELEC 5184 - Power Systems Analysis

ELEC 5194 - Power Systems Operation and Control

ELEC 5210 - Optimization Methods in Engineering

ELEC 5220 - Methods of Engineering Analysis

ELEC 5230 - Advanced Linear Systems

ELEC 5248 - Digital Communication Systems

ELEC 5249 - Space Communications Systems

ELEC 5250 - Information Theory

ELEC 5252 - Computer Communication Networks

ELEC 5276 - Digital Control Systems

ELEC 5294 - Advanced Power Electronic Systems

ELEC 5373 - Optical Engineering

ELEC 5436 - Nonlinear Control Systems I

ELEC 5446 - Introduction to Modern Control Theory

ELEC 5455 - Computer Methods for Device Electronics

ELEC 5456 - Sampled Data and Digital Control Systems

ELEC 5466 - Adaptive Control System Design

ELEC 5476 - Optimal Control Systems

ELEC 5486 - Modeling and System Identification

ELEC 5496 - Robust Control

ELEC 5501 - Microprocessor-Based Design

ELEC 5511 - Hardware-Software Interface

ELEC 5521 - Design and Test of Digital Systems

ELEC 5522 - VLSI Systems

ELEC 5551 - Pattern Recognition

ELEC 5555 - VLSI Circuit Simulation

ELEC 5617 - Random Processes for Engineers

ELEC 5627 - Stochastic Point Processes

ELEC 5637 - Digital Signal Processing

ELEC 5638 - Digital Image Processing

ELEC 5644 - Introduction to Biomedical Imaging

ELEC 5647 - Adaptive Signal Processing

ELEC 5648 - Blind Signal Processing

ELEC 5657 - Detection and Estimation Theory

ELEC 5667 - Wavelet Theory and Applications

ELEC 5678 - Quantum Electronics

ELEC 5687 - Optical Communication Systems

ELEC 5688 - Introduction to Nondestructive Testing

ELEC 5697 - Optical and Spatial Information Processing

ELEC 5710 - Advanced Electric Drive Systems

ELEC 5710 - Advanced Electric Drive Systems

ELEC 5714 - Energy Systems Analysis

ELEC 5720 - Practical Electric Drive Systems

ELEC 5720 - Practical Electric Drive Systems

ELEC 5723 - High Performance Computer Architecture

ELEC 5725 - Advanced Electric Machinery

ELEC 5725 - Advanced Electric Machinery

ELEC 5755 - Renewable Energy Systems

ELEC 5764 - Power Distribution Systems

ELEC 5774 - Power Systems Dynamics and Protection

ELEC 5800 - Special Topics

ELEC 5840 - Independent Study: ELEC

ELEC 5980 - Statistical Quality Control

ELEC 6800 - Special Topics

ELEC 6950 - Master's Thesis

ELEC 6960 - Master's Report

ELEC 7800 - Special Topics

ELEC 7801 - Special Topics

ELEC 7802 - Special Topics

ELEC 7803 - Special Topics

ELEC 7804 - Special Topics

ELEC 7805 - Special Topics

ELEC 7806 - Special Topics

ELEC 7807 - Special Topics

ELEC 7808 - Special Topics

ELEC 7809 - Special Topics

ELEC 7840 - Independent Study: ELEC

ELEC 8990 - Doctoral Dissertation

ELED 4800 - Curriculum Workshop

ELED 5060 - Improvement of Instruction

ELED 5140 - Elementary Curriculum: Integrating Language Arts with Literature

ELED 5150 - Elementary Curriculum: Teaching Mathematics, Science and Social Studies

