

M.E. PROGRAM

CALIFORNIA STATE UNIVERSITY, SACRAMENTO
COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

Total Units: 122

Freshman Year		Sophomore Year		Junior Year		Senior Year	
1st Semester 14 Units	2nd Semester 14 Units	1st Semester 17 Units	2nd Semester 15 Units	1st Semester 16 Units	2nd Semester 17 Units	1st Semester 15 Units	2nd Semester 14 Units
1	2	3	4	5	6	7	8
A CHEM 1E (4) A1	PHYS 11A (4) A2 C1, C2	PHYS 11C (4) A3 A2, C2	ENGR 17 (3) A4 A3, C4 or A3, C4	ENGR 110 (3) A5 B4, C3, C4	ENGR 132 (3) A6 A5	ME 126 (3) A7 A6, F5	ME ELECTIVES 6 UNITS
B ENGR 6 (3) B1	ME 37 (3) B2	ENGR 45 (3) B3 A1, C1	ENGR 30 (3) B4 A2, B1, C2	ENGR 112 (3) B5 B3, B4, C4	ME 138 (3) B6 B2, C5	ME 128 (3) B7 F5	
C MATH 30 (4) C1	MATH 31 (4) C2 C1	MATH 32 (4) C3 C2	MATH 45 (3) C4 C2	ME 116 (2) C5 B1, B2, B5	ME 117 (2) C6 C5	ME 190 (3) C7 C6	ME 191 (2) C8 C7
D GEN ED (3)	GEN ED (3)	GEN ED (3)	GEN ED (3)	ME 105 (3) D5 A4, B4	ME 171 (3) D6 A5, D5	ME 172 (3) D7 D6	GEN ED (3)
E		GEN ED (3)	GEN ED (3)	ME 108 (2) E5 C2	ME 180 (3) E6 B3, B5	GEN ED (3)	GEN ED (3)
F				ENGR 124 (3) F5 A1, A2, C3	GEN ED (3)		

The course sequence shown insures all prerequisites are completed prior to taking a course.
Prerequisites are listed in red; concurrent enrollment listed in green.
Please see reverse side for course titles.

Mechanical Engineering Course Titles

Course	Course Title
CHEM 1E	General Chemistry for Engineers
PHYS 11A	General Physics: Mechanics
PHYS 11C	General Physics: Electricity and Magnetism
MATH 30	Calculus I
MATH 31	Calculus II
MATH 32	Calculus III
MATH 45	Differential Equations
ENGR 6	Engineering Graphics and CADD
ENGR 17	Circuit Analysis
ENGR 30	Analytic Mechanics: Statics
ENGR 45	Engineering Materials
ENGR 110	Analytic Mechanics: Dynamics
ENGR 112	Mechanics of Materials
ENGR 124	Thermodynamics
ENGR 132	Fluid Mechanics
ME 37	Manufacturing Processes
ME 105	Introduction to Technical Problem Solving
ME 108	Professional Topics in Mechanical Engineering
ME 116	Machinery Design I
ME 117	Machinery Design II
ME 126	Heat Transfer
ME 128	Thermal-Fluid Systems
ME 138	Concurrent Product and Process Design
ME 171	Modeling & Simulation of Mechatronics & Control Systems
ME 172	Control System Design
ME 180	Mechanical Properties of Materials
ME 190	Project Engineering I
ME 191	Project Engineering II

Mechanical Engineering Electives

Course	Course Title
ME 114	Vibrations
ME 115	Dynamics of Machinery and Multi-Body Systems
ME 121	Solar Thermal & Energy Storage Systems
ME 122	Geo-Thermal & Bio-Energy Systems
ME 123	Wind, Hydro and Ocean Energy
ME 136	Numerical Control Programming
ME 137	Product Design for Manufacturing & Automation
ME 140	Introduction to Motors and Actuators
ME 141	Introduction to Tolerance Analysis
ME 143	Vehicle Dynamics & Design
ME 152	Turbomachinery Design
ME 153	Thermodynamics of Combustion Engines
ME 155	Gas Dynamics
ME 156	Heating and Air Conditioning Systems
ME 159	High Efficiency HVAC
ME 164	Introduction to Test Automation
ME 165	Introduction to Robotics
ME 173	Application of Finite Element Analysis
ME 176	Product Design and Pro/Engineer
ME 177	3-D Parametric Modeling
ME 182	Introduction to Composite Materials
ME 184	Corrosion and Wear
ME 186	Fracture Mechanics in Engineering Design
ME 196A	Motion & Dynamic Analysis of Solid Modeling
ME 196B	Engineering System Approach to Product Design
ME 196C	Computer Programming for Mechanical Engineering Application
	See Department Chair for other approved electives