

MECHANICAL ENGINEERING
Required Courses
 Yearly Proposed Schedule
 (Subject to change depending on enrollment)

REQUIRED ENGINEERING COURSES FOR BACHELOR OF SCIENCE DEGREE

COURSE NO.	COURSE TITLE	PREREQUISITES	F A L L	S P R	S U M
ENGR 1025	Engineering Graphics & CAD	High school geometry & algebra	X	X	X
ENGR 3012	Thermodynamics I	MATH 1401 & PHYS 2311	X	X	X
ME 2023	Statics (CE 2121)	PHYS 2311	X	X	X
ME 2033	Dynamics (CE 3111)	ME 2023 or CE 2121	X	X	X
ME 3010	Elementary Numerical Methods	Coreq: MATH 3195 or MATH (3191 & 3200)	X	X	
ME 3021	Introduction to Fluid Mechanics	ME 2033 or CE 3111 & MATH 2421	X		
ME 3022	Thermodynamics II	ENGR 3012 & MATH 2421	X		
ME 3023	System Dynamics I: Vibrations	ME 2033 or CE 3111, MATH 3195 or MATH (3191 & 3200) Coreq: ME 3043 or CE 3121		X	
ME 3024	Introduction to Materials Science	PHYS 2311		X	
ME 3027	Measurements	MATH 3195 or MATH (3191 & 3200)	X	X	
ME 3028	Measurements Lab	Coreq: ME 3027	X	X	
ME 3030	Electric Circuits and Systems	MATH 2421 & PHYS 2331	X	X	X
ME 3031	Fluids/Thermal Laboratory	Prereq: ENGR 3012; Coreq: ME 3021	X	X	
ME 3032	Electric Circuits and Systems Lab	Coreq: ME 3030 or EE 3030	X	X	
ME 3034	Properties of Engineering Materials	Coreq: ME 3024 or ME 3043 or CE 3121	X	X	
ME 3035	Design of Mechanical Elements	ME 3043 or CE 3121; coreq: ME 3024		X	X
ME 3042	Heat Transfer	ENGR 3012 & MATH 2421	X	X	
ME 3043	Strength of Materials (CE 3121)	ME 2023 or CE 2121	X	X	X
ME 3065	Intermediate Dynamics	ME 2033 or CE 3111 & ME 3010		X	
ME 3145	Manufacturing Processes Design	None	X	X	
ME 4023	System Dynamics II: Controls	ME 3023	X		
ME 4035	Senior Design I	ME 3035	X		
ME 4045	Senior Design II	ME 4035		X	

- Twelve (12) units of technical electives are required in the B.S. program.
- See semester schedule of courses for technical elective offerings.
- Up to six (6) units of 5000 level courses can be used as technical electives in the B.S program and may count as credit towards a master's degree (see an advisor).

REQUIRED ENGINEERING COURSES FOR GENERAL MASTER OF SCIENCE DEGREE

Tentative Course Offerings by Semester

COURSE NO.	COURSE TITLE	PREREQUISITES	F A L L	S P R	S U M
ME 5110	Numerical Methods for Engineers	Graduate standing or consent of instructor		X	
ME 5120	Methods of Engineering Analysis	Graduate standing or consent of instructor	X		
ME 5122	Macroscopic Thermodynamics	Graduate standing or consent of instructor	X		
ME 5141	Viscous Flow	Graduate standing or consent of instructor		X	
ME 5143	Theory of Elasticity	Graduate standing or consent of instructor		X	
ME 5163	Dynamics	Graduate standing or consent of instructor	X		

See graduate advisor for specific program options and electives for the Master of Science or Masters of Engineering degrees.