ELED 5160 - Expressive Arts

ELED 5170 - Community and Interpersonal Relations

ELED 5200 - Classroom Management

ELED 5320 - Advanced Language Arts in Elementary School

ELED 5340 - Multicultural Science Education

ELED 5350 - Science in Elementary School

ELED 5400 - Contemporary Mathematics for Elementary Schools

ELED 5401 - Assessment in Mathematics Education

ELED 5410 - Teaching Numbers and Arithmetic

ELED 5411 - Mathematics Education and Gender

ELED 5415 - Math Science Connections: Indoors

ELED 5416 - Math-Science Connections: Outdoor

ELED 5417 - Structure of Rational Numbers

ELED 5418 - Mathematical Modeling

ELED 5419 - Exploring the Structure of Geometry Using Technology

ELED 5430 - Topics in Mathematics Education

ELED 5440 - Problem Solving and Geometry in the Elementary School

ELED 5450 - Social Studies in Elementary School

ELED 5464 - Teaching About Ethnicity, Race and Prejudice

ELED 5470 - Introduction to Middle School

ELED 5480 - Museum Studies in Paleontology

ELED 5490 - Middle School Curriculum

ELED 5510 - Teacher Leadership: Theory to Reality

ELED 5520 - Teacher Leadership: Essential Knowledge

ELED 5530 - Teacher Leadership: Vital Skills

ELED 5540 - Foundations of School Health Education

ELED 5550 - Curriculum Materials in Health Education

ELED 5560 - Health Education Teaching Practices

ELED 5660 - Energy Education

ELED 5775 - Knowledge of Teaching

ELED 5780 - Storytelling

ELED 5800 - Curriculum Workshop for Elementary Teachers

ELED 5840 - Independent Study

ELED 5910 - Advanced Practicum: Elementary

ELED 5920 - Readings in Elementary Education

ELED 5930 - Internship in Elementary Education

ELED 6100 - Seminar: Elementary Education

ELED 6110 - Curriculum Development and School Improvement

ELED 6120 - International Perspectives on the Curriculum

ELED 6600 - Special Topics: Laboratory in Educational Leadership and Innovation

ELED 6950 - Master's Thesis

ELED 7600 - Special Topics: Laboratory in Educational Leadership and Innovation

ELED 7840 - Independent Study: ELED

ENGL 1010 - Writing Workshop

ENGL 1020 - Core Composition I

ENGL 1050 - Vocabulary for Professionals

ENGL 1111 - Freshman Seminar

ENGL 1200 - Introduction to Fiction

ENGL 1400 - Literary Studies

ENGL 1601 - Telling Tales: Narrative Art in Literature and Film

ENGL 2030 - Core Composition II

ENGL 2070 - Grammar, Rhetoric and Style

ENGL 2154 - Introduction to Creative Writing

ENGL 2250 - Introduction to Film

ENGL 2300 - Topics in Literature and Film

ENGL 2310 - Topics in Literature and Film

ENGL 2320 - Topics in Literature and Film

ENGL 2330 - Topics in Literature and Film

ENGL 2340 - Topics in Literature and Film

ENGL 2390 - Writing the Short Script

ENGL 2415 - Introduction to Movie Writing

ENGL 2450 - Introduction to Literature

ENGL 2510 - Greek and Roman Mythology

ENGL 2520 - The Bible as Literature

ENGL 2600 - Great Works in British and American Literature

ENGL 2840 - Independent Study: ENGL

ENGL 3001 - Critical Writing

ENGL 3020 - Poetry Workshop

ENGL 3050 - Fiction Workshop

ENGL 3070 - Film History I

ENGL 3075 - Film Genres

ENGL 3080 - Film History II

ENGL 3084 - Multimedia Composition

ENGL 3085 - Film Directors

ENGL 3154 - Technical Writing

ENGL 3160 - Language Theory

ENGL 3170 - Business Writing

ENGL 3200 - From Literature to Film

ENGL 3300 - Topics in Film

ENGL 3310 - Topics in Film

ENGL 3320 - Topics in Film

ENGL 3330 - Topics in Literature

ENGL 3340 - Topics in Literature

ENGL 3350 - Topics in Literature

ENGL 3405 - Topics in Writing

ENGL 3415 - Screenwriting Workshop

ENGL 3416 - Magazine Writing

ENGL 3417 - Writing for the Mass Media

ENGL 3450 - Twentieth Century Women Writers

ENGL 3480 - Modern Drama

ENGL 3520 - Religious Narratives

ENGL 3530 - The Hero's Journey

ENGL 3661 - Shakespeare

ENGL 3700 - American Literature to the Civil War

ENGL 3750 - American Literature after the Civil War

ENGL 3795 - Race and Ethnicity in American Literature

ENGL 3798 - International Perspectives in Literature and Film

ENGL 3840 - Independent Study: ENGL

ENGL 3939 - Internship

ENGL 3995 - Travel Study

ENGL 4000 - Studies of Major Authors

ENGL 4025 - Advanced Poetry Workshop

ENGL 4055 - Advanced Fiction Workshop

ENGL 4080 - History of English

ENGL 4160 - Poetics

ENGL 4166 - History of American Poetry

ENGL 4180 - Argumentation and Logic

ENGL 4190 - Special Topics in Rhetoric and Writing

ENGL 4200 - History of the English Novel I

ENGL 4210 - History of the English Novel II

ENGL 4220 - African-American Literature

ENGL 4230 - The American Novel

ENGL 4235 - Faulkner

ENGL 4236 - The American Short Story

ENGL 4240 - Topics in Contemporary American Literature

ENGL 4250 - Twentieth Century Fiction

ENGL 4280 - Proposal and Grant Writing

ENGL 4290 - Rhetoric and the Body

ENGL 4300 - History of British Drama

ENGL 4306 - Survey of Feminist Thought

ENGL 4320 - History of Poetry in English

ENGL 4350 - History of American Drama

ENGL 4400 - Old English I

ENGL 4410 - Old English II: Beowulf

ENGL 4420 - Film Theory and Criticism

ENGL 4460 - Contemporary World Literature

ENGL 4500 - Medieval Literature

ENGL 4510 - Whores and Saints: Medieval Women

ENGL 4520 - English Renaissance

ENGL 4530 - Milton

ENGL 4540 - Restoration and the 18th Century

ENGL 4560 - English Romanticism

ENGL 4580 - The Victorian Age

ENGL 4600 - Modernism

ENGL 4601 - Principles and Practices of Second Language Acquisition

ENGL 4651 - Second Language Writing

ENGL 4720 - Honors in Literature

ENGL 4730 - Chaucer

ENGL 4735 - Philosophy and Literature

ENGL 4740 - Honors in Writing

ENGL 4770 - Topics in English: Film and Literature

ENGL 4800 - Special Topics in Creative Writing

ENGL 4840 - Independent Study: ENGL

ENGL 4920 - Directed Readings

ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies

ENGL 4991 - Senior Seminar in Writing

ENGL 4995 - Senior Writing Project

ENGL 4999 - Literary Studies Senior Seminar

ENGL 5000 - Studies of Major Authors

ENGL 5001 - Special Topics

ENGL 5080 - History of the English Language

ENGL 5093 - Teaching of Writing

ENGL 5100 - Literary Research and Writing

ENGL 5110 - Denver Writing Project

ENGL 5120 - Denver Writing Project Advanced Institute

ENGL 5150 - Research Methods

ENGL 5160 - Poetics

ENGL 5166 - History of American Poetry

ENGL 5171 - Language Theory

ENGL 5190 - Special Topics in Rhetoric and Writing

ENGL 5200 - History of the English Novel I

ENGL 5210 - History of the English Novel II

ENGL 5220 - African-American Literature

ENGL 5230 - The American Novel

ENGL 5235 - Faulkner

ENGL 5236 - The American Short Story

ENGL 5240 - Topics In Contemporary American Literature

ENGL 5250 - Twentieth Century Fiction

ENGL 5280 - Proposal and Grant Writing

ENGL 5300 - History of British Drama

ENGL 5306 - Survey of Feminist Thought

ENGL 5320 - History of Poetry in English

ENGL 5350 - History of American Drama

ENGL 5400 - Old English I

ENGL 5410 - Old English II: Beowulf

ENGL 5420 - Film Theory and Criticism

ENGL 5460 - Contemporary World Literature

ENGL 5500 - Medieval Literature

ENGL 5510 - Whores and Saints: Medieval Women

ENGL 5520 - English Renaissance

ENGL 5530 - Milton

ENGL 5540 - Restoration and the 18th Century

ENGL 5560 - English Romanticism

ENGL 5580 - The Victorian Age

ENGL 5600 - Modernism

ENGL 5601 - Principles and Practices of Second Language Acquisition

ENGL 5650 - American Literature to the Civil War

ENGL 5651 - Second Language Writing

ENGL 5655 - American Literature: Civil War to the Cold War

ENGL 5730 - Chaucer

ENGL 5735 - Philosophy and Literature

ENGL 5770 - Topics in English: Film and Literature

ENGL 5840 - Independent Study: ENGl

ENGL 5913 - Practicum in Language and Rhetoric

ENGL 5939 - Internship

ENGL 6001 - Critical Theory in Literature and Film

ENGL 6002 - Rhetorical Theory

ENGL 6010 - Studies of Major Authors

ENGL 6011 - Studies in Major Authors

ENGL 6012 - Studies in Major Authors

ENGL 6013 - Studies in Major Authors

ENGL 6014 - Studies in Major Authors

ENGL 6015 - Studies in Major Authors

ENGL 6016 - Studies in Major Authors

ENGL 6017 - Studies in Major Authors

ENGL 6018 - Studies in Major Authors

ENGL 6019 - Studies in Major Authors

ENGL 6090 - Studies in Major Authors

ENGL 6101 - Spec Topics in Rhetoric

ENGL 6102 - Spec Topics in Rhetoric

ENGL 6103 - Spec Topics in Rhetoric

ENGL 6104 - Spec Topics in Rhetoric

ENGL 6105 - Spec Topics in Rhetoric

ENGL 6106 - Spec Topics in Rhetoric

ENGL 6107 - Spec Topics in Rhetoric

ENGL 6108 - Spec Topics in Rhetoric

ENGL 6109 - Spec Topics in Rhetoric

ENGL 6110 - Special Topics in Literature

ENGL 6111 - Special Topics in Literature

ENGL 6112 - Special Topics in Literature

ENGL 6113 - Special Topics in Literature

ENGL 6114 - Special Topics in Literature

ENGL 6115 - Special Topics in Literature

ENGL 6116 - Special Topics in Literature

ENGL 6117 - Special Topics in Literature

ENGL 6118 - Special Topics in Literature

ENGL 6119 - Special Topics in Literature

ENGL 6120 - Special Topics in Film

ENGL 6121 - Special Topics in Film

ENGL 6122 - Special Topics in Film

ENGL 6123 - Special Topics in Film

ENGL 6124 - Special Topics in Film

ENGL 6125 - Special Topics in Film

ENGL 6126 - Special Topics in Film

ENGL 6127 - Special Topics in Film

ENGL 6128 - Special Topics in Film

ENGL 6129 - Special Topics in Film

ENGL 6840 - Independent Study

ENGL 6920 - Directed Readings

ENGL 6950 - Master's Thesis

ENGL 6960 - Master's Project

ENGR 1000 - Introduction to Engineering

ENGR 1111 - Psychological and Social Implications of Technology

ENGR 1208 - Special Topics

ENGR 1218 - Special Topics

ENGR 1228 - Special Topics

ENGR 1238 - Special Topics

ENGR 1248 - Special Topics

ENGR 1258 - Special Topics

ENGR 1268 - Special Topics

ENGR 1278 - Special Topics

ENGR 1288 - Special Topics

ENGR 1298 - Special Topics

ENGR 2208 - Special Topics

ENGR 2218 - Special Topics

ENGR 2228 - Special Topics

ENGR 2238 - Special Topics

ENGR 2248 - Special Topics

ENGR 2258 - Special Topics

ENGR 2268 - Special Topics

ENGR 2278 - Special Topics

ENGR 2288 - Special Topics

ENGR 2298 - Special Topics

ENGR 3208 - Special Topics

ENGR 3218 - Special Topics

ENGR 3228 - Special Topics

ENGR 3238 - Special Topics

ENGR 3248 - Special Topics

ENGR 3258 - Special Topics

ENGR 3268 - Special Topics

ENGR 3278 - Special Topics

ENGR 3288 - Special Topics

ENGR 3298 - Special Topics

ENGR 3400 - Technology and Culture

ENGR 3600 - International Dimensions of Technology and Culture

ENGR 4208 - Special Topics

ENGR 4218 - Special Topics

ENGR 4228 - Special Topics

ENGR 4238 - Special Topics

ENGR 4248 - Special Topics

ENGR 4258 - Special Topics

ENGR 4268 - Special Topics

ENGR 4278 - Special Topics

ENGR 4288 - Special Topics

ENGR 4298 - Special Topics

ENGR 4840 - Independent Study

ENGR 5208 - Special Topics

ENGR 5301 - Systems Engineering: Principles and Practice

ENGR 5302 - Systems Engineering: Planning and Management

ENGR 5303 - Special Topics: Systems Engineering

ENGR 5800 - Long Range Infrastructure Planning and Design: Colorado 2050

ENTP 2550 - Introductory Accounting for Entrepreneurs and the Arts

ENTP 3000 - Principles of Entrepreneurship

ENTP 3120 - Legal Issues for Entrepreneurs

ENTP 3780 - Preparing A Business Plan

ENTP 4028 - Leadership and Entrepreneurship in Ireland

ENTP 4950 - Special Topics

ENTP 6000 - Fundamentals of Entrepreneurship

ENTP 6020 - The Business Plan

ENTP 6028 - Leadership and Entrepreneurship In Ireland

ENTP 6040 - Growing Your Venture

ENTP 6800 - Special Topics

ENTP 6820 - Business Consulting

ENTP 6822 - Legal and Ethical Issues of Entrepreneurship

ENTP 6824 - Entrepreneurial Financial Management

ENTP 6826 - International Entrepreneurship

ENTP 6828 - Assess and Develop Market Opportunities

ENTP 6830 - Launching Technology-Based Ventures

ENTP 6832 - Corporate Entrepreneurship and Innovation

ENTP 6834 - Entrepreneurial Marketing

ENTP 6836 - Designing and Leading the Entrepreneurial Organization

ENTP 6838 - Real Estate for the Entrepreneur

ENTP 6840 - Independent Study: ENTP

ENTP 6842 - New Concept Development

ENTP 6844 - Managing New Entrepreneurial Ventures

ENTP 6846 - Marketing a New Business

ENTP 6848 - Leadership in New Ventures

ENTP 6852 - Introduction to Life Science Technology Transfer

ENTP 6854 - Design & Manage Entrepreneurial Organizations

ENTP 6856 - Strategic Planning for Entrepreneurs

ENTP 6858 - Innovation in the Social Sector

ENTP 6860 - Business Planning for Social Entrepreneurs

ENTP 6862 - Strategic Web Development

ENTP 6864 - Virtual Entrepreneurship

ENTP 6930 - Bioscience Internship

ENVS 1042 - Introduction to Environmental Sciences

ENVS 1342 - Introduction to Environment and Society

ENVS 2939 - Internship

ENVS 3082 - Energy and the Environment

ENVS 3500 - Topics in Environmental Sciences

ENVS 4210 - Mining and the Environment

ENVS 4500 - Topics In Environmental Sciences

ENVS 4840 - Independent Study: ENVS

ENVS 4850 - Understanding and Communicating Field Methods

ENVS 4995 - Travel Study

ENVS 5010 - Landscape Geochemistry

ENVS 5020 - Earth Environments and Human Impacts

ENVS 5030 - Environmental Geology

ENVS 5280 - Environmental Hydrology

ENVS 5340 - Multicultural Science Education

ENVS 5403 - Unsaturated Zone Hydrology

ENVS 5410 - Aquatic Chemistry

ENVS 5500 - Topics in Environmental Sciences

ENVS 5600 - Applied Statistics for the Natural Sciences

ENVS 5620 - Health Risk Communication

ENVS 5730 - Air Quality Modeling and Analysis

ENVS 5840 - Independent Study: ENVS

ENVS 5850 - Understanding and Communicating Field Methods

ENVS 5939 - Internship

ENVS 5995 - Travel Study

ENVS 6000 - Environmental Sciences Seminar

ENVS 6002 - Environmental Sciences Seminar

ENVS 6200 - Risk Assessment

ENVS 6210 - Human Health and Environmental Pollution

ENVS 6220 - Toxicology

ENVS 6230 - Environmental Epidemiology

ENVS 6840 - Independent Study: ENVS

ENVS 6950 - Master's Thesis

ENVS 6960 - Master's Report

EPSY 5000 - Psychological Foundations of Education

EPSY 5020 - Advanced Psychological Foundations of Education

EPSY 5050 - Children's Thinking

EPSY 5100 - Advanced Child Growth and Development

EPSY 5110 - Human Learning

EPSY 5120 - Behavior Analysis

EPSY 5140 - Advanced Adolescent Growth and Development

EPSY 5160 - Behavior Disorders in Exceptional Children

EPSY 5170 - Behavior Analysis and Intervention

EPSY 5180 - Psychology of Gifted, Talented and Creative Children

EPSY 5200 - Social Psychology of Learning

EPSY 5220 - Adult Learning and Education

EPSY 5240 - Cognition and Instruction

EPSY 5260 - Child Study and Observation

EPSY 5500 - Student Teaching

EPSY 5800 - Workshop: School Applications of Educational Psychology

EPSY 5840 - Independent Study

EPSY 5920 - Readings in Educational Psychology

EPSY 6000 - Seminar in Educational Psychology

EPSY 6120 - Family Dynamics

EPSY 6170 - Assessment of Infants Who are At-Risk

EPSY 6200 - Human Development Over the Life Span

EPSY 6250 - Advanced Abnormal Psychology

EPSY 6350 - Theories of Personality Development and Change

EPSY 6500 - Student Teaching: Implementation and Reflection

EPSY 6600 - Human Motivation

EPSY 6840 - Independent Study: EPSY

EPSY 6910 - Practicum in Educational Psychology

EPSY 6950 - Master's Thesis

EPSY 7601 - Special Topics: Laboratory in Educational Leadership and Innovation

EPSY 7910 - Educational Psychology Practicum

ETST 1111 - Freshman Seminar

ETST 2000 - Introduction to Ethnic Studies

ETST 2024 - Race and Ethnic Relations

ETST 2036 - American Indian Cultural Images

ETST 2105 - African American Contemporary Social Issues

ETST 2115 - Genocide in the 21st Century: Darfur and Beyond

ETST 2125 - The Bi-Racial Family

ETST 2145 - The Gullah in Novel and Film

ETST 2155 - African American History

ETST 2165 - Cultural Diversity Awareness in the Workplace

ETST 2294 - Race and the Media

ETST 2400 - Issues in Chicano/a Education

ETST 2496 - American Indian Literature

ETST 2606 - The American Indian Experience

ETST 2840 - Independent Study: ETST

ETST 2939 - Internship

ETST 3001 - Urban Sociology

ETST 3002 - Ethnicity, Health and Social Justice

ETST 3010 - Conference Participation

ETST 3108 - Chicano/a and Latino/a History

ETST 3110 - Indigenous Studies

ETST 3129 - Contemporary Latin American Literature

ETST 3211 - Hip Hop Music & Culture

ETST 3216 - Federal Law and American Indians

ETST 3224 - U.S. Middle East Culture and Religion

ETST 3230 - African American Family

ETST 3254 - Race and Ethnicity in the Inner City

ETST 3272 - Global Media

ETST 3274 - Power, Poverty, Culture

ETST 3297 - Social History of Asian Americans

ETST 3307 - Selected Topics: Asian Americans

ETST 3350 - Colonial Latin America

ETST 3357 - Asian American Literature

ETST 3365 - Aztlan in the United States: Chicano History from 1821

ETST 3394 - Literature of Social Protest from an Ethnic Perspective

ETST 3396 - History of the American Indian

ETST 3408 - Social Psychology of Latinos/as

ETST 3567 - Asian American Women

ETST 3574 - Topics in Ethnic Studies

ETST 3616 - Selected Topics: American Indians

ETST 3697 - Contemporary Asian American Issues

ETST 3704 - Culture, Racism and Alienation

ETST 3794 - Ethnic Diversity in American Literature

ETST 3838 - History of the Mexican American in Colorado

ETST 3840 - Independent Study: ETST

ETST 3842 - Independent Study: ETST

ETST 3939 - Internship

ETST 4000 - Research Methods in Ethnic Studies

ETST 4144 - Indigenous Political Systems

ETST 4146 - Indigenous Politics

ETST 4156 - The Arab-Israeli Peace Process

ETST 4220 - African-American Literature

ETST 4411 - Modern Mexico

ETST 4515 - The African American in Politics

ETST 4555 - International Women's Resistance

ETST 4558 - Chicano and Latino Politics

ETST 4574 - Special Topics

ETST 4616 - Selected Topics: Chicanos/as and Latinos/as

ETST 4726 - North American Indian Art

ETST 4730 - Peoples and Cultures of Sub-Saharan Africa

ETST 4768 - Chicano/Chicana Narrative and Social History

ETST 4827 - Women and the Law

ETST 4840 - Independent Study: ETST

ETST 4960 - Senior Seminar in Ethnic Studies

FILM 1060 - Camera/Multi-Media Production

FILM 2050 - Film/Video Prod/Post II

FILM 2060 - Film and Video Lighting and Grip

FILM 2500 - Screenwriting: Short Scripts for Film and TV

FILM 2640 - Introduction to Digital Effects

FILM 3070 - History of Silent Film Production

FILM 3080 - History of Sound Film Production

FILM 3100 - History of Film Production I

FILM 3111 - Shooting Action and Physical Effects

FILM 3150 - History of Film Production II

FILM 3207 - Directing Workshop

FILM 3264 - Advanced Digital Effects

FILM 3270 - Film/Video Production III

FILM 3275 - Film and Video Postproduction III

FILM 3300 - Advanced Lighting for Film and Video

FILM 3350 - Editing Aesthetics

FILM 3375 - Documentary Production

FILM 3400 - Intermediate Screenwriting

FILM 4209 - Advanced Production Management

FILM 4270 - Film and Video Production IV

FILM 4280 - Film and Video Postproduction IV

FILM 4400 - Advanced Screenwriting

FILM 4500 - Writing for Episodic Television

FILM 4600 - Topics in Film

FILM 4720 - Reel Prep

FILM 4840 - Independent Study: FILM

FILM 5500 - Writing for Episodic Television

FILM 5600 - Topics in Film

FILM 5840 - Independent Study: FILM

FINE 1001 - Introduction to Art

FINE 1100 - Drawing I

FINE 1111 - Freshman Seminar

FINE 1120 - Digital Photography for Non-Majors

FINE 1140 - Topics in Photography

FINE 1150 - Introduction to Photography

FINE 1400 - Two Dimensional Design

FINE 1435 - Intro to Electronic Art and Design

FINE 1500 - Three-Dimensional Design

FINE 1600 - Painting Methods and Materials

FINE 1810 - Digital Animation Foundations: Producing Animation

FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D

FINE 2015 - Intermedia Foundations

FINE 2100 - The Media of Drawing

FINE 2130 - Experiments in Color/Photography for Non-Majors

FINE 2140 - Topics in Photography

FINE 2155 - Introduction to Digital Photography

FINE 2200 - Painting I

FINE 2405 - Introduction to Digital Design

FINE 2415 - Typography Studio

FINE 2428 - Scientific Media Design I

FINE 2500 - Bronze Casting and Metal Sculpture

FINE 2510 - Wood and Metal Sculpture

FINE 2600 - Art History Survey I

FINE 2610 - Art History Survey II

FINE 2810 - Digital Animation Techniques: Surface Modeling

FINE 2820 - Digital Animation Techniques: Surface Properties

FINE 2830 - Digital Animation Techniques: Lighting

FINE 2850 - Digital Animation Techniques: 3D Character Creation

FINE 2995 - Travel Study

FINE 3015 - Interdisciplinary Practices

FINE 3020 - Life Drawing

FINE 3050 - Painting II: Figure Painting

FINE 3100 - Drawing II: Spatial Thinking and Visualization

FINE 3110 - Imaging and Identity

FINE 3120 - Visual Culture Studies

FINE 3130 - Photography, Optics and Perspectives in Italy

FINE 3135 - Historic Photographic Processes in Italy

FINE 3150 - Feminism and Art

FINE 3160 - Color and Studio Lighting

FINE 3161 - The Silver Fine Print

FINE 3162 - The Digital Fine Print

FINE 3171 - Concepts and Processes in Photography

FINE 3172 - Digital Bookmaking

FINE 3175 - Creative Commercial Applications

FINE 3200 - Intermediate Painting I

FINE 3210 - Intermediate Painting II

FINE 3220 - Intermediate Drawing

FINE 3230 - Abstract Drawing

FINE 3240 - Abstract Painting

FINE 3250 - Sculpture: Contemporary Artists and Concepts

FINE 3260 - Portraiture

FINE 3300 - Painting and the Printed Image

FINE 3310 - Drawing and the Printed Image

FINE 3340 - Topics in Studio Art

FINE 3342 - Topics in Studio Art

FINE 3343 - Topics in Studio Art

FINE 3350 - Topics in Multimedia

FINE 3400 - Introduction to Web Design and Digital Imaging

FINE 3405 - Digital Video for Non-Majors

FINE 3414 - Motion Design I

FINE 3415 - Design Studio I

FINE 3424 - Interactive Media

FINE 3434 - 3D Motion Design

FINE 3438 - Text, Image and Electronic Art

FINE 3444 - Interactive Media II

FINE 3448 - Scientific Media Design II

FINE 3450 - Digital Painting

FINE 3454 - Motion Design II

FINE 3464 - Design Studio II

FINE 3474 - Narrative and Experience

FINE 3500 - Modeling and Casting the Figure

FINE 3505 - Sculpture Topics

FINE 3510 - Installation Art

FINE 3515 - Public Art

FINE 3520 - Sculpture: Contemporary Artists and Concepts

FINE 3525 - Environmental Sculpture

FINE 3530 - Iron Casting

FINE 3535 - Sculpture Rendering

FINE 3600 - Art History Survey III: Non-Western Art

FINE 3630 - History of Photography

FINE 3631 - Photography: Theory and Criticism

FINE 3635 - Photography Now

FINE 3640 - Topics in Art History

FINE 3644 - Topics in Art History

FINE 3810 - Digital Animation Studio: Set/Environment Design

FINE 3820 - Digital Animation Techniques: Rigging and Animation

FINE 3830 - Digital Animation Technique: Character Animation

FINE 3845 - Digital Animation Discovery and Preproduction Seminar

FINE 3850 - Digital Animation Techniques: Dynamic Simulation

FINE 3939 - Internship

FINE 3995 - Travel Study

FINE 4000 - Advanced Drawing I

FINE 4010 - Advanced Drawing II

FINE 4020 - Anatomy for the Artist

FINE 4100 - Painting & Drawing Theory & Practice

FINE 4140 - Topics in Photography

FINE 4195 - Advanced Photography I

FINE 4196 - Advanced Photography II

FINE 4200 - Advanced Painting I

FINE 4210 - Advanced Painting II

FINE 4340 - Topics in Studio Art

FINE 4350 - Topics in Digital Design

FINE 4400 - Design Studio III

FINE 4434 - Virtual Landscapes

FINE 4448 - Scientific Media Design III

FINE 4480 - The Practice of Design

FINE 4495 - Design Studio IV

FINE 4500 - Kinetic Sculpture

FINE 4505 - Performance Art

FINE 4510 - Advanced Sculpture

FINE 4520 - Performance/Installation in Fine Art

FINE 4522 - Interdisciplinary Art in Ireland

FINE 4524 - Topics in Art History

FINE 4525 - Museum Studies

FINE 4610 - Pre-Columbian Art

FINE 4620 - American Art

FINE 4625 - Studio Creative Process

FINE 4632 - Media History and Aesthetics

FINE 4650 - Nineteenth-Century Art

FINE 4660 - Twentieth-Century Art

FINE 4670 - Greek and Roman Art

FINE 4680 - Art of the Middle Ages

FINE 4690 - Renaissance Art

FINE 4710 - Baroque and Rococo Art

FINE 4712 - Applied Digital Media

FINE 4730 - Arts of Japan

FINE 4750 - Arts of China

FINE 4770 - Art of India and Southeast Asia

FINE 4790 - Methods in Art History

FINE 4800 - Senior Art Seminar

FINE 4810 - Digital Animation Studio: Animation Production I

FINE 4820 - Digital Animation Studio: Animation Production II

FINE 4840 - Independent Study: FINE

FINE 4950 - BFA Thesis

FINE 4951 - Bachelor of Art Thesis

FINE 4990 - Contemporary Art - 1945 To the Present

FINE 4995 - Travel Study

FINE 5000 - Graduate Drawing

FINE 5020 - Graduate Anatomy for Artists

FINE 5190 - Graduate Photography

FINE 5200 - Graduate Painting I

FINE 5210 - Graduate Painting II

FINE 5340 - Topics in Studio Art

FINE 5350 - Topics in Multimedia

FINE 5448 - Scientific Media Design III

FINE 5500 - Graduate Sculpture I

FINE 5510 - Graduate Sculpture II

FINE 5522 - Interdisciplinary Art in Ireland

FINE 5524 - Topics in Art History

FINE 5525 - Museum Studies

FINE 5610 - Pre-Columbian Art

FINE 5620 - American Art

FINE 5625 - Studio Creative Process

FINE 5632 - History of Digital Media

FINE 5644 - Topics in Art History

FINE 5650 - Nineteenth-Century Art

FINE 5660 - Twentieth-Century Art

FINE 5670 - Greek and Roman Art

FINE 5680 - Art of the Middle Ages

FINE 5690 - Renaissance Art

FINE 5710 - Baroque and Rococo Art

FINE 5730 - Arts of Japan

FINE 5750 - Arts of China

FINE 5770 - Art of India and Southeast Asia

FINE 5790 - Methods in Art History

FINE 5800 - Art Seminar

FINE 5840 - Independent Study: FINE

FINE 5939 - Internship

FINE 5995 - Travel Study

FNCE 2939 - Internship

FNCE 3000 - Principles of Finance

FNCE 3500 - Management of Business Capital

FNCE 3600 - Financial Markets and Institutions

FNCE 3700 - Investment and Portfolio Management

FNCE 3809 - Introduction to Risk Management

FNCE 3840 - Independent Study: FNCE

FNCE 3939 - Internship

FNCE 3949 - Experiential Learning with Risk Management Industry

FNCE 4129 - Legal and Ethical Implications of Risk

FNCE 4370 - International Financial Management

FNCE 4500 - Corporate Financial Decisions

FNCE 4709 - Life and Health Insurance

FNCE 4750 - Business Intelligence and Financial Modeling

FNCE 4809 - Insurance Principles and Applications

FNCE 4840 - Independent Study: FNCE

FNCE 4909 - Corporate Risk Management

FNCE 4950 - Special Topics

FNCE 5939 - Internship

FNCE 6290 - Quantitative Methods for Finance

FNCE 6300 - Macroeconomics and Financial Markets

FNCE 6310 - Financial Decisions and Policies

FNCE 6330 - Investment Management Analysis

FNCE 6340 - Security Analysis and Firm Valuation

FNCE 6350 - Financial Innovations

FNCE 6360 - Management of Financial Institutions

FNCE 6365 - Banking Principles and Practices

FNCE 6370 - International Financial Management

FNCE 6372 - Business Forecasting

FNCE 6380 - Futures and Options

FNCE 6382 - Survey of Financial Derivatives: Futures, Options and Swaps

FNCE 6410 - Real Options and Investment Decisions Under Uncertainty

FNCE 6411 - International Corporate Governance

FNCE 6420 - Mergers and Acquisitions

FNCE 6430 - Practical Equity Analysis & Portfolio Management

FNCE 6450 - Short-Term Financial Management

FNCE 6480 - Financial Modeling

FNCE 6800 - Special Topics

FNCE 6840 - Independent Study: FNCE

FNCE 6995 - Travel Study

FNDS 5000 - Teaching as a Profession

FNDS 5050 - Critical Issues in American Education

FNDS 5100 - Education in Other Countries

FNDS 5410 - History and Philosophy of Modern Education

FNDS 5420 - History and Philosophy of Education: Twentieth Century America

FNDS 5500 - Contemporary Philosophies of Education

FNDS 5800 - Seminar: Foundations of Education

FNDS 5810 - Special Topics

FNDS 5840 - Independent Study: FNDS

FNDS 5920 - Readings in Foundations of Education

FNDS 6350 - Seminar: Foundations of Education

FNDS 6600 - Special Topics: Laboratory in Educational Leadership and Innovation

FNDS 6920 - Readings in Foundations of Education

FNDS 6950 - Master's Thesis

FNDS 7370 - Dissertation Seminar

FNDS 7420 - History and Philosophy of Education: Twentieth Century America

FNDS 7500 - Contemporary Philosophies of Education

FNDS 7600 - Special Topics: Laboratory in Educational Leadership and Innovation

FNDS 7840 - Independent Study: FNDS

FNDS 7930 - Teaching Internship in Foundations of Education

FNDS 8990 - Doctor of Philosophy Dissertation

FNDS 8991 - Doctor of Education Dissertation

FREN 1000 - Introduction to Cultures of the French- Speaking World

FREN 1010 - Beginning French I

FREN 1020 - Beginning French II

FREN 1111 - Freshman Seminar

FREN 2110 - Intermediate French I: Grammar Review, Reading and Composition

FREN 2120 - Intermediate French II: Grammar Review and Conversation

FREN 2939 - Internship

FREN 2995 - Travel Study

FREN 3010 - French Phonetics and Pronunciation

FREN 3020 - Oral Practice

FREN 3050 - Advanced Grammar and Composition

FREN 3060 - Advanced French Language Skills

FREN 3112 - Survey of French Literature I

FREN 3120 - French Cultural Identities: Myths and Realities

FREN 3122 - Survey of French Literature II

FREN 3130 - Current Topics of the French-Speaking World

FREN 3140 - Contemporary Francophone Cultures

FREN 3200 - The Francophone World in the Post-Colonial Era

FREN 3840 - Independent Study: FREN

FREN 3939 - Internship

FREN 3970 - Special Topics

FREN 3995 - Travel Study

FREN 4010 - Advanced Composition: Stylistics

FREN 4050 - Advanced French for Business

FREN 4082 - Introduction to Translation

FREN 4200 - French Civilization Through the Nineteenth Century

FREN 4210 - French Civilization - Twentieth and Twenty-First Centuries

FREN 4310 - Seventeenth Century Literature

FREN 4360 - Eighteenth Century Novel, Theater and Poetry

FREN 4430 - Nineteenth Century French Novel

FREN 4480 - Twentieth Century French Novel

FREN 4490 - Twentieth Century French Theater

FREN 4500 - Black Literature of the French-Speaking World

FREN 4510 - French Women Writers

FREN 4600 - History of the French Language

FREN 4840 - Independent Study: FREN

FREN 4841 - Independent Study: FREN

FREN 4970 - Special Topics

FREN 4995 - Travel Study

FREN 5082 - Introduction to Translation

FREN 5200 - French Civilization Through the Nineteenth Century

FREN 5210 - French Civilization - Twentieth and Twenty-First Centuries

FREN 5430 - Nineteenth Century French Novel

FREN 5480 - Twentieth Century French Novel

FREN 5510 - French Women Writers

FREN 5600 - History of the French Language

FREN 5840 - Independent Study: FREN

FREN 5995 - Travel Study

GEMM 6000 - 21st Century Global Energy Issues and Realities

GEMM 6100 - Global Energy Economics

GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry

GEMM 6210 - Land Management and Energy Contracts

GEMM 6300 - Renewable and Alternative Energy: Opportunities & Challenges

GEMM 6400 - Leadership and Decision Making in the Global Energy Environment

GEMM 6410 - People Management in the Global Energy Environment

GEMM 6430 - Organizational Behavior in the Energy Industry

GEMM 6450 - Strategic Management of the Energy Industry

GEMM 6460 - Integrated Information Management for Energy Firms

GEMM 6470 - Energy Marketing

GEMM 6500 - Financial Accounting in the Global Energy Markets

GEMM 6600 - Introduction To Financial Management In The Energy Industry

GEMM 6610 - Advanced Financial Management in the Energy Industry

GEMM 6620 - Energy Assest & Production Management for the Energy Industry

GEMM 6630 - Renewable Energy Management

GEMM 6690 - Special Topics

GEOG 1102 - World Regional Geography

GEOG 1111 - Freshman Seminar

GEOG 1202 - Introduction to Physical Geography

GEOG 1302 - Introduction to Human Geography

GEOG 1332 - Topics in Science

GEOG 1602 - Introduction to Urban Studies

GEOG 2080 - Introduction to Mapping and Map Analysis

GEOG 2202 - Natural Hazards

GEOG 2939 - Internship

GEOG 3100 - Geography of Colorado

GEOG 3110 - Geography of North America

GEOG 3120 - Geography of Europe

GEOG 3130 - Central America and the Caribbean

GEOG 3140 - Geography of South America

GEOG 3150 - Middle East

GEOG 3160 - Geography of China

GEOG 3232 - Weather and Climate

GEOG 3240 - Colorado Climates

GEOG 3300 - Population and Resources in the World Environment

GEOG 3302 - Water Resources

GEOG 3411 - Globalization and Regional Development

GEOG 3430 - Geography of Tourism

GEOG 3501 - Geography of Health

GEOG 3770 - Geography and Film

GEOG 3840 - Independent Study: GEOG

GEOG 3939 - Internship

GEOG 3990 - Special Topics

GEOG 4000 - Planning Methods I

GEOG 4010 - Landscape Geochemistry

GEOG 4020 - Earth Environments and Human Impacts

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing

GEOG 4080 - Introduction to GIS

GEOG 4081 - Introduction to Cartography and Computer Mapping

GEOG 4085 - GIS Applications for the Urban Environment

GEOG 4090 - Environmental Modeling with Geographic Information Systems

GEOG 4095 - Deploying GIS Functionality on the Web

GEOG 4220 - Environmental Impact Assessment

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

GEOG 4235 - GIS Applications in the Health Sciences

GEOG 4240 - Principles of Geomorphology

GEOG 4260 - Natural Resource Planning and Management

GEOG 4265 - Sustainability in Resources Management

GEOG 4270 - Glacial Geomorphology

GEOG 4280 - Environmental Hydrology

GEOG 4335 - Contemporary Environmental Issues

GEOG 4350 - Environment and Society in the American Past

GEOG 4400 - Regional Economic Development

GEOG 4420 - The Politics of Nature

GEOG 4440 - Science, Policy and the Environment

GEOG 4630 - Transportation Planning I: Transport Network Analysis

GEOG 4640 - Urban Geography: Denver and the U.S.

GEOG 4670 - Transportation Planning II: Urban Transportation Planning

GEOG 4680 - Urban Sustainability: Perspectives and Practice

GEOG 4710 - Disasters, Climate Change, and Health

GEOG 4770 - Applied Statistics for the Natural Sciences

GEOG 4840 - Independent Study: GEOG

GEOG 4940 - Senior Seminar

GEOG 4950 - Honors Thesis

GEOG 4990 - Special Topics

GEOG 4995 - Travel Study

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

GEOG 5070 - Remote Sensing II: Advanced Remote Sensing

GEOG 5080 - Introduction to GIS

GEOG 5081 - Introduction to Cartography and Computer Mapping

GEOG 5085 - GIS Applications for the Urban Environment

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GEOG 5095 - Deploying GIS Functionality on the Web

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GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

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GEOG 5270 - Glacial Geomorphology

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GEOG 5680 - Urban Sustainability: Perspectives and Practice

GEOG 5710 - Disasters, Climate Change, and Health

GEOG 5840 - Independent Study

GEOG 5939 - Internship

GEOG 5990 - Special Topics In Geography

GEOG 5995 - Travel Study

GEOG 6840 - Independent Study: GEOG

GEOG 6950 - Master's Thesis

GEOG 8990 - Doctor's Thesis

GEOL 1022 - History of Life

GEOL 1072 - Physical Geology: Surface Processes

GEOL 1082 - Physical Geology: Internal Processes

GEOL 1111 - Freshman Seminar

GEOL 1115 - Earth Sciences Content

GEOL 1202 - Introduction to Oceanography

GEOL 1302 - Introduction to Astrogeology

GEOL 1400 - Geology of the National Parks

GEOL 1402 - Introduction to the Ice Ages

GEOL 1840 - Independent Study: GEOL

GEOL 2939 - Internship

GEOL 3011 - Mineralogy

GEOL 3032 - Geology of Colorado

GEOL 3100 - Current Perspectives on the Evolution of Consciousness and Culture

GEOL 3102 - Dinosaurs Past and Present

GEOL 3231 - Introductory Petrology

GEOL 3411 - Introductory Paleontology

GEOL 3415 - Museum Studies in Paleontology

GEOL 3418 - Field Paleontology

GEOL 3421 - Sedimentation and Stratigraphy

GEOL 3840 - Independent Study: GEOL

GEOL 3939 - Internship

GEOL 4010 - Landscape Geochemistry

GEOL 4020 - Earth Environments and Human Impacts

GEOL 4030 - Environmental Geology

GEOL 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

GEOL 4111 - Field Methods In Geology

GEOL 4240 - Principles of Geomorphology

GEOL 4270 - Glacial Geomorphology

GEOL 4280 - Environmental Hydrology

GEOL 4402 - Unsaturated Zone Hydrology

GEOL 4460 - Vertebrate Paleontology and Evolution

GEOL 4513 - Geology of the Grand Canyon

GEOL 4770 - Applied Statistics for the Natural Sciences

GEOL 4780 - Engineering Geology

GEOL 4840 - Independent Study: GEOL

GEOL 4995 - Travel Study

GEOL 5001 - RM-MSMSP: Earth Processes I

GEOL 5002 - RM-MSMSP: Earth Sciences II - Sedimentology and Paleontology

GEOL 5003 - RM-MSMSP: Earth Science in Context

GEOL 5004 - RM-MSMSP Research Experience for Teachers - Geology Cohort

GEOL 5030 - Environmental Geology

GEOL 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

GEOL 5111 - Field Methods In Geology

GEOL 5240 - Principles of Geomorphology

GEOL 5270 - Glacial Geomorphology

GEOL 5770 - Applied Statistics for the Natural Sciences

GEOL 5780 - Engineering Geology

GEOL 5939 - Internship

GEOL 5950 - Master's Thesis

GEOL 5995 - Travel Study

GEOL 6840 - Independent Study: GEOL

GEOL 6950 - Master's Thesis

GEOL 6960 - Master's Project

GRMN 1000 - Germany and the Germans

GRMN 1010 - Beginning German I

GRMN 1020 - Beginning German II

GRMN 1111 - Freshman Seminar

GRMN 2110 - Intermediate German I

GRMN 2130 - Intermediate German II

GRMN 2150 - Intermediate German II: Grammar Review and Oral Practice

GRMN 2210 - Readings and Translation

GRMN 2240 - Intermediate Composition and Vocabulary Building

GRMN 2840 - Independent Study: GRMN

GRMN 2939 - Internship

GRMN 2995 - Travel Study

GRMN 3030 - Advanced Conversation: Idioms and Vocabulary Building

GRMN 3050 - Phonetics and Pronunciation of German

GRMN 3060 - Advanced German Language Skills I

GRMN 3070 - Advanced German Language Skills II

GRMN 3080 - Advanced German Language Skills III

GRMN 3090 - Advanced German Language Skills IV

GRMN 3110 - Introduction to German Literature I

GRMN 3130 - Current Topics of the German-Speaking World

GRMN 3200 - Current German Society and Culture

GRMN 3230 - German Civilization I: From Medieval Through Age of Idealism

GRMN 3240 - German Civilization II: The Modern Age

GRMN 3310 - Techniques of Translation

GRMN 3512 - Faust in Literature and Music

GRMN 3540 - German Cinema and Society

GRMN 3840 - Independent Study: GRMN

GRMN 3939 - Internship

GRMN 3995 - Travel Study

GRMN 4050 - Advanced German Phonetics and Language History

GRMN 4840 - Independent Study: GRMN

GRMN 4995 - Travel Study

GRMN 5995 - Travel Study

HBSC 1111 - Freshman Seminar

HBSC 2001 - Understanding Community and Public Health

HBSC 2051 - Introduction to Population Studies

HBSC 3001 - Introduction to Epidemiology

HBSC 3002 - Ethnicity, Health and Social Justice

HBSC 3010 - Human Sexuality and Public Health

HBSC 3021 - Fundamentals of Health Promotion

HBSC 3031 - Health, Human Biology and Behavior

HBSC 3041 - Health, Culture and Society

HBSC 3071 - Global Topics in Sexual and Reproductive Health

HBSC 3200 - Human Migration: Nomads, Sojourners, and Settlers

HBSC 3939 - Internship

HBSC 4020 - Global Health: Comparative Public Health Systems

HBSC 4021 - Community Health Assessment

HBSC 4031 - Ethnographic Research in Public Health

HBSC 4040 - Social Determinants of Health

HBSC 4060 - Evolutionary Medicine

HBSC 4080 - Global Health Practice

HBSC 4090 - Political Economy of Drugs

HBSC 4110 - Public Health Perspectives on Family Violence

HBSC 4200 - The Global HIV/AIDS Epidemic

HBSC 4620 - Health Risk Communication

HBSC 4840 - Independent Study

HBSC 4995 - Travel Study

HBSC 4999 - Topics in the Health and Behavioral Sciences

HBSC 5020 - Global Health: Comparative Public Health Systems

HBSC 5021 - Community Health Assessment

HBSC 5031 - Ethnographic Research in Public Health

HBSC 5040 - Social Determinants of Health

HBSC 5060 - Evolutionary Medicine

HBSC 5080 - Global Health Practice

HBSC 5090 - Political Economy of Drugs

HBSC 5110 - Public Health Perspectives on Family Violence

HBSC 5200 - The Global HIV/AIDS Epidemic

HBSC 5620 - Health Risk Communication

HBSC 5840 - Independent Study

HBSC 5939 - Internship

HBSC 5995 - Travel Study

HBSC 5999 - Topics in the Health and Behavioral Sciences

HBSC 6320 - Human Genetics: Legal, Ethical and Social Issues

HBSC 6840 - Independent Study: HBSC

HBSC 7001 - Colloquium Series in the Health and Behavioral Sciences

HBSC 7011 - Theoretical Perspectives in Health and Behavioral Science I

HBSC 7021 - Theoretical Perspectives in Health and Behavioral Science II

HBSC 7031 - Human Ecology and Environmental Adaptation

HBSC 7041 - Research Design and Methods in the Health and Behavioral Sciences I

HBSC 7051 - Qualitative Research Design and Methods

HBSC 7061 - Quantitative Methods in the Health and Behavioral Sciences

HBSC 7061 - Social Statistics

HBSC 7071 - Social and Behavioral Determinants of Health and Disease

HBSC 7111 - Applications of the Health and Behavioral Sciences

HBSC 7120 - Human Reproductive Technologies and the Law

HBSC 7121 - Dissertation Proposal and Research

HBSC 7210 - Human Health and Environmental Pollution

HBSC 7235 - GIS Applications in the Health Sciences

HBSC 7310 - Environmental Epidemiology

HBSC 7320 - Human Genetics: Legal, Ethical and Social Issues

HBSC 7340 - Risk Assessment

HBSC 7360 - Toxicology

HBSC 7400 - Topics in the Health and Behavioral Sciences

HBSC 8990 - Doctoral Dissertation

HIPR 6010 - Preservation Theory and Practice

HIPR 6090 - Special Topics in Historic Preservation

HIPR 6110 - Regionalisms & the Vernacular

HIPR 6170 - Preservation Design Studio

HIPR 6171 - Preservation Design Seminar

HIPR 6210 - Survey, Significance, Recognition

HIPR 6310 - Documentation, Analysis, Representation

HIPR 6410 - Urban Conservation: Context for Reuse

HIPR 6510 - Building Conservation

HIPR 6610 - Reading the City

HIPR 6840 - Independent Study

HIPR 6851 - Professional Project

HIPR 6930 - Internship

HIPR 6951 - Thesis

HIST 1016 - World History to 1500

HIST 1026 - World History Since 1500

HIST 1111 - Freshman Seminar

HIST 1211 - Western Civilization I

HIST 1212 - Western Civilization II

HIST 1361 - U.S. History to 1876

HIST 1362 - U.S. History Since 1876

HIST 1381 - Paths to the Present I

HIST 1382 - Getting Here: Paths to the Present II

HIST 2939 - Internship

HIST 3031 - Theory and Practice of History: An Introduction to the Major

HIST 3121 - The World at War, 1914-1945

HIST 3230 - The American Presidency

HIST 3231 - Famous U.S. Trials

HIST 3232 - The American Colonies to 1750

HIST 3235 - U.S. Labor History, 1800 to the Present

HIST 3343 - Women in U.S. History

HIST 3345 - Immigration and Ethnicity in American History

HIST 3347 - African-American History, 1619-Present

HIST 3348 - The African-American Protest Tradition, 1865 - Present

HIST 3349 - Social Movements in 20th Century America

HIST 3350 - Colonial Latin America

HIST 3360 - Denver History

HIST 3364 - Native Americans and Spaniards in North America

HIST 3365 - Aztlan in the United States: Chicano History from 1821

HIST 3366 - Environmental History of North America

HIST 3396 - History of the American Indian

HIST 3451 - Introduction to African History

HIST 3460 - Introduction to Latin American History

HIST 3470 - Introduction to Asian History

HIST 3471 - Islam and Asia

HIST 3480 - Introduction to European History

HIST 3481 - Ancient Greece

HIST 3482 - Rome: City and Empire

HIST 3483 - Introduction to Modern South Asia

HIST 3484 - British Isles to 1714

HIST 3485 - British Isles Since 1714

HIST 3486 - Renaissance and Reformation

HIST 3487 - Medieval Europe

HIST 3488 - Tudor-Stuart England

HIST 3500 - African History in Novels and Films

HIST 3601 - Colorado History

HIST 3606 - Science, Technology, and Society in the Modern World

HIST 3706 - Age of Revolution

HIST 3810 - Topics

HIST 3840 - Independent Study: History

HIST 3939 - Internship

HIST 3995 - Travel Study

HIST 4021 - Renaissance Europe

HIST 4022 - Reformation Europe

HIST 4027 - Enlightenment and Revolution

HIST 4028 - After the Revolutions: Nineteenth Century Intellectual History

HIST 4029 - Age of Anxiety in Europe

HIST 4030 - Europe During the World Wars

HIST 4031 - Contemporary Europe

HIST 4032 - Globalization in World History Since 1945

HIST 4034 - Core Themes in European History

HIST 4046 - Victorians and Victorianism

HIST 4051 - Britain and The Empire

HIST 4055 - The Atlantic Slave Trade: Africa, Caribbean and U.S.

HIST 4061 - French Revolution and Napoleon

HIST 4062 - Modern France, 1789 to the Present

HIST 4071 - Modern Germany

HIST 4074 - Post-War Germany

HIST 4075 - Travel Stories and Origins of Cultural Anthropology

HIST 4076 - History of Modern Science

HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917

HIST 4083 - Russia Since 1917

HIST 4086 - Eastern Europe

HIST 4133 - Management of Material Culture and Museum Collections

HIST 4201 - Core Themes in U.S. History

HIST 4210 - The American Revolution

HIST 4212 - Civil War and Reconstruction

HIST 4213 - The Gilded Age and Early 20th Century Challenges: U.S. History, 1865-1932

HIST 4216 - History of American Popular Culture

HIST 4217 - Consumer Culture

HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present

HIST 4220 - U.S. Foreign Policy Since 1912

HIST 4222 - U.S. Society and Thought to 1860

HIST 4223 - U.S. Society and Thought Since 1860

HIST 4225 - Urban America: Colonial Times to the Present

HIST 4226 - U.S. Business History

HIST 4227 - American West

HIST 4228 - Western Art and Architecture

HIST 4229 - Colorado Historic Places

HIST 4230 - Women in the West

HIST 4231 - History in Museums

HIST 4232 - Historic Preservation

HIST 4234 - Introduction to Public History

HIST 4235 - Sports and American Society

HIST 4236 - Colorado Mining and Railroads

HIST 4238 - U.S. History Through Fiction

HIST 4240 - National Parks History

HIST 4242 - Oral History

HIST 4243 - Public History Administration

HIST 4244 - Interpretation of History in Museums: Exhibits and Education

HIST 4245 - Heritage Tourism

HIST 4303 - Sex and Gender in Modern Britain

HIST 4306 - Survey of Feminist Thought

HIST 4307 - History of Sexuality

HIST 4308 - Crime, Policing, and Justice in American History

HIST 4345 - Gender, Science, and Medicine: 1600 to the Present

HIST 4346 - Medicine and Society: the Ancients to the Present

HIST 4411 - Modern Mexico

HIST 4412 - Mexico and the United States: People and Politics on the Border

HIST 4414 - Nationalism and State Building in Latin America, 1750-1850

HIST 4415 - Social Revolutions in Latin America

HIST 4416 - The Age of Imperialism

HIST 4417 - Commodities and Globalization: Dessert in World History

HIST 4418 - Trade and Premodern World History

HIST 4420 - Traditional China: China to 1600

HIST 4421 - Modern China

HIST 4431 - Modern Japan

HIST 4451 - Southern Africa

HIST 4455 - African Struggle for Independence

HIST 4460 - The Islamic World's Golden Age

HIST 4461 - The Modern Middle East

HIST 4471 - The Second World War

HIST 4472 - The 1950s: Korean War, the Cold War and Social Transformation

HIST 4475 - The Vietnam War

HIST 4501 - World History for Educators

HIST 4503 - Topics in History of Science

HIST 4504 - Animals in U.S. History

HIST 4621 - Explorers and Exploration

HIST 4645 - Archival Management

HIST 4810 - Special Topics

HIST 4839 - History Seminar

HIST 4840 - Independent Study: HIST

HIST 4849 - Independent Study History Honors Research Paper

HIST 4850 - History in the Community: History Day Mentoring

HIST 5021 - Renaissance Europe

HIST 5022 - Reformation Europe

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HIST 5421 - Modern China

HIST 5431 - Modern Japan

HIST 5451 - Southern Africa

HIST 5455 - African Struggle for Independence

HIST 5460 - The Islamic World's Golden Age

HIST 5461 - The Modern Middle East

HIST 5464 - Problems and Methods in Teaching History and Social Studies I

HIST 5465 - Problems and Methods in Teaching History and Social Studies II

HIST 5466 - Teaching About Ethnicity, Race, and Prejudice

HIST 5471 - The Second World War

HIST 5472 - The 1950s: Korean War, the Cold War and Social Transformation

HIST 5475 - The Vietnam War

HIST 5501 - World History for Educators

HIST 5502 - World History For Educators Workshops

HIST 5503 - Topics in History of Science

HIST 5504 - Animals in U.S. History

HIST 5621 - Explorers and Exploration

HIST 5645 - Archival Management

HIST 5810 - Special Topics

HIST 5840 - Independent Study: History

HIST 5939 - Internship

HIST 5995 - Travel Study

HIST 6013 - Introduction to the Professional Study of History

HIST 6840 - Independent Study: HIST

HIST 6920 - Readings in European History

HIST 6925 - Readings in Early U.S. History

HIST 6926 - Readings in Later U.S. History, 1865-1932

HIST 6927 - Readings in Public History

HIST 6929 - Readings in Later U.S. History, 1929 to the Present

HIST 6931 - Readings: Special Subjects in History

HIST 6939 - Internship

HIST 6950 - Master's Thesis

HIST 6951 - Masters Project: Advanced History Curriculum Development

HIST 6952 - Master's Project: Public History

HIST 6980 - Seminar in European History

HIST 6981 - Seminar in British History

HIST 6986 - Seminar in Later U.S. History

HIST 6989 - Seminar: Special Subjects in History

HIST 6992 - Seminar: Colorado Studies

HIST 6993 - Seminar: History of Technology

HLTH 6010 - Health Care Systems

HLTH 6040 - Health Care Financial Management

HLTH 6055 - Transformational Leadership/Metaphysical Management

HLTH 6070 - International Health Policy and Management

HLTH 6071 - Introduction To Health Information Technology

HLTH 6072 - Fundamentals of Health Information Technology Management

HLTH 6075 - International Health Travel Study

HLTH 6740 - Profiles in Health Care

HLTH 6800 - Special Topics

HLTH 6840 - Independent Study: HLTH

HLTH 6911 - Health Field Studies

HUMN 1012 - The Humanistic Tradition: Modes of Expression

HUMN 3250 - Introduction to Law Studies

HUMN 5000 - 19th Century Philosophy

HUMN 5013 - Philosophical Problems in the Social Sciences and the Humanities

HUMN 5020 - Elements of Social Thought

HUMN 5025 - Methods and Texts of the Humanities

HUMN 5101 - Pragmatism: Classical American Philosophy

HUMN 5220 - Aesthetics and the Philosophy of Art

HUMN 5242 - Bioethics

HUMN 5250 - Environmental Ethics

HUMN 5520 - The City Beautiful: Art, Architecture and Theory in Urban History

HUMN 5550 - Paris 1910: Art, Philosophy and Psychology

HUMN 5600 - Philosophy of Religion

HUMN 5650 - Reflections on Modernity

HUMN 5660 - Visual Arts: Interpretations and Contexts

HUMN 5710 - Women and Religion

HUMN 5720 - Sexuality, Gender and Their Visual Representation

HUMN 5750 - Philosophical Psychology

HUMN 5833 - Existentialism

HUMN 5840 - Independent Study: HUMN

HUMN 5920 - Philosophy of Media and Technology

HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities

HUMN 5933 - Philosophy of Eros

HUMN 5939 - Internship

HUMN 5950 - Master's Thesis

HUMN 5960 - Master's Project

HUMN 5984 - Topics: Interdisciplinary Humanities

INTB 2939 - Internshp

INTB 3000 - Global Perspectives

INTB 3901 - The Construction of the European Union

INTB 3902 - Intercultural Management: European Values and Behavior

INTB 3903 - International Business Law

INTB 3904 - International Negotiation

INTB 3905 - International Marketing and Distribution

INTB 3906 - International Communication and Consumer Behavior

INTB 3907 - European Marketing and Management of a Product Line

INTB 3908 - Organizations and Culture

INTB 3909 - Single Market, European Law and Euroland

INTB 3910 - International Corporate Finance

INTB 3911 - The United States Of Europe

INTB 3912 - Global Marketing-Communication

INTB 3939 - Internship

INTB 4028 - Travel Study Topics

INTB 4400 - Environments of International Business

INTB 4410 - Operations of International Business

INTB 4950 - Special Topics in International Business

INTB 5800 - Special Topics in International Business

INTB 5939 - Internship

INTB 6000 - Introduction to International Business

INTB 6020 - Cross-Cultural Management

INTB 6022 - International Business Negotiations

INTB 6024 - International Trade Finance and Management

INTB 6026 - International Marketing

INTB 6028 - Travel Study Topics

INTB 6040 - Managing Global Talent

INTB 6060 - The Legal Aspects of International Business

INTB 6080 - Global Competition

INTB 6082 - Marketing in Emerging Markets

INTB 6094 - Marketing Issues in the Chinese Environment

INTB 6200 - International Business Policy

INTB 6370 - International Accounting

INTB 6372 - International Financial Management

INTB 6411 - International Corporate Governance

INTB 6750 - Research Methods in International Business

INTB 6800 - Special Topics in International Business

INTB 6840 - Independent Study

INTB 6870 - Global Climate Change

INTB 6950 - Master's Thesis

INTE 5110 - Instructional Development and Production

INTE 5120 - Instructional Models, Strategies and Tactics

INTE 5140 - Performance Technology

INTE 5160 - Managing Information and Learning Technology Programs

INTE 5200 - Designing and Organizing an Online Course

INTE 5250 - Facilitating and Fostering Online Learning

INTE 5310 - Producing Educational Materials

INTE 5330 - Digital Storytelling

INTE 5340 - Digital Storytelling in the Curriculum

INTE 5350 - Leadership for Digital Storytelling

INTE 5370 - Digital Video For Interactivity

INTE 5410 - Designing Text and Graphics for Instruction

INTE 5510 - Integrating Technology in the Curriculum

INTE 5520 - Technologies for Learning and Productivity

INTE 5600 - Multimedia Authoring

INTE 5610 - Principles for Designing Multimedia

INTE 5640 - Technology of Student-Centered Learning Environments

INTE 5650 - Policies and Planning for eLearning Programs

INTE 5660 - Designing and Teaching in eLearning Environments

INTE 5670 - Developing eLearning Instruction

INTE 5680 - Integrating Media in eLearning Environments

INTE 5690 - Enhancing Web-based Learning Environments with JavaScript and PHP Programming

INTE 5710 - Telecommunications and Networking in Education

INTE 5830 - Information and Learning Technologies Workshop

INTE 5840 - Independent Study: INTE

INTE 5990 - Special Topics in Instructional Technology

INTE 5998 - Professional Development Activities

INTE 6110 - Managing Instructional Development

INTE 6120 - Design Studio For Project Management and Collaboration

INTE 6130 - Implementing and Evaluating Instruction

INTE 6515 - Leadership for Learning Technologies Integration

INTE 6530 - Development Projects in Information and Learning Technologies

INTE 6710 - Creative Designs for Instructional Materials

INTE 6720 - Research in Information and Learning Technologies

INTE 6730 - Comparative Models of Instructional Design

INTE 6740 - Learning Processes Applied to Instructional Technology

INTE 6750 - Current Trends and Issues in Instructional Technology

INTE 6760 - Advanced Seminar in Instructional Design and Development

INTE 6840 - Independent Study: INTE

INTE 6930 - Internship in Information and Learning Technologies

INTE 6950 - Master's Thesis

INTE 6960 - Master's Project

INTE 6999 - Leadership and Practice in Information and Learning Technologies

IPTE 4002 - Math Instruction and Assessment

IPTE 4005 - Social Studies in the Elementary Curriculum

IPTE 4006 - Integrated Science and Social Studies in the Elementary Curriculum

IPTE 4026 - Content Literacy Assessment and Instruction Teaching Lab

IPTE 4050 - Planning for the First Year of Teaching

IPTE 4120 - Negotiating the Classroom Culture with Children

IPTE 4121 - Negotiating the Classroom Culture with Adolescents

IPTE 4130 - Democratic Schooling: Issues of Laws and Ethics

IPTE 4351 - Inquiry Science Methods

IPTE 4460 - Thoughtful Inquiry in Teaching Social Studies: Culture, People and Change

IPTE 4465 - Thoughtful Inquiry in Teaching Social Studies: Power, Technology and Society

IPTE 4800 - Special Topics: Initial and Professional Teacher Ed

IPTE 4911 - Internship and Site Seminar II

IPTE 4912 - Internship and Site Seminar III

IPTE 4913 - Internship and Site Seminar IV

IPTE 4915 - Internship and Seminar I

IPTE 4916 - Internship and Seminar II

IPTE 4917 - Internship and Seminar III

IPTE 4918 - Internship and Seminar IV

IPTE 5002 - Math Instruction and Assessment

IPTE 5005 - Social Studies in the Elementary Curriculum

IPTE 5006 - Integrated Science and Social Studies in the Elementary Curriculum

IPTE 5026 - Content Literacy Assessment and Instruction Teaching Lab

IPTE 5050 - Planning for the First Year of Teaching

IPTE 5070 - Teacher Inquiry I

IPTE 5071 - Teacher Inquiry II

IPTE 5080 - Principles and Practice of Change

IPTE 5120 - Negotiating the Classroom Culture with Children

IPTE 5121 - Negotiating the Classroom Culture with Adolescents

IPTE 5130 - Democratic Schooling: Issues of Laws and Ethics

IPTE 5351 - Inquiry Science Methods

IPTE 5460 - Thoughtful Inquiry in Teaching Social Studies: Culture, People and Change

IPTE 5465 - Thoughtful Inquiry in Teaching Social Studies: Power, Technology and Society

IPTE 5690 - Curriculum and Methods in Foreign Language

IPTE 5691 - Curriculum and Methods in Foreign Language II

IPTE 5800 - Special Topics

IPTE 5800 - Special Topics: Initial & Professional Teacher Ed

IPTE 5840 - Independent Study: IPTE

IPTE 5910 - Internship and Site Seminar I

IPTE 5911 - Internship and Site Seminar II

IPTE 5912 - Internship and Site Seminar III

IPTE 5913 - Internship and Site Seminar IV

IPTE 5915 - Internship and Seminar I

IPTE 5916 - Internship and Seminar II

IPTE 5917 - Internship and Seminar III

IPTE 5918 - Internship and Seminar IV

IPTE 5919 - Second Endorsement Internship or Guest Student Teaching

ISMG 2050 - Introduction to Business Problem Solving

ISMG 2075 - Introduction to Microsoft Access

ISMG 2200 - Introduction to Business Programming

ISMG 2800 - Designing for the Web

ISMG 3000 - Principles of Information Systems

ISMG 3100 - Information Technology Hardware and Software

ISMG 3200 - Programming, Data, File and Object Structures

ISMG 3500 - Enterprise Data and Content Management

ISMG 3600 - System Strategy, Architecture and Design

ISMG 3939 - Internship

ISMG 4200 - Building Business Applications

ISMG 4300 - Information Security and Compliance

ISMG 4500 - Database Management and Applications

ISMG 4600 - Systems Analysis and Design

ISMG 4700 - Business Data Communications and Networking

ISMG 4750 - Business Intelligence and Financial Modeling

ISMG 4760 - Customer Relationship Management

ISMG 4780 - Accounting and Information Systems Processes and Controls

ISMG 4800 - eBusiness Systems Development

ISMG 4840 - Independent Study

ISMG 4900 - Project Management and Practice

ISMG 4950 - Special Topics

ISMG 5939 - Internship

ISMG 6020 - .Net Programming Fundamentals

ISMG 6040 - Business Process Management

ISMG 6060 - Analysis, Modeling and Design

ISMG 6071 - Introduction to Health Information Technology

ISMG 6072 - Fundamentals of Health Information Technology Management

ISMG 6080 - Database Management Systems

ISMG 6120 - Internet and Mobile Technologies

ISMG 6180 - Information Systems Management and Strategy

ISMG 6200 - Global Information Systems

ISMG 6220 - Business Intelligence Systems

ISMG 6240 - Website Development Practice and Technologies

ISMG 6280 - Service Oriented Architecture

ISMG 6420 - Global Enterprise Systems

ISMG 6430 - Information Systems Security and Privacy

ISMG 6450 - IT Project Management

ISMG 6460 - Emerging Technologies

ISMG 6480 - Data Warehouse and Administration

ISMG 6510 - Accounting and Information Systems Processes and Controls

ISMG 6800 - Special Topics

ISMG 6810 - Business Intelligence in Healthcare

ISMG 6820 - Business Intelligence and Financial Modeling

ISMG 6840 - Independent Study: ISMG

ISMG 6950 - Master's Thesis

ISMG 7001 - AI-Based Decision Making

ISMG 7002 - Computer Security

ISMG 7200 - Advances In Management Information Systems

ISMG 7210 - Topics In Analytical Research In Management Information Systems

ISMG 7211 - Topics In Behavioral and Organizational Research In Management Information Systems

ISMG 7220 - Research methods: Design and Analysis

ISMG 7551 - Parallel and Distributed Systems

ISMG 7552 - Advanced Topics in Parallel Processing

ISMG 7574 - Advanced Topics in Operating Systems

ISMG 7582 - Artificial Intelligence

ISMG 7654 - Algorithms For Communication Networks

ISMG 7765 - Computer Networks

ISMG 7799 - Topics in Network Computing

ISMG 7800 - Special Topics

ISMG 7840 - Independent Study: Pre-Dissertation Research

ISMG 8990 - Dissertation Development

ITED 4700 - Instructional Teamwork Academy

ITED 4710 - Student Supervision Academy

ITED 4720 - Interpersonal Skills Academy

ITED 4730 - Personal Growth and Development Academy

ITED 4740 - Behavior Management

ITED 4750 - Instructional Strategies Academy

ITED 4760 - Instructional Technology Academy

ITED 4770 - Vocabulary and Comprehension

ITED 4780 - Assisting with Phonemic Awareness and Phonics in the Classroom

ITED 4790 - Assisting with Reading Fluency in the Classroom

ITED 4800 - Grades K-4 Mathematics

ITED 4810 - Number Theory and Rational Numbers

ITED 4820 - Algebraic Concepts and Spatial Reasoning

ITED 5022 - Learning and Classroom Management Strategies for Secondary Schools

ITED 5023 - Literacy Strategies for Secondary Schools

ITED 5025 - Reading Instruction and Assessment K-5

ITED 5800 - Special Topics in Education

ITED 5801 - Special Topics in Education

ITED 5802 - Special Topics in Education

ITED 5803 - Special Topics in Education

ITED 5804 - Special Topics in Education

ITED 5805 - Special Topics in Education

ITED 5840 - Independent Study

LALC 5010 - ELA Foundations

LALC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I

LALC 5060 - Linking Assessment and Instruction in Language and Literacy, Part II

LALC 5100 - Theories and Methods of Second Language Teaching

LALC 5724 - Colorado Writing Project I

LALC 5726 - Colorado Writing Project II

LALC 5728 - Colorado Writing Project III

LATN 1010 - Elementary Latin I

LATN 1020 - Beginning Latin II

LATN 1050 - Vocabulary for Professionals

LATN 1100 - Building Vocabulary From Greek and Latin Words

LATN 2010 - Intermediate Latin I

LATN 2020 - Intermediate Latin II

LATN 2840 - Independent Study

LATN 3000 - Medical Terminology

LCRT 1111 - Introduction to College Literacy for Migrant Populations

LCRT 5010 - Foundations of Language

LCRT 5020 - Workshop in Literacy and Language Teaching

LCRT 5028 - Adolescent Literacy, Part I

LCRT 5029 - Adolescent Literacy, Part II

LCRT 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction

LCRT 5055 - Linking Assessment and Instruction in Language and Literacy

LCRT 5080 - Teachers as Readers and Writers

LCRT 5140 - Multicultural Education

LCRT 5150 - Culture of the Classroom

LCRT 5200 - Theory and Methods of English Education

LCRT 5201 - Adolescent Literature

LCRT 5210 - Literacy Development Pre K-3rd Grade

LCRT 5220 - Literacy Routines and Assessment, Pre K-3rd Grade

LCRT 5230 - Early Literacy Instruction

LCRT 5700 - Language and Literacy Portfolios: Development, Reflection and Empowerment

LCRT 5710 - Primary Literacy: Pre-3rd Grade

LCRT 5720 - Writing: Process, Development, and Teaching Grades 3-12

LCRT 5730 - Language and Literacy Across the Curriculum

LCRT 5750 - Children's Literature in Spanish

LCRT 5770 - Effective Literacy Instruction for Second Language Learners

LCRT 5780 - Connecting Cultures Through Literature

LCRT 5790 - Children's Literature Through the Ages

LCRT 5795 - Current Children's Literature

LCRT 5800 - Sociolinguistics: Language Variation and its Implications for Teaching

LCRT 5810 - Wksp: Lang Acq & Development

LCRT 5830 - Wrkshp-Multicultural EDU

LCRT 5831 - Reading Recovery: Observation Survey

LCRT 5835 - Special Topics: Literacy and Language

LCRT 5840 - Independent Study: LCRT

LCRT 5911 - Reading Recovery Practicum: Early Intervention (Theory, Procedures and Practice)

LCRT 5920 - Readings in Multicultural

LCRT 5925 - Selected Readings: Advanced Study in Literacy and Language

LCRT 6090 - Research Seminar

LCRT 6713 - Intro To Language Policy

LCRT 6840 - Independent Study: LCRT

LCRT 6910 - Seminar and Practicum in Literacy and Language, K-6

LCRT 6911 - Seminar and Practicum in Literacy and Language, 7-12+

LCRT 6913 - Reading Recovery: Practicum

LCRT 6915 - Seminar and Practicum in Literacy Professional Development

LCRT 6950 - Master's Thesis

LDAR 5501 - Landscape Architecture Design Studio 1

LDAR 5502 - Landscape Architecture Design Studio 2

LDAR 5503 - Landscape Architecture Design Studio 3

LDAR 5510 - Graphic Media in Landscape Architecture

LDAR 5521 - History of Landscape Architecture

LDAR 5532 - Landform Manipulation

LDAR 5572 - Landscape Ecology

LDAR 5573 - Applied Advanced Landscape Ecology Workshop

LDAR 6520 - Landscape Architecture in Other Cultures

LDAR 6604 - Landscape Architecture Design Studio 4

LDAR 6605 - Landscape Architecture Design Studio 5

LDAR 6606 - Landscape Architecture Design Studio 6

LDAR 6607 - Landscape Architecture Design Studio 7

LDAR 6608 - Landscape Architecture Design Studio 8

LDAR 6620 - Landscape Architecture Theory and Criticism

LDAR 6622 - Visual Quality Analysis

LDAR 6624 - The Built Environment in Other Cultures I: Research Design

LDAR 6625 - Landscape Architecture Field Studies

LDAR 6631 - Landscape Construction Materials and Methods

LDAR 6632 - Site Planning

LDAR 6641 - Computer Applications in Landscape Architecture

LDAR 6642 - Landscape Architecture Digital Design Workshop

LDAR 6670 - Plants in Design

LDAR 6671 - Plant Material Identification

LDAR 6686 - Special Topics: Landscape Architecture

LDAR 6710 - Landscape Representation

LDAR 6711 - Advanced Landscape Architectural Graphics Workshop

LDAR 6712 - Green Roof-Design

LDAR 6720 - Finding Common Ground

LDAR 6721 - Regionalism

LDAR 6722 - Contested Terrains

LDAR 6723 - Cinema and the Landscape

LDAR 6724 - American Landscape Arch

LDAR 6750 - Professional Practice

LDAR 6840 - Independent Study

LDAR 6910 - Teaching Assistantship

LDAR 6930 - Landscape Architecture Internship

LDAR 6949 - Research Tools & Methods

LDAR 6950 - Thesis Research

LDAR 6951 - Landscape Architecture Thesis

MATH 1009 - Computer-Based Algebraic Problem Solving

MATH 1010 - Mathematics for the Liberal Arts

MATH 1070 - Algebra for Social Sciences and Business

MATH 1080 - Polynomial Calculus

MATH 1110 - College Algebra

MATH 1111 - Freshman Seminar

MATH 1120 - College Trigonometry

MATH 1130 - Precalculus Mathematics

MATH 1401 - Calculus I

MATH 2411 - Calculus II

MATH 2421 - Calculus III

MATH 2511 - Discrete Structures

MATH 2810 - Topics

MATH 2830 - Introductory Statistics

MATH 2939 - Internship

MATH 3000 - Introduction to Abstract Mathematics

MATH 3040 - Mathematics for Elementary Teachers

MATH 3140 - Introduction to Modern Algebra

MATH 3191 - Applied Linear Algebra

MATH 3195 - Linear Algebra and Differential Equations

MATH 3200 - Elementary Differential Equations

MATH 3210 - Higher Geometry I

MATH 3250 - Problem Solving Tools

MATH 3301 - Introduction to Operations Research I - Deterministic Systems

MATH 3302 - Operations Research II

MATH 3440 - Introduction to Symbolic Logic

MATH 3511 - Mathematics of Chemistry

MATH 3800 - Probability and Statistics for Engineers

MATH 3939 - Internship

MATH 4010 - History of Mathematics

MATH 4012 - An Advanced Perspective on Number and Operation

MATH 4013 - An Inquiry-based Approach to Geometry

MATH 4014 - Statistical Knowledge for Teaching

MATH 4015 - Capstone Course for Secondary Teachers

MATH 4027 - Topics in Mathematics

MATH 4101 - Applied Statistics Using SAS and SPSS I

MATH 4102 - Applied Statistics Using SAS and SPSS II

MATH 4110 - Theory of Numbers

MATH 4201 - Topology

MATH 4220 - Higher Geometry II

MATH 4310 - Introduction to Real Analysis I

MATH 4320 - Introduction to Real Analysis II

MATH 4387 - Regression Analysis, Modeling and Time Series

MATH 4390 - Game Theory

MATH 4394 - Experimental Designs

MATH 4408 - Applied Graph Theory

MATH 4409 - Applied Combinatorics

MATH 4450 - Complex Variables

MATH 4576 - Mathematical Foundations of Artificial Intelligence I

MATH 4590 - Applied Math Senior Sem

MATH 4650 - Numerical Analysis I

MATH 4660 - Numerical Analysis II

MATH 4674 - Parallel Computing and Architectures

MATH 4733 - Partial Differential Equations

MATH 4779 - Math Clinic

MATH 4788 - Bioinformatics

MATH 4791 - Continuous Modeling

MATH 4792 - Probabilistic Modeling

MATH 4793 - Discrete Math Modeling

MATH 4794 - Optimization Modeling

MATH 4810 - Probability

MATH 4820 - Statistics

MATH 4830 - Applied Statistics

MATH 4840 - Independent Study

MATH 5010 - History of Mathematics

MATH 5012 - An Advanced Perspective on Number and Operation

MATH 5013 - An Inquiry-based Approach to Geometry

MATH 5014 - Statistical Knowledge for Teaching

MATH 5015 - Capstone Course for Secondary Teachers

MATH 5016 - RM-MSMSP Research Experience for Teachers - Math Cohort

MATH 5017 - Topics in Mathematics for Teachers

MATH 5027 - Topics in Applied Mathematics

MATH 5070 - Applied Analysis

MATH 5110 - Theory of Numbers

MATH 5135 - Functions of a Complex Variable

MATH 5198 - Mathematics for Bioscientists

MATH 5250 - Problem Solving Tools

MATH 5310 - Probability

MATH 5320 - Statistics

MATH 5350 - Mathematical Theory of Interest

MATH 5351 - Actuarial Models

MATH 5387 - Regression Analysis, Modeling and Time Series

MATH 5390 - Game Theory

MATH 5394 - Experimental Designs

MATH 5410 - Modern Cryptology

MATH 5432 - Computational Graph Theory

MATH 5446 - Theory of Automata

MATH 5490 - Network Flows

MATH 5576 - Mathematical Foundations of Artificial Intelligence I

MATH 5593 - Linear Programming

MATH 5610 - Computational Biology

MATH 5660 - Numerical Analysis I

MATH 5661 - Numerical Analysis II

MATH 5674 - Parallel Computing and Architectures

MATH 5718 - Applied Linear Algebra

MATH 5733 - Partial Differential Equations

MATH 5779 - Math Clinic

MATH 5791 - Continuous Modeling

MATH 5792 - Probabilistic Modeling

MATH 5793 - Discrete Math Modeling

MATH 5794 - Optimization Modeling

MATH 5830 - Applied Statistics

MATH 5840 - Independent Study

MATH 5939 - Internship

MATH 5950 - Master's Thesis

MATH 5960 - Master's Project

MATH 6023 - Topics in Discrete Math

MATH 6131 - Real Analysis

MATH 6330 - Workshop in Statistical Consulting

MATH 6360 - Exploratory Data Analysis

MATH 6376 - Statistical Computing

MATH 6380 - Stochastic Processes

MATH 6384 - Analysis of Dependent Data

MATH 6388 - Advanced Statistical Methods for Research

MATH 6393 - Introduction to Bayesian Statistics

MATH 6395 - Multivariate Methods

MATH 6398 - Calculus of Variations and Optimal Control

MATH 6404 - Applied Graph Theory

MATH 6595 - Computational Methods in Nonlinear Programming

MATH 6653 - Introduction to Finite Element Methods

MATH 6735 - Continuum Mechanics

MATH 6840 - Independent Study

MATH 7101 - Topology

MATH 7132 - Functional Analysis

MATH 7376 - Statistical Computing

MATH 7381 - Mathematical Statistics I

MATH 7382 - Mathematical Statistics II

MATH 7384 - Mathematical Probability

MATH 7385 - Stochastic Differential Equations

MATH 7397 - Nonparametric Statistics

MATH 7405 - Advanced Graph Theory

MATH 7409 - Applied Combinatorics

MATH 7410 - Combinatorial Structures

MATH 7413 - Modern Algebra I

MATH 7414 - Modern Algebra II

MATH 7419 - Mathematical Coding Theory

MATH 7421 - Projective Geometry

MATH 7593 - Advanced Linear Programming

MATH 7594 - Integer Programming

MATH 7595 - Advanced Nonlinear Programming

MATH 7663 - Finite Difference Methods for Partial Differential Equations

MATH 7665 - Numerical Linear Algebra

MATH 7667 - Introduction to Approximation Theory

MATH 7821 - Topics in Projective Geometry

MATH 7822 - Topics in Linear Algebra

MATH 7823 - Topics in Discrete Math

MATH 7824 - Topics in Computational Mathematics

MATH 7825 - Topics in Optimization

MATH 7826 - Topics in Probability and Statistics

MATH 7827 - Topics in Applied Mathematics

MATH 7840 - Independent Study

MATH 7921 - Readings in Mathematics

MATH 7922 - Rdgs:Math Fndts-Cmptr Sc

MATH 7923 - Readings: Discrete Mathematics

MATH 7924 - Rdgs:Comp Mathematics

MATH 7925 - Readings: Optimization

MATH 7926 - Rdgs:Applied Prob/Stats

MATH 7927 - Rdgs:Comp/Math Biology

MATH 8660 - Mathematical Foundations of Finite Element Methods

MATH 8664 - Iterative Methods in Numerical Linear Algebra

MATH 8990 - Doctoral Dissertation

MCKE 3041 - Number and Operation

MCKE 3042 - Algebra, Probability and Data Analysis

MCKE 3043 - Geometry and Measurement

MCKE 5000 - Algebraic Patterns and Functions I

MCKE 5002 - Algebraic Patterns and Functions II

MCKE 5004 - Statistics and Probability

MCKE 5005 - Geometry

MCKE 5006 - Mathematics of Change

MCKE 5007 - Discrete Math--Counting the Possibilities

MCKE 5008 - Discovery and Use of the History of Math

MCKE 5009 - Math Modeling--Using and Applying Math

MCKE 5011 - Mathematics and Science of Musical Instruments

MECH 1025 - CAD and Graphics for Mechanical Engineering

MECH 1208 - Special Topics: 1208-1298

MECH 2023 - Statics

MECH 2030 - Analysis Techniques in Mechanical Engineering

MECH 2033 - Dynamics

MECH 2208 - Special Topics: 2208-2298

MECH 3010 - Elementary Numerical Methods and Programming

MECH 3012 - Thermodynamics

MECH 3021 - Introduction to Fluid Mechanics

MECH 3022 - Thermodynamics II

MECH 3023 - System Dynamics I: Vibrations

MECH 3024 - Introduction to Materials Science

MECH 3027 - Measurements

MECH 3028 - Laboratory of Mechanical Measurements

MECH 3030 - Electric Circuits and Systems

MECH 3031 - Fluids/Thermal Laboratory

MECH 3032 - Electric Circuits and Systems Lab

MECH 3034 - Properties of Engineering Materials

MECH 3035 - Design of Mechanical Elements

MECH 3042 - Heat Transfer

MECH 3043 - Strength of Materials

MECH 3065 - Intermediate Dynamics

MECH 3145 - Manufacturing Processes Design

MECH 3147 - Bioengineering

MECH 3208 - Special Topics: 3208-3298

MECH 3840 - Independent Study

MECH 4023 - System Dynamics II: Controls

MECH 4024 - Mechanical Behavior of Materials

MECH 4035 - Senior Design I

MECH 4045 - Senior Design II

MECH 4110 - Numerical Methods for Engineers

MECH 4112 - Internal Combustion Engines

MECH 4114 - Designing with Composites

MECH 4115 - Applied Plasticity and Creep

MECH 4116 - Robotics

MECH 4120 - Methods of Engineering Analysis

MECH 4132 - Power Plant Systems Design

MECH 4135 - Mechanical Systems Design

MECH 4136 - Control Systems Design

MECH 4141 - Fluid Mechanics

MECH 4142 - Thermal Systems Design

MECH 4147 - Engineering Economy

MECH 4155 - Air Conditioning Design

MECH 4160 - Introduction to Operations Research

MECH 4163 - Rigid-Body Dynamics

MECH 4166 - Computerized Numerical Control (CNC) Manufacturing

MECH 4175 - Finite Element Analysis in Machine Design

MECH 4195 - Solid Modeling

MECH 4208 - Special Topics

MECH 4840 - Independent Study

MECH 5110 - Numerical Methods for Engineers

MECH 5114 - Designing with Composites

MECH 5115 - Applied Plasticity and Creep

MECH 5120 - Methods of Engineering Analysis

MECH 5121 - Introduction to Fluid Dynamics

MECH 5122 - Macroscopic Thermodynamics

MECH 5123 - Introduction to Continuum Mechanics

MECH 5124 - Yield-Limited Behavior of Materials

MECH 5133 - Theory of Inelastic Materials

MECH 5141 - Viscous Flow

MECH 5142 - Statistical Thermodynamics

MECH 5143 - Theory of Elasticity

MECH 5144 - Plasticity and Creep

MECH 5161 - Compressible Flow

MECH 5162 - Heat Transfer I

MECH 5163 - Dynamics

MECH 5166 - Computerized Numerical Control (CNC) Manufacturing

MECH 5172 - Heat Transfer II

MECH 5175 - Finite Element Stress Analysis

MECH 5208 - Special Topics

MECH 5840 - Independent Study

MECH 5842 - Independent Study: MECH

MECH 5950 - Master's Thesis

MECH 5960 - Master's Report

MECH 5970 - Graduate Problem Course

MGMT 1000 - Introduction to Business

MGMT 1111 - Business Freshman Seminar

MGMT 2939 - Internship

MGMT 3000 - Managing Individuals and Teams

MGMT 3010 - Managing People for a Competitive Advantage

MGMT 3111 - Business Transfer Student Seminar

MGMT 3830 - Business and Sustainability

MGMT 3939 - Internship

MGMT 4100 - Managing Cultural Diversity

MGMT 4330 - Mastering Management

MGMT 4350 - Leading Organizational Change

MGMT 4370 - Organization Design

MGMT 4400 - Environments of International Business

MGMT 4410 - Operations of International Business

MGMT 4420 - Human Resources Management: Staffing

MGMT 4430 - Human Resources Management: Training

MGMT 4440 - Human Resource Management: Performance Management

MGMT 4450 - Human Resources Management: Compensation

MGMT 4500 - Business Policy and Strategic Management

MGMT 4770 - Human Resource Information Systems

MGMT 4780 - Preparing A Business Plan

MGMT 4830 - Business and Sustainability

MGMT 4834 - Global Sports & Entertainment Management

MGMT 4840 - Independent Study

MGMT 4900 - Project Management and Practice

MGMT 4950 - Special Topics in Management

MGMT 5800 - Special Topics in Management

MGMT 5939 - Internship

MGMT 6020 - Leadership in Difficult Times

MGMT 6040 - Managing Global Talent

MGMT 6320 - Organizational Development

MGMT 6360 - Designing Effective Organizations

MGMT 6380 - Managing People for Competitive Advantage

MGMT 6710 - Human Resources Management: Staffing

MGMT 6720 - Human Resources Management: Training

MGMT 6730 - Human Resources Management: Performance Management

MGMT 6740 - Human Resources Management: Compensation

MGMT 6780 - Small Business Management

MGMT 6800 - Special Topics in Management

MGMT 6801 - Career Strategies

MGMT 6803 - Visionary Leadership

MGMT 6804 - Bargaining and Negotiation

MGMT 6805 - Entrepreneurship and Venture Capital

MGMT 6806 - Corporate Entrepreneurship

MGMT 6808 - Leadership Development

MGMT 6820 - Management Field Studies

MGMT 6821 - Managing for Sustainability

MGMT 6822 - Business Ethics and Corporate Social Responsibility

MGMT 6830 - Sports and Entertainment Management

MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries

MGMT 6834 - London Calling: Global Sports and Entertainment Management

MGMT 6840 - Independent Study

MGMT 6950 - Master's Thesis

MINS 5000 - Topics

MINS 5840 - Independent Study

MINS 5939 - Internship

MINS 5950 - Master's Thesis

MINS 5960 - Master's Project

MKTG 1000 - Introduction to Marketing

MKTG 2939 - Internship

MKTG 3000 - Principles of Marketing

MKTG 3100 - Marketing Research

MKTG 3200 - Buyer Behavior

MKTG 3939 - Internship

MKTG 4000 - Advertising

MKTG 4050 - Applied Marketing Management

MKTG 4051 - Honors Applied Marketing Management

MKTG 4200 - International Marketing

MKTG 4220 - Asian Business Development and Marketing

MKTG 4250 - Sports Marketing

MKTG 4580 - International Transportation

MKTG 4700 - Personal Selling and Sales Management

MKTG 4720 - Internet Marketing

MKTG 4760 - Customer Relationship Management

MKTG 4800 - Marketing Seminar

MKTG 4840 - Independent Study

MKTG 4950 - Special Topics

MKTG 5939 - Internship

MKTG 6010 - Marketing Strategy, Evaluation and Development

MKTG 6020 - International Marketing

MKTG 6030 - Sales and Sales Force Management

MKTG 6040 - Services Marketing

MKTG 6050 - Marketing Research

MKTG 6060 - Buyer Behavior

MKTG 6070 - Integrated Marketing Communications and Brand Identity

MKTG 6080 - Marketing in Emerging Markets

MKTG 6090 - Customer Relationship Management

MKTG 6091 - Strategic Product Marketing

MKTG 6092 - Internet Marketing

MKTG 6094 - Marketing Issues in the Chinese Environment

MKTG 6120 - Non-Profit and Social Marketing

MKTG 6200 - Marketing Dashboard Metrics

MKTG 6700 - Marketing Travel Study

MKTG 6800 - Topics in Marketing

MKTG 6820 - Sports & Entertainment Marketing

MKTG 6840 - Independent Study

MLNG 1111 - Freshman Seminar

MLNG 1995 - Travel Study Abroad

MLNG 2939 - Internship

MLNG 4690 - Methods of Teaching Modern Languages

MLNG 4691 - Methods of Teaching Modern Languages II

MLNG 5690 - Methods of Teaching Modern Languages

MLNG 5691 - Methods of Teaching Modern Languages II

MSRA 5000 - Introduction to Graduate Studies

MSRA 5001 - MSRA Research Seminar

MSRA 5004 - Topics in Media Forensics

MSRA 5054 - Experiential Lab

MSRA 5114 - Foundations in Media Forensics

MSRA 5124 - Forensic Science and Litigation

MSRA 5134 - Introductory Computer Forensics

MSRA 5214 - Forensic Audio Analysis

MSRA 5224 - Forensic Video Analysis

MSRA 5234 - Digital Evidence

MSRA 5244 - Mobile Phone Forensics

MSRA 5314 - Report Writing and Court Testimony

MSRA 5500 - Topics in Professional Audio

MSRA 5505 - Audio Post Production I

MSRA 5550 - Audio Production III

MSRA 5560 - Mastering & Advanced Digital Audio

MSRA 5575 - Graduate Surround Sound

MSRA 5576 - Surround Sound II

MSRA 5580 - Graduate Audio Seminar I

MSRA 5581 - Graduate Audio Seminar II

MSRA 5590 - Graduate Audio Production

MSRA 5600 - Topics in Music

MSRA 5605 - Audio Post Production II

MSRA 5840 - Independent Study for MSRA

MSRA 6510 - Graduate Audio Studies Pedagogy

MSRA 6550 - Sound Design

MSRA 6950 - Thesis in Professional Audio

MSRA 6951 - Professional Audio Portfolio Thesis

MSRA 6954 - Research Thesis in Media Forensics

MUSC 1111 - Freshman Seminar

MUSC 2220 - Commercial Electronic Music Composition

MUSC 2300 - Introduction to Songwriting

MUSC 2450 - Introduction to Performing Arts and Events Management

MUSC 2500 - Performance Art and Experimental Music

MUSC 2540 - Audio Production I

MUSC 2560 - Audio Production II

MUSC 2700 - Introduction to Music Business

MUSC 3120 - Music in Film: Altered Reality

MUSC 3125 - Sound and Music for Video Games

MUSC 3210 - Music and Entertainment Marketing

MUSC 3220 - Artist Management

MUSC 3310 - Songwriting II

MUSC 3530 - Live Sound Reinforcement

MUSC 3550 - Critical Listening for Recording Arts

MUSC 3615 - Topics In Music Business

MUSC 3690 - Concert Promotion, Tour, and Venue Management

MUSC 3700 - Music and Entertainment Business in the Digital Age

MUSC 3710 - CAM Records

MUSC 3715 - Music Business Modules

MUSC 3720 - Law and the Music Industry

MUSC 3755 - Music Publishing

MUSC 3770 - Recording Studio Management

MUSC 3785 - Current Issues In the Music Business

MUSC 3790 - Video Production in the Arts: Music

MUSC 3820 - Digital Music Techniques

MUSC 3939 - Internship

MUSC 4200 - Advanced Composition

MUSC 4500 - Topics in Professional Audio

MUSC 4505 - Audio Post Production I

MUSC 4550 - Audio Production III

MUSC 4560 - Mastering & Advanced Digital Audio

MUSC 4575 - Surround Sound

MUSC 4576 - Surround Sound II

MUSC 4580 - Audio Production Seminar I

MUSC 4581 - Audio Production Seminar II

MUSC 4605 - Audio Post Production II

MUSC 4740 - Music Business Analysis

MUSC 4890 - Music Business Senior Seminar

MUSC 5840 - Independent Study: MUSC

MUSC 5939 - Internship

PACN 5010 - Rocky Mountain Program

PACN 5030 - Denver Community Leadership Forum

PBHL 1111 - Freshman Seminar

PBHL 2020 - Introduction to Environmental Health

PBHL 2051 - Introduction To Population Studies

PBHL 3001 - Introduction to Epidemiology

PBHL 3002 - Ethnicity, Health and Social Justice

PBHL 3010 - Human Sexuality and Public Health

PBHL 3021 - Fundamentals of Health Promotion

PBHL 3031 - Health, Human Biology and Behavior

PBHL 3041 - Health, Culture and Society

PBHL 3071 - Global Topics In Sexual and Reproductive Health

PBHL 3200 - Human Migration: Nomads, Sojourners, and Settlers

PBHL 3939 - Internship

PBHL 4020 - Global Health: Comparative Public Health Systems

PBHL 4031 - Ethnographic Research In Public Health

PBHL 4040 - Social Determinants of Health

PBHL 4060 - Evolutionary Medicine

PBHL 4080 - Global Health Practice

PBHL 4090 - Political Economy of Drugs

PBHL 4110 - Public Health Perspectives On Family Violence

PBHL 4200 - The Global HIV/AIDS Epidemic

PBHL 4620 - Health Risk Communication

PBHL 4840 - Independent Study

PBHL 4995 - Travel Study

PBHL 4999 - Topics In The Health and Behavioral Sciences

PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community

PHIL 1111 - Freshman Seminar

PHIL 1700 - Philosophy and the Arts

PHIL 2441 - Logic and Language

PHIL 2510 - Philosophy of Nature

PHIL 2939 - Internship

PHIL 3000 - Ethics in Community Affairs

PHIL 3002 - Ancient Greek Philosophy

PHIL 3005 - Roman and Early Medieval Philosophy

PHIL 3010 - Medieval Philosophy

PHIL 3022 - Modern Philosophy

PHIL 3032 - Twentieth Century Analytic Philosophy

PHIL 3100 - Current Perspectives on the Evolution of Consciousness and Culture

PHIL 3150 - History of Ethics

PHIL 3200 - Social and Political Philosophy

PHIL 3250 - Business Ethics

PHIL 3280 - War and Morality

PHIL 3300 - Special Topics in Philosophy

PHIL 3350 - Metaphysics

PHIL 3360 - Epistemology

PHIL 3420 - Kosmos: Theories of the Universe

PHIL 3440 - Introduction to Symbolic Logic

PHIL 3500 - Ideology and Culture: Racism and Sexism

PHIL 3550 - Philosophy of Death and Dying

PHIL 3656 - Contemporary Religious Ethics: Jewish and Christian Traditions

PHIL 3666 - Asian Philosophies and Religions

PHIL 3840 - Independent Study

PHIL 3939 - Internship

PHIL 3981 - Chinese Philosophy and Culture

PHIL 4000 - 19th Century Philosophy

PHIL 4040 - Skeptic and Believer

PHIL 4101 - Pragmatism: Classical American Philosophy

PHIL 4150 - Twentieth Century Ethics

PHIL 4200 - Philosophical Problems and Contemporary Culture

PHIL 4220 - Aesthetics and the Philosophy of Art

PHIL 4230 - Postmodernism and the Social Sciences

PHIL 4242 - Bioethics

PHIL 4250 - Environmental Ethics

PHIL 4260 - Philosophy of Law

PHIL 4270 - Philosophy of History

PHIL 4300 - Philosophy of Mind

PHIL 4360 - American Legal Process

PHIL 4460 - Theories of Human Nature

PHIL 4470 - Concepts of the Soul

PHIL 4480 - Perspectives on Good and Evil

PHIL 4600 - Philosophy of Religion

PHIL 4650 - Differing Concepts of God

PHIL 4700 - Seminar in a Major Philosopher (topics)

PHIL 4710 - Western Religious Thought

PHIL 4720 - Eastern Religious Thought

PHIL 4730 - Philosophy and Literature

PHIL 4735 - Rationalism

PHIL 4740 - Empiricism

PHIL 4750 - Introduction to Phenomenology

PHIL 4760 - Kant

PHIL 4770 - Hegel

PHIL 4780 - Heidegger

PHIL 4790 - Nietzsche

PHIL 4800 - Plato

PHIL 4810 - Aristotle

PHIL 4812 - Special Topics in Philosophy

PHIL 4820 - Hume

PHIL 4833 - Existentialism

PHIL 4840 - Independent Study: PHIL

PHIL 4900 - John Dewey

PHIL 4920 - Philosophy of Media and Technology

PHIL 4933 - Philosophy of Eros

PHIL 4950 - Honors Thesis

PHIL 4980 - Special Topics in Philosophy

PHIL 5000 - 19th Century Philosophy

PHIL 5013 - Philosophical Problems in the Social Sciences and the Humanities

PHIL 5020 - Elements of Social Thought

PHIL 5040 - Skeptic and Believer

PHIL 5100 - Topics in the History of Philosophy

PHIL 5101 - Pragmatism: Classical American Philosophy

PHIL 5220 - Aesthetics and the Philosophy of Art

PHIL 5242 - Bioethics

PHIL 5250 - Environmental Ethics

PHIL 5260 - Philosophy of Law

PHIL 5300 - Philosophy of Mind

PHIL 5360 - American Legal Process

PHIL 5470 - Concepts of the Soul

PHIL 5550 - Paris 1910: Art, Philosophy and Psychology

PHIL 5600 - Philosophy of Religion

PHIL 5650 - Reflections on Modernity

PHIL 5655 - Differing Concepts of God

PHIL 5720 - Topics in Recent Philosophy

PHIL 5730 - Philosophy and Literature

PHIL 5735 - Rationalism

PHIL 5740 - Empiricism

PHIL 5750 - Introduction to Phenomenology

PHIL 5755 - Philosophical Psychology

PHIL 5770 - Hegel

PHIL 5780 - Heidegger

PHIL 5790 - Nietzsche

PHIL 5800 - Plato

PHIL 5810 - Aristotle

PHIL 5812 - Special Topics in Philosophy

PHIL 5820 - Hume

PHIL 5830 - Kant

PHIL 5833 - Existentialism

PHIL 5840 - Independent Study: PHIL

PHIL 5900 - John Dewey

PHIL 5920 - Philosophy of Media and Technology

PHIL 5933 - Philosophy of Eros

PHYS 1000 - Introduction to Physics

PHYS 1052 - General Astronomy I

PHYS 1100 - Foundations of Physics

PHYS 1111 - Freshman Seminar

PHYS 1115 - Physics Content

PHYS 1332 - Explorations in Physics

PHYS 1840 - Independent Study: PHYS

PHYS 2010 - College Physics I

PHYS 2020 - College Physics II

PHYS 2030 - College Physics Lab I

PHYS 2040 - College Physics Lab II

PHYS 2311 - General Physics I: Calculus-Based

PHYS 2321 - General Physics Lab I

PHYS 2331 - General Physics II: Calculus-Based

PHYS 2341 - General Physics Lab II

PHYS 2711 - Vibrations and Waves

PHYS 2811 - Modern Physics I

PHYS 2821 - Modern Physics II

PHYS 2840 - Independent Study: PHYS

PHYS 2939 - Internship

PHYS 3040 - Modern Cosmology

PHYS 3050 - General Astronomy II

PHYS 3082 - Energy and the Environment

PHYS 3120 - Methods of Mathematical Physics

PHYS 3151 - Biophysics Outlook I

PHYS 3161 - Biophysics Outlook II

PHYS 3211 - Analytical Mechanics

PHYS 3251 - Biophysics of the Body

PHYS 3411 - Thermal Physics

PHYS 3451 - Biophysics of the Cell

PHYS 3620 - Sound and Music

PHYS 3711 - Junior Laboratory I

PHYS 3721 - Junior Laboratory II

PHYS 3811 - Quantum Mechanics

PHYS 3820 - Subatomic Physics

PHYS 3840 - Independent Study: PHYS

PHYS 3939 - Internship

PHYS 4331 - Principles of Electricity and Magnetism

PHYS 4351 - Bioelectromagnetism

PHYS 4400 - Topics in Scientific Instrumentation and Laboratory Methods

PHYS 4401 - Special Topics

PHYS 4402 - Special Topics

PHYS 4403 - Special Topics

PHYS 4510 - Optics

PHYS 4550 - Astrophysics

PHYS 4610 - Computational Physics

PHYS 4620 - Computational Physics II

PHYS 4650 - Solid State Physics

PHYS 4711 - Senior Laboratory I

PHYS 4721 - Senior Laboratory II

PHYS 4788 - Bioinformatics

PHYS 4810 - Atomic and Molecular Structure

PHYS 4840 - Independent Study: PHYS

PHYS 4850 - Physics for Design and Innovation I

PHYS 4852 - Physics for Design and Innovation II

PHYS 4920 - Advanced Undergraduate Seminar

PHYS 4931 - Internship in Applied Physics

PHYS 4939 - Internship

PHYS 4980 - Advanced Physics Topics

PHYS 5101 - RM-MSMSP: Forces and Motion

PHYS 5102 - RM-MSMSP: Light, Color, and Geometrical Optics

PHYS 5103 - Forms and Transfer of Energy

PHYS 5104 - RM-MSMSP Aviation Fundamentals

PHYS 5105 - RM-MSMSP Research Experience for Teachers - Physics Cohort

PHYS 5400 - Topics in Scientific Instrumentation and Laboratory Methods

PHYS 5401 - Special Topics

PHYS 5402 - Special Topics

PHYS 5403 - Special Topics

PHYS 5840 - Independent Study: PHYS

PHYS 5850 - Physics for Design and Innovation I

PHYS 5852 - Physics for Design and Innovation II

PHYS 5939 - Internship

PHYS 5950 - Master's Thesis

PHYS 5960 - Master's Project

PHYS 5980 - Advanced Physics Topics

PHYS 6840 - Independent Study: PHYS

PMUS 1001 - Music Appreciation

PMUS 1020 - Beginning Musicianship

PMUS 1023 - Piano Class

PMUS 1024 - Piano Class II

PMUS 1025 - Piano Class III

PMUS 1026 - Piano Class IV

PMUS 1040 - Class Guitar

PMUS 1041 - Class Guitar II

PMUS 1050 - Voice Class I

PMUS 1060 - Voice Class II

PMUS 1093 - Commercial Guitar Styles and Theory - Harmony

PMUS 1094 - Commercial Guitar Styles and Theory - Melody

PMUS 1100 - Music Theory I

PMUS 1110 - Ear Training and Sight Singing I

PMUS 1200 - Music Theory II

PMUS 1210 - Ear Training and Sight Singing II

PMUS 1310 - Sight Reading and Improvisation

PMUS 1400 - Group Applied Lessons

PMUS 1410 - Percussion I Ensemble

PMUS 1420 - UCD A Cappella Voices Ensemble

PMUS 1430 - Solo Vocal Jazz Ensemble

PMUS 1440 - Acoustic Guitar Ensemble

PMUS 1450 - Music Theatre Ensemble

PMUS 1500 - General Recital

PMUS 1501 - Applied Music Instruction

PMUS 1502 - Applied Electric Bass

PMUS 1503 - Applied Music Instruction

PMUS 1511 - Applied Music Instruction

PMUS 1512 - Applied String Bass

PMUS 1513 - Applied Music Instruction

PMUS 1521 - Applied Music Instruction

PMUS 1522 - Applied Bassoon

PMUS 1523 - Applied Music Instruction

PMUS 1531 - Applied Music Instruction

PMUS 1532 - Applied Clarinet

PMUS 1533 - App Mus: Clarinet

PMUS 1541 - Applied Music Instruction

PMUS 1542 - Applied Bass Clarinet

PMUS 1543 - Applied Music Instruction

PMUS 1551 - Applied Music Instruction

PMUS 1552 - Applied Flute

PMUS 1553 - Applied Music Instruction

PMUS 1562 - Applied French Horn

PMUS 1571 - Applied Music Instruction

PMUS 1572 - Applied Guitar

PMUS 1573 - Applied Music Instruction

PMUS 1581 - Applied Music Instruction

PMUS 1582 - Applied Banjo

PMUS 1583 - Applied Music Instruction

PMUS 1600 - Topics in Performance Music

PMUS 1612 - Applied Drum Kit

PMUS 1621 - Applied Music Instruction

PMUS 1622 - Applied Oboe

PMUS 1623 - Applied Music Instruction

PMUS 1631 - Applied Music Instruction

PMUS 1632 - Applied World Percussion

PMUS 1633 - Applied Music Instruction

PMUS 1641 - Applied Music Instruction

PMUS 1642 - Applied Piano

PMUS 1643 - Applied Music Instruction

PMUS 1651 - Applied Music Instruction

PMUS 1652 - Applied Jazz Piano

PMUS 1653 - Applied Music Instruction

PMUS 1661 - Applied Music Instruction

PMUS 1662 - Applied Saxophone

PMUS 1663 - Applied Music Instruction

PMUS 1671 - Applied Music Instruction

PMUS 1672 - Applied Synthesizer

PMUS 1673 - Applied Music Instruction

PMUS 1681 - Applied Music Instruction

PMUS 1682 - Applied Trombone

PMUS 1683 - Applied Music Instruction

PMUS 1691 - Applied Music Instruction

PMUS 1692 - Applied Trumpet

PMUS 1693 - Applied Music Instruction

PMUS 1700 - Applied Music Instruction

PMUS 1701 - Applied Music Instruction

PMUS 1702 - Applied Violin

PMUS 1703 - Applied Music Instruction

PMUS 1711 - Applied Music Instruction

PMUS 1712 - Applied Viola

PMUS 1713 - Applied Music Instruction

PMUS 1721 - Applied Music Instruction

PMUS 1722 - Applied Cello

PMUS 1723 - Applied Music Instruction

PMUS 1731 - Applied Music Instruction

PMUS 1732 - Applied Voice

PMUS 1733 - Applied Music Instruction

PMUS 1741 - Applied Instruction

PMUS 1742 - Applied Tuba

PMUS 1743 - Applied Music Instruction

PMUS 1762 - Applied Euphonium

PMUS 1801 - MIS Applied Electric Bass

PMUS 1802 - MIS Applied String Bass

PMUS 1803 - MIS Applied Guitar

PMUS 1804 - MIS Applied Percussion

PMUS 1805 - MIS Applied Drum Kit

PMUS 1806 - MIS Applied Piano

PMUS 1807 - MIS Applied Jazz Piano

PMUS 1808 - MIS Applied Voice

PMUS 1809 - MIS Applied Synthesizer

PMUS 1810 - MIS Applied Trumpet

PMUS 1811 - MIS Applied Trombone

PMUS 1812 - MIS Applied Tuba

PMUS 1813 - MIS Applied French Horn

PMUS 1814 - MIS Applied Euphonium

PMUS 1815 - MIS Applied Banjo

PMUS 1816 - MIS Applied Bassoon

PMUS 1817 - MIS Applied Clarinet

PMUS 1818 - MIS Applied Flute

PMUS 1819 - MIS Applied Saxophone

PMUS 1820 - MIS Applied Oboe

PMUS 1821 - MIS Applied Cello

PMUS 1822 - MIS Applied Viola

PMUS 1823 - MIS Applied Violin

PMUS 2094 - Rhythm Section Techniques

PMUS 2100 - Music Theory III

PMUS 2110 - Ear Training and Sight Singing III

PMUS 2120 - Introduction to Arranging and Orchestration

PMUS 2200 - Jazz Theory

PMUS 2410 - Percussion II Ensemble

PMUS 2420 - Electro/Acoustic Ensemble

PMUS 2430 - Pop/Rock Ensemble

PMUS 2440 - Chamber Ensemble

PMUS 2502 - Applied Electric Bass

PMUS 2512 - Applied String Bass

PMUS 2522 - Applied Bassoon

PMUS 2532 - Applied Clarinet

PMUS 2542 - Applied Bass Clarinet

PMUS 2552 - Applied Flute

PMUS 2562 - Applied French Horn

PMUS 2572 - Applied Guitar

PMUS 2582 - Applied Banjo

PMUS 2612 - Applied Drum Kit

PMUS 2622 - Applied Oboe

PMUS 2632 - Applied World Percussion

PMUS 2642 - Applied Piano

PMUS 2652 - Applied Jazz Piano

PMUS 2662 - Applied Saxophone

PMUS 2672 - Applied Synthesizer

PMUS 2682 - Applied Trombone

PMUS 2692 - Applied Trumpet

PMUS 2702 - Applied Violin

PMUS 2712 - Applied Viola

PMUS 2722 - Applied Cello

PMUS 2732 - Applied Voice

PMUS 2742 - Applied Tuba

PMUS 2750 - Functional Guitar Skills: Acoustic Guitar Styles

PMUS 2751 - Functional Guitar Skills: Essential Studio Guitarist

PMUS 2752 - Functional Guitar Skills: World Guitar Styles

PMUS 2753 - Functional Guitar Skills: American Guitar Styles

PMUS 2762 - Applied Euphonium

PMUS 3010 - Commercial Singing I

PMUS 3020 - Commercial Singing II

PMUS 3110 - Social and Political Implications of American Music

PMUS 3210 - Introduction to Teaching Private Music Lessons

PMUS 3300 - Advanced Jazz Improvisation

PMUS 3410 - Percussion III Ensemble

PMUS 3420 - UCD 7 Ensemble

PMUS 3430 - Jazz Combo Ensemble

PMUS 3440 - Voz de la Clave

PMUS 3450 - Singer/Songwriter Ensemble

PMUS 3501 - Applied Instruction

PMUS 3502 - Applied Electric Bass

PMUS 3503 - App Music Instruction

PMUS 3512 - Applied String Bass

PMUS 3513 - App Music Instruction

PMUS 3522 - Applied Bassoon

PMUS 3523 - App Music Instruction

PMUS 3532 - Applied Clarinet

PMUS 3533 - App Music Instruction

PMUS 3542 - Applied Bass Clarinet

PMUS 3543 - App Music Instruction

PMUS 3551 - Applied Flute

PMUS 3552 - Applied Flute

PMUS 3553 - App Music Instruction

PMUS 3562 - Applied French Horn

PMUS 3571 - Applied Guitar

PMUS 3572 - Applied Guitar

PMUS 3573 - App Music Instruction

PMUS 3582 - Applied Banjo

PMUS 3583 - App Music Instruction

PMUS 3612 - Applied Drum Kit

PMUS 3622 - Applied Oboe

PMUS 3623 - App Music Instruction

PMUS 3631 - Applied Percussion

PMUS 3632 - Applied World Percussion

PMUS 3633 - App Music Instruction

PMUS 3641 - Applied Piano

PMUS 3642 - Applied Piano

PMUS 3643 - App Music Instruction

PMUS 3651 - Applied Piano (JAZZ)

PMUS 3652 - Applied Jazz Piano

PMUS 3653 - App Music Instruction

PMUS 3662 - Applied Saxophone

PMUS 3663 - App Music Instruction

PMUS 3671 - Applied Synthesizer

PMUS 3672 - Applied Synthesizer

PMUS 3673 - App Music Instruction

PMUS 3681 - Applied Trombone

PMUS 3682 - Applied Trombone

PMUS 3683 - App Music Instruction

PMUS 3691 - Applied Trumpet

PMUS 3692 - Applied Trumpet

PMUS 3693 - App Music Instruction

PMUS 3701 - Applied Violin

PMUS 3702 - Applied Violin

PMUS 3703 - App Music Instruction

PMUS 3712 - Applied Viola

PMUS 3713 - App Music Instruction

PMUS 3722 - Applied Cello

PMUS 3723 - App Music Instruction

PMUS 3731 - Applied Voice

PMUS 3732 - Applied Voice

PMUS 3733 - App Music Instruction

PMUS 3741 - Applied Tuba

PMUS 3742 - Applied Tuba

PMUS 3743 - App Music Instruction

PMUS 3753 - Applied Music Instruction: Euphonium

PMUS 3762 - Applied Euphonium

PMUS 3820 - Music History Modules

PMUS 3825 - Real History of Rock and Roll

PMUS 3830 - History and Literature of Music I

PMUS 3831 - History and Literature of Music II

PMUS 3840 - Independent Study: PMUS

PMUS 4060 - Music Theory Analysis

PMUS 4200 - Senior Recital

PMUS 4410 - Claim Jumpers Ensemble

PMUS 4420 - Ninth Street Singers Ensemble

PMUS 4430 - Guitar Ensemble

PMUS 4502 - Applied Electric Bass

PMUS 4512 - Applied String Bass

PMUS 4522 - Applied Bassoon

PMUS 4532 - Applied Clarinet

PMUS 4542 - Applied Bass Clarinet

PMUS 4552 - Applied Flute

PMUS 4562 - Applied French Horn

PMUS 4572 - Applied Guitar

PMUS 4582 - Applied Banjo

PMUS 4600 - Topics in Music

PMUS 4612 - Applied Drum Kit

PMUS 4622 - Applied Oboe

PMUS 4632 - Applied World Percussion

PMUS 4642 - Applied Piano

PMUS 4652 - Applied Jazz Piano

PMUS 4662 - Applied Saxophone

PMUS 4672 - Applied Synthesizer

PMUS 4682 - Applied Trombone

PMUS 4692 - Applied Trumpet

PMUS 4702 - Applied Violin

PMUS 4712 - Applied Viola

PMUS 4722 - Applied Cello

PMUS 4732 - Applied Voice

PMUS 4742 - Applied Tuba

PMUS 4762 - Applied Euphonium

PMUS 4840 - Independent Study: PMUS

PMUS 5600 - Topics in Music

PRNU 2939 - Internship

PRNU 3939 - Internship

PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice

PSCI 1101 - American Political System

PSCI 1111 - Freshman Seminar

PSCI 2001 - Topics in Political Science

PSCI 2006 - Global Political Issues

PSCI 2840 - Independent Study

PSCI 2939 - Internship

PSCI 3000 - Topics: Conference Participation

PSCI 3002 - Topics in Political Science

PSCI 3011 - Research Methods

PSCI 3022 - Introduction to Comparative Politics

PSCI 3034 - Race, Gender, Law and Public Policy

PSCI 3035 - Political Movements: Race and Gender

PSCI 3042 - Introduction to International Relations

PSCI 3064 - Power and Empowerment in the United States

PSCI 3214 - Federal Law and American Indians

PSCI 3333 - Utopian Transformations

PSCI 3347 - Film and Politics

PSCI 3840 - Independent Study: PSCI

PSCI 3914 - The Urban Citizen

PSCI 3939 - Internship

PSCI 4002 - Topics in Political Science

PSCI 4009 - Politics of the Budgetary Process

PSCI 4011 - GIS in Political Science

PSCI 4014 - Media and Politics

PSCI 4024 - Legislatures and Legislation

PSCI 4025 - Local Governance and Globalization

PSCI 4034 - Political Parties and Pressure Groups

PSCI 4044 - The Presidency

PSCI 4057 - Religion and Politics

PSCI 4074 - Urban Politics

PSCI 4084 - Local Government and Administration

PSCI 4085 - Comparative Public Policy

PSCI 4094 - Seminar: American Politics

PSCI 4105 - Comparative Politics: Europe

PSCI 4115 - Third World Politics

PSCI 4124 - Denver Politics

PSCI 4126 - Introduction to International Political Economy

PSCI 4144 - Indigenous Political Systems

PSCI 4146 - Indigenous Politics

PSCI 4155 - Political Systems of the Middle East and North Africa

PSCI 4156 - The Arab-Israeli Peace Process

PSCI 4165 - Islamic Politics and Culture

PSCI 4185 - Corruption in the U.S. and Abroad

PSCI 4186 - East Asia in World Affairs

PSCI 4195 - Political Systems of Sub-Saharan Africa

PSCI 4206 - Social Movements, NGOs and Global Politics

PSCI 4207 - Theories of Social and Political Change

PSCI 4215 - Women's Rights, Human Rights: Global Perspectives

PSCI 4216 - International Politics: Human Rights

PSCI 4225 - Democracy and Democratization

PSCI 4226 - The United Nations in World Affairs

PSCI 4235 - Politics and Markets in Latin America

PSCI 4236 - American Foreign Policy

PSCI 4237 - American National Security

PSCI 4248 - Gender, Globalization and Development

PSCI 4266 - International Law

PSCI 4274 - Conflict Resolution and Public Consent Building

PSCI 4276 - Conflicts and Rights in International Law

PSCI 4286 - International Relations: War or Peace?

PSCI 4324 - Politics, Public Policy and Leadership

PSCI 4326 - Advanced International Political Economy: Globalization

PSCI 4330 - U.S. Health Policy

PSCI 4354 - Environmental Politics

PSCI 4365 - Global Ecological Crises

PSCI 4374 - Public Priorities for the 21st Century

PSCI 4407 - Early Political Thought

PSCI 4414 - Organizational Change Agents

PSCI 4417 - Modern Political Thought

PSCI 4427 - Law, Politics and Justice

PSCI 4437 - Coercion and the State

PSCI 4444 - Contemporary Culture and Politics in America

PSCI 4446 - Advanced Indigenous Peoples' Politics

PSCI 4457 - American Political Thought

PSCI 4477 - Constitutional Law I

PSCI 4487 - Constitutional Law II

PSCI 4494 - Judicial Politics

PSCI 4505 - The Post-Soviet World: Origins and Present Condition

PSCI 4545 - Immigration Politics

PSCI 4554 - Chicano and Latino Politics

PSCI 4555 - International Women's Resistance

PSCI 4564 - Gender and Politics

PSCI 4605 - Politics and Governments of South Asia

PSCI 4615 - Politics and Government of China

PSCI 4644 - Ethical Responsibilities of Leaders

PSCI 4645 - Comparative Political Leadership

PSCI 4726 - Russian and Chinese Foreign Policy

PSCI 4736 - The Middle East in World Affairs

PSCI 4757 - Legal Reasoning and Writing

PSCI 4807 - Revolution and Political Violence

PSCI 4827 - Women and the Law

PSCI 4837 - Contemporary Issues in Civil Liberties

PSCI 4840 - Independent Study: PSCI

PSCI 4934 - CU at the Capitol

PSCI 4995 - Travel Study

PSCI 5000 - State of the Discipline

PSCI 5005 - Political Theory After 9/11

PSCI 5007 - Beyond Political Correctness

PSCI 5008 - Graduate Topics in Political Science

PSCI 5009 - Politics of the Budgetary Process

PSCI 5011 - GIS in Political Science

PSCI 5013 - Philosophical Problems in the Social Sciences

PSCI 5014 - Seminar: American Politics

PSCI 5024 - State Politics: Focus on Colorado

PSCI 5025 - Local Governance and Globalization

PSCI 5044 - The Presidency

PSCI 5054 - The Legislative Process

PSCI 5057 - Religion and Politics

PSCI 5084 - Local Government and Administration

PSCI 5085 - Comparative Public Policy

PSCI 5094 - Seminar: Urban Politics

PSCI 5105 - Comparative Politics: Europe

PSCI 5135 - Seminar: Political Economy of Latin America

PSCI 5145 - Indigenous Politics

PSCI 5206 - Social Movements, NGOs and Global Politics

PSCI 5216 - Seminar: International Relations

PSCI 5225 - Democracy and Democratization

PSCI 5236 - Seminar: American Foreign Policy

PSCI 5238 - Seminar: Comparative Foreign Policy

PSCI 5245 - Gender, Globalization and Development

PSCI 5256 - Seminar: National Question and Self-Determination

PSCI 5266 - International Law

PSCI 5274 - Conflict Resolution and Public Consent Building

PSCI 5276 - Conflicts and Rights in International Law

PSCI 5286 - International Relations: War or Peace?

PSCI 5324 - Politics, Public Policy and Leadership

PSCI 5326 - Advanced International Political Economy: Globalization

PSCI 5354 - Seminar: Environmental Politics and Policy

PSCI 5374 - Public Priorities for the 21st Century

PSCI 5414 - Organizational Change Agents

PSCI 5417 - Seminar: Practical Utopias

PSCI 5446 - Advanced Indigenous Peoples' Politics

PSCI 5457 - Seminar: American Political Thought

PSCI 5468 - Research Methods in Political Science

PSCI 5477 - The U.S. Constitution: Law and Politics

PSCI 5545 - Immigration Politics

PSCI 5555 - International Women's Resistance

PSCI 5615 - Seminar: Chinese Development

PSCI 5644 - Ethical Responsibilities of Leaders

PSCI 5726 - Seminar on U.S. and China Relations

PSCI 5747 - Legal Reasoning and Writing

PSCI 5807 - Seminar: Conflict Behavior and the Politics of Violence

PSCI 5827 - Seminar: Political Psychology

PSCI 5837 - Contemporary Issues in Civil Liberties

PSCI 5840 - Independent Study: PSCI

PSCI 5914 - Community Development

PSCI 5939 - Internship

PSCI 5950 - Master's Thesis

PSCI 5960 - Master's Project

PSCI 5995 - Travel Study

PSCI 6840 - Independent Study: PSCI

PSYC 1000 - Introduction to Psychology I

PSYC 1005 - Introduction to Psychology II

PSYC 1111 - Freshman Seminar

PSYC 2050 - Improving Memory

PSYC 2060 - Psychology Applied to Everyday Life

PSYC 2090 - Statistics and Research Methods

PSYC 2220 - Biological Basis of Behavior

PSYC 2939 - Internship

PSYC 2990 - Topics in Psychology

PSYC 3090 - Research Methods in Experimental Psychology

PSYC 3104 - Behavioral Genetics

PSYC 3135 - Organizational Psychology

PSYC 3205 - Human Development I: Child Psychology

PSYC 3215 - Human Development II: Adolescence and Adulthood

PSYC 3222 - Principles of Learning and Behavior

PSYC 3235 - Human Sexuality

PSYC 3254 - Introduction to Animal Behavior

PSYC 3262 - Health Psychology

PSYC 3263 - Hormones and Behavior

PSYC 3265 - Drugs, Brain and Behavior

PSYC 3305 - Abnormal Psychology

PSYC 3405 - Family Psychology

PSYC 3505 - Psychology and the Law

PSYC 3600 - Topics in Psychology

PSYC 3610 - Psychological Trauma

PSYC 3611 - Psychology of Women

PSYC 3612 - Domestic Abuse

PSYC 3724 - Developmental Psychobiology

PSYC 3810 - Neuropsychology

PSYC 3822 - Aging, Brain and Behavior

PSYC 3939 - Internship

PSYC 4054 - Behavioral Neuroscience

PSYC 4101 - Applied Statistics Using SAS and SPSS I

PSYC 4102 - Applied Statistics Using SAS and SPSS II

PSYC 4144 - Human Cognition

PSYC 4164 - Psychology of Perception

PSYC 4415 - Experimental Social Psychology

PSYC 4455 - Theories of Personality

PSYC 4485 - Psychology of Cultural Diversity

PSYC 4500 - Psychotherapy

PSYC 4511 - History of Psychology

PSYC 4645 - Industrial Psychology

PSYC 4730 - Clinical Psychology: Ethics and Issues

PSYC 4803 - Principles of Psychological Testing

PSYC 4840 - Independent Study: PSYC

PSYC 4939 - Internship

PSYC 4990 - Topics in Psychology

PSYC 5803 - Principles of Psychological Testing

PSYC 5840 - Independent Study: PSYC

PSYC 5939 - Internship

PSYC 5990 - Topics in Psychology

PSYC 6200 - Developmental Psychopathology

PSYC 6840 - Independent Study

PSYC 6841 - Independent Study: PSYC

PSYC 6910 - Research Practicum

PSYC 6930 - Clinical Internship

PSYC 6950 - Master's Thesis

PSYC 7144 - Advanced Cognition and Emotion

PSYC 7205 - Advanced Developmental Psychology

PSYC 7220 - Advanced Biological Bases of Behavior

PSYC 7262 - Health Psychology I

PSYC 7350 - Psychotherapy I

PSYC 7360 - Psychotherapy II

PSYC 7400 - Child Assessment

PSYC 7410 - Assessment I

PSYC 7420 - Assessment II

PSYC 7485 - Diversity in Clinical Psychology

PSYC 7490 - Topics in Health Psychology Summer Lecture Series

PSYC 7500 - Advanced Psychopathology

PSYC 7511 - Historical and Philosophical Foundations of Psychology

PSYC 7520 - Experimental Psychopathology

PSYC 7700 - Clinical Research Methods

PSYC 7710 - Multivariate Statistics

PSYC 7713 - Advanced Statistics

PSYC 7730 - Ethical and Professional Issues in Psychology

PSYC 7830 - Clinical Interviewing

PSYC 7910 - Clinical Practicum

PSYC 8100 - Clinical Behavioral Medicine

PSYC 8200 - Teaching Skills Workshop

PSYC 8262 - Health Psychology II

PSYC 8501 - Primary Care Psychology

PSYC 8910 - Clinical Health Practicum

PSYC 8938 - Pre-Doctoral Internship

PSYC 8990 - Doctoral Dissertation

PUAD 1001 - Introduction to Leadership and Public Service

PUAD 5001 - Introduction to Public Administration and Public Service

PUAD 5002 - Organizational Management and Behavior

PUAD 5003 - Research and Analytic Methods

PUAD 5004 - Economics and Public Finance

PUAD 5005 - The Policy Process and Democracy

PUAD 5006 - Leadership and Professional Ethics

PUAD 5110 - Seminar in Nonprofit Management

PUAD 5115 - Effective Grant Writing for Nonprofit and Public Sector Managers

PUAD 5120 - Nonprofits and Public Policy

PUAD 5125 - Civil Society and Nongovernmental Organizations

PUAD 5130 - Collaboration Across Sectors

PUAD 5140 - Nonprofit Financial Management

PUAD 5150 - Understanding and Achieving Funding Diversity

PUAD 5160 - Nonprofit Boards and Executive Leadership

PUAD 5170 - Strategic Management for Nonprofit and Public Managers

PUAD 5180 - Social Entrepreneurship

PUAD 5220 - Human Resource Management In Public Service Organizations

PUAD 5250 - Intergovernmental Management

PUAD 5260 - Managing in a Multicultural Society

PUAD 5271 - Managing Conflict and Change

PUAD 5280 - American Public Service Environment

PUAD 5310 - Policy Formulation & Implementation

PUAD 5320 - Public Policy Analysis

PUAD 5330 - Intermediate Statistical Analysis

PUAD 5350 - Program Evaluation

PUAD 5361 - Capstone Seminar

PUAD 5370 - Media and Public Policy

PUAD 5380 - Citizen Participation: Theory and Practice

PUAD 5410 - Administrative Law

PUAD 5420 - Law and Public Policy

PUAD 5430 - Seminar in Legal Research Methods and Public Law Scholarship

PUAD 5440 - Negotiation and Conflict Resolution

PUAD 5450 - Law of All-Hazards Management

PUAD 5460 - Political Advocacy

PUAD 5501 - Contemporary Issues in Revenue and Tax Administration and Policy

PUAD 5502 - Public Financial Management and Policy

PUAD 5503 - Governmental Budgeting

PUAD 5540 - Organization Development

PUAD 5615 - Health Policy

PUAD 5617 - Health Economics

PUAD 5618 - Cost-Benefit Analysis

PUAD 5625 - Local Government Management

PUAD 5626 - Local Government Politics and Policy

PUAD 5628 - Urban Social Problems

PUAD 5631 - Seminar in Environmental Politics and Policy

PUAD 5632 - Seminar in Environmental Management

PUAD 5633 - Seminar in Natural Resource and Environmental Health Law

PUAD 5634 - Theories of Sustainable Infrastructure Management

PUAD 5650 - Disaster and Emergency Management Policies

PUAD 5710 - Public Sector Technology

PUAD 5910 - Women and Violence: A Sociological Perspective

PUAD 5920 - Psychology of Violence Against Women

PUAD 5930 - Battered Women and the Legal System

PUAD 5940 - Domestic Violence Social Change and Advocacy

PUAD 5950 - Interpersonal Violence and Health

PUAD 5960 - Interpersonal Violence and Health

PUAD 5961 - Interpersonal Violence, Health Advocacy and Systems Change

PUAD 6600 - Special Topics: Public Administration

PUAD 6840 - Independent Study: PUAD

PUAD 6910 - Field Study in Public Administration

PUAD 6950 - Master's Thesis

PUAD 7007 - Qualitative Research Methods

PUAD 7110 - Seminar in Nonprofit Management

PUAD 7115 - Effective Grant Writing for Nonprofit and Public Sector Managers

PUAD 7120 - Nonprofits and Public Policy

PUAD 7125 - Civil Society and Nongovernmental Organizations

PUAD 7130 - Collaboration Across Sectors

PUAD 7140 - Nonprofit Financial Management

PUAD 7150 - Understanding and Achieving Funding Diversity

PUAD 7160 - Nonprofit Boards and Executive Leadership

PUAD 7170 - Strategic Management for Nonprofit and Public Managers

PUAD 7180 - Social Entrepreneurship

PUAD 7220 - Managing People in Public and Nonprofit Organizations

PUAD 7250 - Intergovernmental Management

PUAD 7260 - Managing in a Multicultural Society

PUAD 7271 - Managing Conflict and Change

PUAD 7310 - Policy Formulation & Implementation

PUAD 7320 - Public Policy Analysis

PUAD 7350 - Program Evaluation

PUAD 7361 - Advanced Seminar in Public Policy and Management

PUAD 7370 - Media and Public Policy

PUAD 7380 - Citizen Participation: Theory and Practice

PUAD 7410 - Administrative Law

PUAD 7420 - Law and Public Policy

PUAD 7430 - Seminar in Legal Research Methods and Public Law Scholarship

PUAD 7440 - Negotiation and Conflict Resolution

PUAD 7450 - Law of All-Hazards Management

PUAD 7460 - Political Advocacy

PUAD 7501 - Contemporary Issues in Revenue and Tax Administration and Policy

PUAD 7502 - Public Financial Management and Policy

PUAD 7503 - Governmental Budgeting

PUAD 7540 - Organization Development

PUAD 7600 - Special Topics: Public Administration

PUAD 7615 - Health Policy

PUAD 7617 - Health Economics

PUAD 7618 - Cost-Benefit Analysis

PUAD 7625 - Local Government Management

PUAD 7626 - Local Government Politics and Policy

PUAD 7628 - Urban Social Problems

PUAD 7631 - Seminar in Environmental Politics and Policy

PUAD 7632 - Seminar in Environmental Management

PUAD 7633 - Seminar in Natural Resource and Environmental Health Law

PUAD 7634 - Theories of Sustainable Infrastructure Management

PUAD 7650 - Disaster and Emergency Management Policies

PUAD 7710 - Public Sector Technology

PUAD 7910 - Women and Violence: A Sociological Perspective

PUAD 7920 - Psychology of Violence Against Women

PUAD 7930 - Battered Women and the Legal System

PUAD 7940 - Domestic Violence Social Change and Advocacy

PUAD 8010 - Historical and Comparative Foundations of Public Administration

PUAD 8020 - Seminar in Public Management

PUAD 8030 - Seminar in Public Policy

PUAD 8040 - Seminar In Economic and Institutional Foundations of Public Affairs

PUAD 8050 - Quantitative Methods I

PUAD 8060 - Seminar On The Conduct Of Empirical Inquiry

PUAD 8070 - Quantitative Methods II

PUAD 8840 - Independent Study: PUAD

PUAD 8990 - Doctoral Dissertation

RLST 1610 - Introduction to Religious Studies

RLST 2660 - World Religions

RLST 2680 - The American Indian Experience

RLST 2700 - The Bible as Literature

RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference

RLST 3060 - History of Early Christianity

RLST 3080 - Reformation Europe

RLST 3100 - Islamic Politics and Culture

RLST 3300 - Shamanic Traditions

RLST 3400 - Asian Philosophies and Religions

RLST 3500 - Religions of India

RLST 3660 - Chinese Philosophy and Culture

RLST 3720 - Religious Narratives

RLST 3740 - Biblical Traditions: Old Testament

RLST 3760 - Biblical Studies: New Testament

RLST 3770 - Archaeological Discoveries Relating to the Bible

RLST 4000 - Religion and Cultural Diversity

RLST 4010 - Comparative Religious Systems

RLST 4020 - Sociology of Religion

RLST 4040 - Psychology of Religion

RLST 4060 - Philosophy of Religion

RLST 4070 - Western Religious Thought

RLST 4080 - Eastern Religious Thought

RLST 4100 - Special Topics in Religion

RLST 4160 - Mysticism

RLST 4260 - Kosmos: Theories of the Universe

RLST 4280 - Current Perspectives on the Evolution of Consciousness and Culture

RLST 4300 - Myth and Symbol

RLST 4320 - Spirituality in the Modern World

RLST 4340 - The Hero's Journey

RLST 4360 - Freudian and Jungian Perspectives in Dream Analysis

RLST 4400 - Differing Concepts of God

RLST 4420 - Goddess Traditions

RLST 4440 - Concepts of the Soul

RLST 4460 - Death and Concepts of Afterlife

RLST 4480 - Perspectives on Good and Evil

RLST 4500 - Religion and Politics

RLST 4710 - Women and Religion

RLST 4730 - Whores and Saints: Medieval Women

RLST 4840 - Independent Study: RLST

RLST 5010 - Comparative Religious Systems

RLST 5020 - Sociology of Religion

RLST 5040 - Psychology of Religion

RLST 5060 - Philosophy of Religion

RLST 5160 - Mysticism

RLST 5300 - Myth and Symbol

RLST 5400 - Differing Concepts of God

RLST 5420 - Goddess Traditions

RLST 5440 - Concepts of the Soul

RLST 5460 - Death and Concepts of Afterlife

RLST 5500 - Religion and Politics

RLST 5710 - Women and Religion

RLST 5730 - Whores and Saints: Medieval Women

RSEM 5000 - Orientation to Research and Measurement in Education

RSEM 5050 - Assessment for Teachers

RSEM 5080 - Research for Teachers

RSEM 5100 - Basic Statistics

RSEM 5200 - Introduction to Research Methods

RSEM 5300 - Introduction to Measurement

RSEM 5350 - Workshop in Instrument Development

RSEM 5400 - Introduction to Evaluation of Programs and Persons

RSEM 5800 - Workshop: Topics in Research and Evaluation Methodology

RSEM 5840 - Independent Study: RSEM

RSEM 5910 - Practicum in Research and Evaluation Methodology

RSEM 5920 - Readings in Educational Statistics

RSEM 5921 - Readings in Educational Research

RSEM 5923 - Readings in Educational Measurement

RSEM 5924 - Readings in Program Evaluation

RSEM 6050 - Seminar in Assessment Policy Issues

RSEM 6100 - Methods of Qualitative Inquiry

RSEM 7050 - Methods of Survey Research

RSEM 7100 - Advanced Methods of Qualitative Inquiry

RSEM 7110 - Intermediate Statistics

RSEM 7120 - Advanced Methods in Quantitative Inquiry and Measurement

RSEM 7150 - Mixed Methods Research

RSEM 7240 - Patterned Inquiry for Educational Administrators

RSEM 7500 - Special Topics: Research and Evaluation Methods

SCHL 5020 - Collection Development

SCHL 5030 - Information Literacy and Reference

SCHL 5040 - Information Storage and Utilization

SCHL 5110 - Integrating Instructional Technology Practices in School Libraries

SCHL 5160 - Managing School Library Programs

SCHL 5530 - Foundations of School Librarianship

SCHL 5830 - School Library Workshop

SCHL 5911 - School Library Field Experience-Elementary

SCHL 5912 - School Library Field Experience-Secondary

SCHL 6720 - Practitioner-Based Research in School Libraries

SCHL 6999 - Leadership and Practice in School Libraries

SECE 5060 - Improvement of Instruction

SECE 5200 - Classroom Management

SECE 5300 - Introductory Curriculum and Methods in Secondary Mathematics

SECE 5340 - Multicultural Science Education

SECE 5350 - Issues and Problems in Science Education

SECE 5400 - Curriculum in Secondary Mathematics

SECE 5401 - Assessment in Mathematics Education

SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics

SECE 5411 - Mathematics Education and Gender

SECE 5417 - Structure of Rational Numbers

SECE 5418 - Mathematical Modeling

SECE 5419 - Exploring the Structure of Geometry Using Technology

SECE 5420 - Teaching Mathematics to Low Achievers

SECE 5430 - Teaching Aids in Mathematics Education

SECE 5440 - Topics in Mathematics Education

SECE 5460 - Secondary Social Studies Methods and Curriculum Design

SECE 5464 - Teaching About Ethnicity, Race and Prejudice

SECE 5465 - Teaching Critical Issues in Social Studies: An Interdisciplinary Approach

SECE 5480 - Museum Studies in Paleontology

SECE 5490 - Middle School Curriculum

SECE 5500 - The Nature of Science

SECE 5510 - Teacher Leadership: Theory to Reality

SECE 5520 - Teacher Leadership: Essential Knowledge

SECE 5530 - Teacher Leadership: Vital Skills

SECE 5540 - Foundations of School Health Education

SECE 5550 - Curriculum Materials in Health Education

SECE 5560 - Health Education Teaching Practices

SECE 5650 - Environmental Education

SECE 5660 - Energy Education

SECE 5780 - Storytelling

SECE 5800 - Curriculum Workshop for Secondary Teachers

SECE 5840 - Independent Study: SECE

SECE 5910 - Advanced Practicum in Teaching

SECE 5920 - Readings in Secondary Education

SECE 5930 - Internship in Secondary Education

SECE 5950 - Master's Thesis

SECE 6100 - Seminar in Secondary Education

SECE 6110 - Curriculum in Urban Studies

SECE 6120 - International Perspectives on the Curriculum

SECE 6840 - Independent Study: SECE

SECE 6910 - Geology Field Study in Hawaii for Teachers

SECE 6950 - Master's Thesis

SJUS 2000 - Democratic Participation and Social Justice

SJUS 2010 - Social Justice: Theories, Narratives, and Technologies

SJUS 3939 - Internship

SJUS 4000 - Social Justice Capstone

SJUS 4840 - Independent Study

SOCY 1001 - Introduction to Sociology

SOCY 1050 - Analysis of Modern Society

SOCY 1111 - Freshman Seminar

SOCY 2462 - Introduction to Social Psychology

SOCY 3001 - Urban Sociology

SOCY 3010 - Sociology of Human Sexuality

SOCY 3020 - Race and Ethnicity in the U.S.

SOCY 3030 - Social Change

SOCY 3040 - Drugs, Alcohol & Society

SOCY 3050 - Sociology of Education

SOCY 3080 - Sex and Gender

SOCY 3111 - Research Methods

SOCY 3121 - Statistics

SOCY 3297 - Social History of Asian Americans

SOCY 3300 - Advanced Social Problems

SOCY 3460 - The Social Psychology of Intergroup Relations

SOCY 3490 - Criminology

SOCY 3500 - Topics in Sociology

SOCY 3510 - Topics in Sociology

SOCY 3520 - Topics in Sociology

SOCY 3530 - Topics in Sociology

SOCY 3540 - Topics in Sociology

SOCY 3550 - Topics in Sociology

SOCY 3560 - Death and Dying

SOCY 3600 - Social Relations

SOCY 3650 - Sociology of Music

SOCY 3700 - Sociology of the Family

SOCY 3710 - Sociology of Global Issues

SOCY 3840 - Independent Study: SOCY

SOCY 3939 - Internship

SOCY 4040 - Social Determinants of Health

SOCY 4101 - Applied Statistics Using SAS and SPSS I

SOCY 4102 - Applied Statistics Using SAS and SPSS II

SOCY 4110 - Sociology of Health Care

SOCY 4120 - Popular Culture and the American Family

SOCY 4150 - History of Sociological Theory

SOCY 4160 - Contemporary Sociological Theory

SOCY 4220 - Population Change and Analysis

SOCY 4280 - Urban Social Space

SOCY 4290 - Aging, Society and Social Policy

SOCY 4340 - Juvenile Delinquency

SOCY 4440 - Social Inequality

SOCY 4460 - Hate Groups and Group Violence

SOCY 4475 - Self and Identity

SOCY 4510 - Advanced Study of Social Change

SOCY 4520 - Collective Behavior

SOCY 4610 - Sociology of Religion

SOCY 4640 - Sociology of Childhood and Adolescence

SOCY 4650 - Sociology of Adulthood and Aging

SOCY 4700 - Sociology of Law

SOCY 4770 - Advanced Topics in Sociology

SOCY 4771 - Advanced Topics in Sociology

SOCY 4772 - Advanced Topics in Sociology

SOCY 4773 - Advanced Topics in Sociology

SOCY 4774 - Advanced Topics in Sociology

SOCY 4780 - Violence in Relationships

SOCY 4831 - Senior Seminar

SOCY 4840 - Independent Study: SOCY

SOCY 4910 - Research Practicum

SOCY 5000 - Professional Seminar: Sociological Inquiry

SOCY 5014 - Classical Sociological Theory

SOCY 5015 - Contemporary Sociological Theory

SOCY 5024 - Seminar: Research Methods I

SOCY 5040 - Social Determinants of Health

SOCY 5110 - Sociology of Health Care

SOCY 5120 - Popular Culture and the American Family

SOCY 5183 - Seminar: Quantitative Data Analysis

SOCY 5220 - Population Change and Analysis

SOCY 5430 - Societies in Transition

SOCY 5440 - Social Inequality

SOCY 5475 - Self and Identity

SOCY 5480 - Graduate Special Topics

SOCY 5500 - Graduate Special Topics

SOCY 5550 - Seminar: Sociology of the Family

SOCY 5610 - Sociology of Religion

SOCY 5640 - Sociology of Childhood and Adolescence

SOCY 5650 - Sociology of Adulthood and Aging

SOCY 5660 - Seminar: Social Psychology

SOCY 5680 - Hate Groups and Group Violence

SOCY 5750 - Seminar: Criminology

SOCY 5770 - Advanced Topics in Sociology

SOCY 5771 - Advanced Topics in Sociology

SOCY 5772 - Advanced Topics in Sociology

SOCY 5773 - Advanced Topics in Sociology

SOCY 5774 - Advanced Topics in Sociology

SOCY 5780 - Violence in Relationships

SOCY 5840 - Independent Study: SOCY

SOCY 5910 - Research Practicum

SOCY 5920 - Guided Readings in Sociology

SOCY 5930 - Internship in Sociology

SOCY 5939 - Internship

SOCY 5955 - Master's Thesis

SOCY 5964 - Master's Report

SPAN 1000 - Introduction to Cultures of the Spanish Speaking World

SPAN 1010 - Beginning Spanish I

SPAN 1011 - Intensive Spanish

SPAN 1020 - Beginning Spanish II

SPAN 1021 - Intensive Spanish

SPAN 1111 - Freshman Seminar

SPAN 1995 - Travel Study

SPAN 2110 - Second Year Spanish I

SPAN 2120 - Second Year Spanish II

SPAN 2130 - Current Topics in the Spanish-Speaking World

SPAN 2939 - Internship

SPAN 2995 - Travel Study

SPAN 3010 - Advanced Conversation and Composition I

SPAN 3020 - Advanced Conversation and Composition II

SPAN 3060 - Hispanic Phonetics: Theory and Practice

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact

SPAN 3073 - Bilingual Communities: Spanish in a Global Setting

SPAN 3082 - Introduction to Translation I

SPAN 3092 - Introduction to Translation II

SPAN 3100 - Culture and Civilization of Spain

SPAN 3212 - Spanish American Culture and Civilization

SPAN 3213 - Contemporary Latin American Culture and Institutions

SPAN 3221 - Culture and Civilization of Spain I

SPAN 3222 - Culture and Civilization of Spain II

SPAN 3223 - Contemporary Spanish Culture and Institutions

SPAN 3225 - Special Topics In Hispanic Culture

SPAN 3230 - Ibero-American Cultures through Film

SPAN 3252 - Introduction to the Study of Literature

SPAN 3300 - Twentieth Century Spanish Literature

SPAN 3310 - Spanish Writing and Grammar I

SPAN 3400 - Survey of Spanish Literature I

SPAN 3410 - Survey of Spanish Literature II

SPAN 3510 - Survey of Spanish American Literature II

SPAN 3550 - Spanish American Short Story

SPAN 3700 - Spanish for International Business I

SPAN 3710 - Spanish for International Business II

SPAN 3730 - Special Topics in Spanish for International Business

SPAN 3830 - Topics in Spanish Literature

SPAN 3840 - Independent Study: SPAN

SPAN 3841 - Independent Study: SPAN

SPAN 3939 - Internship

SPAN 3970 - Topics in Spanish Literature

SPAN 3995 - Travel Study

SPAN 4010 - History of the Spanish Language

SPAN 4020 - Spanish Sociolinguistics

SPAN 4060 - Dialects of the Spanish-Speaking World

SPAN 4070 - Spanish Applied Linguistics & Second Language Acquisition

SPAN 4076 - Spanish In Colorado

SPAN 4080 - Spanish in the United States

SPAN 4110 - Contemporary Spanish Literature

SPAN 4130 - Medieval Spanish Literature

SPAN 4150 - Masterpieces of Spanish Literature

SPAN 4160 - Masterpieces of Spanish-American Literature

SPAN 4220 - Mexican Literature I: pre-Columbian and Colonial

SPAN 4221 - Mexican Literature II: 19th to 21st Centuries

SPAN 4225 - Orientalisms In The Hispanic Tradition

SPAN 4230 - Modern Culture of Spain through Film and Narrative

SPAN 4300 - Generation of 1898

SPAN 4310 - Seminar in Spanish Creative Writing: Poetry and Short Fiction

SPAN 4400 - Romanticism in Spain

SPAN 4410 - Modernism

SPAN 4500 - Nineteenth-Century Spanish Novel

SPAN 4510 - Contemporary Spanish-American Novel

SPAN 4520 - Golden Age Drama

SPAN 4540 - Race, Class, and Gender in Spanish Golden Age Literature

SPAN 4620 - Don Quijote

SPAN 4640 - Borges: An Introduction to His Labyrinths

SPAN 4650 - GARCIA MARQUEZ: Words of Magic

SPAN 4840 - Independent Study: SPAN

SPAN 4970 - Special Topics in Literature

SPAN 4980 - Special Topics in Linguistics

SPAN 5000 - Introduction to Graduate Studies in Spanish

SPAN 5010 - History of the Spanish Language

SPAN 5020 - Spanish Sociolinguistics

SPAN 5060 - Dialects of the Spanish-Speaking World

SPAN 5070 - Spanish Applied Linguistics & Second Language Acquisition

SPAN 5076 - Spanish In Colorado

SPAN 5080 - Spanish in the United States

SPAN 5110 - Contemporary Spanish Literature

SPAN 5130 - Medieval Spanish Literature

SPAN 5150 - Masterpieces of Spanish Literature

SPAN 5160 - Masterpieces of Spanish-American Literature

SPAN 5220 - Mexican Literature I: pre-Columbian and Colonial

SPAN 5221 - Mexican Literature II: 19th to 21st Centuries

SPAN 5225 - Orientalisms In The Hispanic Traditions

SPAN 5230 - Modern Culture of Spain through Film and Narrative

SPAN 5300 - Generation of 1898

SPAN 5310 - Seminar in Spanish Creative Writing: Poetry and Short Fiction

SPAN 5400 - Romanticism in Spain

SPAN 5410 - Modernism

SPAN 5500 - Nineteenth-Century Spanish Novel

SPAN 5510 - Contemporary Spanish-American Novel

SPAN 5520 - Golden Age Drama

SPAN 5540 - Race, Class, and Gender in Spanish Golden Age Literature

SPAN 5620 - Don Quijote

SPAN 5640 - Borges: An Introduction to His Labyrinths

SPAN 5650 - GARCIA MARQUEZ: Words of Magic

SPAN 5840 - Independent Study: SPAN

SPAN 5939 - Internship

SPAN 5950 - Master's Thesis

SPAN 5970 - Special Topics in Literature

SPAN 5980 - Special Topics in Linguistics

SPED 4030 - Data Decisions - Div Lrnrs

SPED 4150 - Individualizing Instruction for Learners with Challenging Behaviors

SPED 4200 - Autism Spectrum Disorders

SPED 4710 - Significant Health Support Needs Academy

SPED 4720 - Significant Supports for Challenging Behavior Academy

SPED 4730 - Significant Communication Support Needs Academy

SPED 4740 - Life Skills Academy

SPED 4750 - Orientation to Special Education

SPED 4800 - Orientation to Early Intervention Services

SPED 4805 - Fundamentals of the IFSP Process

SPED 4810 - Early Intervention Teamwork

SPED 4815 - Working with Families

SPED 4820 - Instructional Strategies for Early Intervention

SPED 4825 - Promoting Social Emotional Development

SPED 4830 - Health Support Needs in Early Intervention

SPED 4835 - Language and Literacy for Early Intervention

SPED 4840 - Communication Support Needs Early Intervention

SPED 4845 - Individualized Intervention Infants/Toddlers

SPED 4850 - Transition to Age 3

SPED 4855 - Interpersonal Skills for DI Assistants

SPED 4860 - Personal Growth Development for DI Assistants

SPED 4865 - Instructional & Assistive Technology in EI

SPED 4870 - Autism Spectrum Disorder in Early Intervention

SPED 4910 - Special Education Generalist Internship and Site Seminar I

SPED 4919 - CO-TOP Practicum

SPED 5010 - Instructional Strategies for Students with Special Needs

SPED 5030 - Data Decisions - Div Lrnrs

SPED 5130 - Speech/Language Characteristics of Students with Severe Communication Needs

SPED 5140 - Advanced Assessment in Special Education

SPED 5151 - Culturally Responsive Supports for Social and Emotional Development

SPED 5160 - Medical/Physical Challenges of Students with Special Needs

SPED 5170 - Individualizing Instruction for Diverse Learners

SPED 5180 - Curriculum Planning for Students with Special Needs

SPED 5250 - Effective Practices for Young Children with Autism Spectrum Disorders

SPED 5260 - Effective Practices for Elementary Children with Autism Spectrum Disorders

SPED 5270 - Effective Practices for Teenagers/Young Adults with Autism Spectrum Disorder

SPED 5300 - Collaborating in Schools and Communities

SPED 5310 - Collaboration with Families

SPED 5400 - Seminar in Special Education

SPED 5450 - Introduction to ABA and Terminology

SPED 5460 - ABA Practical Applications

SPED 5470 - ABA Data

SPED 5480 - ABA Advanced Data and Behavioral Plans and Applications

SPED 5490 - Autism In Early Intervention

SPED 5500 - Transition and Secondary Issues in Special Education

SPED 5530 - Language of Diverse Learners with and without Special Needs

SPED 5600 - Special Education for School Professionals

SPED 5740 - Linguistically Responsive Special Education

SPED 5780 - Literacy Intervention for Students with Disabilities

SPED 5800 - Workshop: Topics in Special Education

SPED 5840 - Independent Study: SPED

SPED 5930 - Special Education Generalist Internship and Site Seminar I

SPED 5931 - Special Education Generalist Internship and Site Seminar I

SPED 5932 - Special Education Generalist Internship and Site Seminar II

SPED 5933 - Special Education Generalist Internship and Site Seminar III

SPED 6100 - Communication Development for Students with Severe to Profound Needs

SPED 6300 - Teaching Methods for Students with Severe Communication Needs

SPED 6950 - Master's Thesis

SPSY 5600 - Behavior Analysis and Intervention

SPSY 5800 - Workshop: Topics in School Psychology

SPSY 5840 - Independent Study: SPSY

SPSY 5900 - School-Based Multicultural Interventions

SPSY 6000 - BrainSTARS: TBI-Strategies for Teams and Re-Educ

SPSY 6020 - Consultation and Leadership in TBI

SPSY 6040 - Applied Research in TBI for School Psychologists

SPSY 6100 - School Psychology: Professional and Legal Foundations

SPSY 6150 - Psychoeducational Assessment I

SPSY 6160 - Psychoeducational Assessment II

SPSY 6170 - Assessment and Intervention: Birth to 3

SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health

SPSY 6350 - School-Based Interventions: Children, Youth and Families

SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems

SPSY 6410 - Psychoeducational Assessment of Culturally and Linguistically Diverse Students

SPSY 6420 - Crisis Prevention, Planning and Intervention

SPSY 6450 - School-Based Consultation for Mental Health Professionals

SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents

SPSY 6550 - Academic Interventions in School Psychology

SPSY 6911 - School Psychology Practicum

SPSY 6915 - Practicum with Culturally and Linguistically Diverse Students

SPSY 6917 - Advanced Practicum in Psychological Assessment

SPSY 6930 - School Psychology Internship

SPSY 6935 - Practicum in Evidence-Based Interventions: TBI

SSCI 4710 - Women and Religion

SSCI 5000 - 19th Century Philosophy

SSCI 5013 - Philosophical Problems in the Social Sciences and Humanities

SSCI 5020 - Elements of Social Thought

SSCI 5023 - Research Perspectives in Social Science

SSCI 5050 - Topics in Social Science

SSCI 5101 - Pragmatism: Classical American Philosophy

SSCI 5242 - Bioethics

SSCI 5250 - Environmental Ethics

SSCI 5400 - Women and Violence

SSCI 5520 - The City Beautiful: Art, Architecture and Theory in Urban History

SSCI 5530 - Social Construction of the Self

SSCI 5550 - Paris 1910: Art, Philosophy and Psychology

SSCI 5600 - Philosophy of Religion

SSCI 5650 - Reflections on Modernity

SSCI 5710 - Women and Religion

SSCI 5720 - Sexuality, Gender and Their Visual Representation

SSCI 5750 - Philosophical Psychology

SSCI 5830 - Grant Writing for Nonprofits

SSCI 5833 - Existentialism

SSCI 5840 - Independent Study: SSCI

SSCI 5920 - Philosophy of Media and Technology

SSCI 5933 - Philosophy of Eros

SSCI 5939 - Internship

SSCI 6010 - Methods and Theories of Feminism and Gender Studies

SSCI 6950 - Master's Thesis

SSCI 6960 - Master's Project or Report

SUST 3010 - The Non-Sustainable Past

SUST 3011 - Toward a Sustainable Future

SUST 3939 - Internship

SUST 4960 - Capstone in Sustainability

TCED 1111 - Freshman Seminar

TCED 2400 - Issues in Chicano/a Education

TCED 4800 - Workshop: Teacher Education

TCED 5000 - Special Topics: Teacher Education

TFVP 1050 - Video Production/Post-Production I

TFVP 1100 - Introduction to Theatre, Film, and Television

TFVP 1110 - Production Design: Theatre, Film and Video

TFVP 1550 - Scriptwriting I

TFVP 1611 - Acting Lab I

TFVP 2090 - Production Management Techniques

TFVP 2100 - Visual Culture

TFVP 2800 - Elements of Directing

TFVP 2810 - Introduction to Production Process

TFVP 3222 - Theatre, Film & Video Business

TFVP 3550 - Directing Process

TFVP 3620 - Acting Styles

TFVP 3730 - Scenery Design

TFVP 3740 - Costume Design

TFVP 3820 - Production Process

TFVP 3860 - Applications Seminar

TFVP 3910 - BA Junior Project

TFVP 3939 - Internship

TFVP 4090 - Senior Seminar & Project

TFVP 4095 - Senior Thesis Project

TFVP 4560 - Directors at Work

TFVP 4570 - Directing Practicum

TFVP 4910 - BA Senior Project

THTR 1001 - Introduction to Theatre

THTR 2450 - Introduction to Performing Arts and Events Management

THTR 2510 - Introduction to Oral Interpretation

THTR 2530 - Acting: Character and Staging

THTR 2531 - Acting for Non-Theatre Majors

THTR 2560 - Topics in Theatre

THTR 2600 - Studio I: Dynamics of Content Creation

THTR 2700 - Art for the Theatre

THTR 2710 - Theatrical Design, Aesthetics, Production I

THTR 2820 - Departmental Production

THTR 2821 - Multi-Arts Performance

THTR 2822 - Affiliated Theatre Production

THTR 2823 - Theatre Buffs Production

THTR 2824 - Theatre Practice: Management

THTR 2840 - Independent Study: THTR

THTR 3010 - Stage and Production Management

THTR 3530 - Acting: Character and Text

THTR 3531 - Theatre of Social Responsibility

THTR 3560 - Topics in Theatre

THTR 3561 - Topics in Theatre: Honors in Humanities Cluster

THTR 3580 - Theatre for Children

THTR 3610 - Performance: Theory/History/Criticism I

THTR 3611 - Drama of Diversity

THTR 3720 - Lighting Design

THTR 3760 - Sound Design for the Theater

THTR 3840 - Independent Study: THTR

THTR 3995 - Travel Study Topics

THTR 4530 - Acting: Character and Media

THTR 4550 - Playwriting: The Short Form

THTR 4560 - Topics in Theater

THTR 4570 - Creative Drama

THTR 4580 - Theatre for Children

THTR 4610 - Performance: Theory/History/Criticism II

THTR 4611 - American Theatre History

THTR 4730 - Advanced Scenic Design

THTR 4760 - Topics in Design

THTR 4820 - Theatre Practice

THTR 4840 - Independent Study: THTR

THTR 5530 - Acting: Character and Media

THTR 5550 - Playwriting: The Short Form

THTR 5560 - Topics in Theatre

THTR 5570 - Creative Drama

THTR 5580 - Theatre for Children

THTR 5611 - American Theatre History

THTR 5840 - Independent Study: THTR

THTR 5939 - Internship

THTR 5995 - Travel Study

THTR 6840 - Independent Study: THTR

THTR 6950 - Master's Thesis

UEDU 4000 - Elementary Literacy Instruction and Assessment

UEDU 4001 - Social Studies through Childrens' Literature & Writing

UEDU 4002 - Math Instr & Assmt

UEDU 4003 - Teaching Elementary Mathematics

UEDU 4004 - Elementary Science Methods

UEDU 4010 - Social Foundations and Cultural Diversity in Urban Education

UEDU 4020 - Co-developing Culturally Responsive Classroom Communities

UEDU 4040 - Exploring Diversity in Content and Pedagogy I

UEDU 4050 - Exploring Diversity in Content and Pedagogy II

UEDU 4100 - Secondary Literacy Instruction and Assessment

UEDU 4110 - Tchg Literacy in Eng Ed

UEDU 4200 - Theory and Methods of Teaching Secondary English

UEDU 4201 - Adolescent Literature

UEDU 4300 - Curriculum and Methods in Secondary Math

UEDU 4301 - Assessment In Math Education

UEDU 4400 - Theory and Pedagogy of Science Instruction

UEDU 4401 - Inquiry Science Pedagogy and Practices

UEDU 4930 - Early Internship & Seminar

UEDU 4931 - Internship & Lrng Comm I

UEDU 4932 - Internship & Lrng Comm II

UEDU 4933 - Internship & Lrng Comm III

UEDU 5000 - Elementary Literacy Instruction and Assessment

UEDU 5001 - Social Studies through Childrens' Literature & Writing

UEDU 5002 - Math Instr & Assmt

UEDU 5003 - Teaching Elementary Mathematics

UEDU 5004 - Elementary Science Methods

UEDU 5010 - Scl Fndts, Cltrl Dvrsty Urb Ed

UEDU 5015 - TFA Professional Learning Communities

UEDU 5020 - Co-developing Culturally Responsive Classroom Communities

UEDU 5040 - Exploring Diversity in Content and Pedagogy I

UEDU 5050 - Exploring Diversity in Content and Pedagogy II

UEDU 5060 - Motivation and Engagement in Curriculum and Learning

UEDU 5070 - Curriculum Theories in Urban Education

UEDU 5100 - Secondary Literacy Instruction and Assessment

UEDU 5110 - Tchg Literacy in Eng Ed

UEDU 5200 - Theory and Methods of Teaching Secondary English

UEDU 5201 - Adolescent Literature

UEDU 5300 - Curriculum and Methods in Secondary Math

UEDU 5301 - Assessment In Math Education

UEDU 5400 - Theory and Pedagogy of Science Instruction

UEDU 5401 - Inquiry Science Pedagogy and Practices

UEDU 5931 - Internship & Lrng Comm I

UEDU 5932 - Internship & Lrng Comm II

UEDU 5933 - Internship & Lrng Comm III

UNHL 1100 - Introduction to University Honors and Leadership

UNHL 2755 - UHL Seminar

UNHL 2840 - Independent Study

UNHL 2850 - Faculty-Mentored Research

UNHL 2870 - Intensive Spanish

UNHL 2939 - Internship

UNHL 3010 - Leadership Behavior: Historical and Contemporary Perspectives

UNHL 3100 - Ethics & Leadership: An Introduction

UNHL 3110 - Leadership, Communication, and Conflict

UNHL 3250 - Leadership and Sustainability

UNHL 3310 - Innovation, Cutting-Edge Knowledge, and Self-Guided Learning

UNHL 3501 - Love and Death in the Greek Classics

UNHL 3502 - The History and Literature of Science in the 19th Century

UNHL 3503 - Ethics, Academic Integrity, and Social Responsibility

UNHL 3610 - Neuroscience and Society

UNHL 3620 - Migration, Modernity, and Literacy

UNHL 3810 - Understanding and Dealing with Uncertainty

UNHL 3815 - Life in the Information Age

UNHL 3820 - The Economics of Life

UNHL 3870 - History and Culture of Spanish-Speaking World

UNHL 3939 - Internship

UNHL 4840 - Independent Study

UNHL 4850 - Faculty-Mentored Research

UNHL 4991 - Senior Research Seminar I

UNHL 4992 - Senior Research Seminar II

URBN 6610 - Infrastructure Studio

URBN 6611 - Regulatory Studio

URBN 6612 - Urban Synthesis Studio

URBN 6640 - History of the City

URBN 6641 - Design Process/Practice

URBN 6642 - Design Policy/Regulation

URBN 6643 - Graphics for Planners

URBN 6686 - Special Topics: Urban Design

URBN 6840 - Independent Study: URBN

URBN 6930 - Urban Design Internship

URPL 5460 - Introduction to Sustainable Urban Infrastructure

URPL 5461 - Defining & Measuring Sustainability

URPL 5500 - Graphics for Planners

URPL 5501 - Planning Issues and Processes

URPL 5510 - Planning Methods I

URPL 5511 - Planning Methods II

URPL 5520 - Urban Spatial Analysis

URPL 5530 - Planning Law

URPL 6612 - Geographic Information Systems for Planners

URPL 6630 - Planning Studio I

URPL 6631 - Planning Studio II

URPL 6632 - City Design Policy

URPL 6633 - Urban Form Theory

URPL 6634 - Preservation Theory and Practice

URPL 6635 - City Building

URPL 6636 - Design Policy/Regulation

URPL 6637 - Comprehensive Planning

URPL 6640 - Community Development Process

URPL 6641 - Social Planning

URPL 6649 - Environmental Planning I: Ecology

URPL 6650 - Environmental Planning II: Policy and Law

URPL 6651 - Environmental Impact Assessment

URPL 6652 - Growth Management

URPL 6653 - Natural Resource Planning and Management

URPL 6654 - STNBLE Land Use Planning

URPL 6656 - Regional Land Use Analysis and Planning

URPL 6657 - Global Health Studies II

URPL 6660 - Real Estate Development Process

URPL 6661 - Real Estate Development Finance

URPL 6665 - Urban Market Analysis

URPL 6670 - Urban Economic Development

URPL 6671 - Regional Economic Development

URPL 6673 - Transportation Planning I: Network Analysis

URPL 6674 - Transportation Planning II

URPL 6676 - Urban Housing

URPL 6680 - Urbanization in Developing Countries

URPL 6686 - Special Topics: Urban and Regional Planning

URPL 6820 - Project Management

URPL 6840 - Independent Study: URPL

URPL 6910 - Planning in Other Cultures II: Field Experience

URPL 6930 - Planning Internship

URPL 6950 - Thesis Research and Programming

URPL 6951 - Urban and Regional Planning Thesis

WGST 1050 - Introduction to Women's and Gender Studies

WGST 2900 - Smart Girl Leadership Training and Practicum

WGST 3010 - Sociology of Human Sexuality

WGST 3080 - Sex and Gender

WGST 3343 - Women in U.S. History

WGST 3450 - Twentieth Century Women Writers

WGST 3700 - Sociology of the Family

WGST 3840 - Independent Study: WGST

WGST 3939 - Internship

WGST 4215 - Women's Rights, Human Rights: Global Perspectives

WGST 4230 - Women in the West

WGST 4248 - Gender, Globalization and Development

WGST 4303 - Sex and Gender in Modern Britain

WGST 4306 - Survey of Feminist Thought

WGST 4307 - History of Sexuality

WGST 4345 - Gender, Science, and Medicine: 1600 to the Present

WGST 4420 - Goddess Traditions

WGST 4510 - Whores and Saints: Medieval Women

WGST 4511 - French Women Writers

WGST 4540 - Race, Class, and Gender in Spanish Golden Age Literature

WGST 4555 - International Women's Resistance

WGST 4564 - Gender and Politics

WGST 4710 - Women and Religion

WGST 4827 - Women and the Law

WGST 4933 - Philosophy of Eros

WGST 5306 - Survey of Feminist Thought

WGST 5710 - Women and Religion

WGST 5720 - Sexuality, Gender and Their Visual Representations

WGST 5900 - Smart Girl Coaching Training and Practicum

WGST 6010 - Methods and Theories of Feminism and Gender Studies