

Major Required 92 units

CHM1150 - General Chemistry for Engineers (3)
EGR4810 - Project Design Principles and Applications (1) (B5)
EGR4820 - Project Design Principles and Applications (1) (B5)
EGR4830 - Project Design Principles and Applications (1) (B5)
IME4020 - Ethical Concepts in Technology and Applied Science (3) (B5 or C3)
IME4030 - Fiscal Implications in Technical Decision Making (3) (B5 or D4)
MAT1140 - Calculus I (4) (B4)
MAT1150 - Calculus II (4) (B4)
MAT2140 - Calculus III (4)
MAT2240 - Elementary Linear Algebra and Differential Equations (3)
ME1001L - Engineering Graphics and Visualization Laboratory (1)
ME1101 - Computer-Aided Computations (1)
ME1101L - Computer-Aided Computations Laboratory (1)
ME2141 - Vector Statics (3)
ME2150 - Vector Dynamics (3)
ME2191 - Mechanics of Materials (3)
ME2331 - Introduction to Design (2)
ME2331L - Introduction to Design Laboratory (1)
ME3011 - Thermodynamics (3)
ME3111 - Fluid Mechanics (3)
ME3121 - Intermediate Thermal-Fluids Engineering (3)
ME3131L - Thermal-Fluids Laboratory (1)
ME3150 - Engineering Materials (3)
ME3190 - Stress Analysis (3)
ME3250 - Machine Design (2)
ME3250L - Machine Design Laboratory (1)
ME3401 - Modeling of Dynamic Systems (3)
ME3501L - Mechanics, Behavior and Selection of Materials Laboratory (1)
ME4060 - Finite Element Analysis (2)
ME4060A - Finite Element Analysis Activity (1)
ME4150 - Heat Transfer (3)
ME4271 - Thermal Systems Design (3)
ME4351 - Mechanical Measurements (2)
ME4351L - Mechanical Measurements Laboratory (1)
ME4391 - Control of Mechanical Systems (2)
ME4391L - Control of Mechanical Systems Laboratory (1)
ME4622 - Undergraduate Seminar (1)
MFE2010 - Manufacturing Systems and Processes (2)
MFE2010L - Manufacturing Systems and Processes Laboratory (1)
PHY1510 - Introduction to Newtonian Mechanics (3) (B1)
PHY1510L - Newtonian Mechanics Laboratory (1) (B3)
PHY1520 - Introduction to Electromagnetism and Circuits (3)
PHY1520L - Introductory Laboratory on Electromagnetism and Circuits (1)

Major Electives 6 units

Select 6 units from the following list:
ME3070 - Alternative Energy Systems (3)
ME4050 - Acoustics and Noise Control (3)
ME4070 - Solar Thermal Engineering (2) **and**
ME4070L - Solar Thermal Engineering Laboratory (1)
ME4080 - Nuclear Engineering (3)
ME4110 - Heat Power (2) **and**
ME4110L - Heat Power Laboratory (1)
ME4120 - Internal Combustion Engines (2) **and**
ME4120L - Internal Combustion Engines Laboratory (1)
ME4131 - Mechanical Vibrations (3)
ME4160 - Intermediate Dynamics (3)
ME4180 - Air Conditioning (2) **and**
ME4180L - Air Conditioning Laboratory (1)
ME4210 - Dynamics of Machinery (3)
ME4230 - Mechanics of Composite Materials (3)
ME4251 - Advanced Machine Design and Analysis (2) **and**
ME4251L - Advanced Machine Design and Analysis Laboratory (1)

ME4330 - Engineering Computational Methods (3)
ME4441 - Air Pollution Formation and Control (3)
ME4801 - Introduction to Micro-Electromechanical Systems (3)
ME4990 - Special Topics for Upper Division Students (1-3)
ME4990A - Special Topics for Upper Division Students Activity (1-3)
ME4990L - Special Topics for Upper Division Students Laboratory (1-3)

General Education Requirements 48 Units

Students should view their Degree Progress Report (DPR) for information regarding their General Education requirements. Unless specific GE courses are required for their major, please refer to the list of approved courses in the General Education Program in the University Catalog, catalog.cpp.edu. When viewing the catalog, students should select the catalog year associated with the GE requirements listed in their Degree Progress Report.

Area A. English Language Communication and Critical Thinking (9 units)

At least 3 units from each sub-area

1. Oral Communication
2. Written Communication
3. Critical Thinking (Satisfied by completion of undergraduate Engineering degree)

Area B. Scientific Inquiry and Quantitative Reasoning (12 units)

At least 3 units from B1, B2, B4, and B5 including 1 unit of lab from B1 or B2 to fulfill B3

1. Physical Sciences
2. Life Sciences
3. Laboratory Activity
4. Mathematics/Quantitative Reasoning
5. Science and Technology Synthesis

Area C. Arts and Humanities (12 units)

At least 3 units from each sub-area and 3 additional units from sub-areas 1 and/or 2

1. Visual and Performing Arts
2. Literature, Modern Languages, Philosophy and Civilization
3. Arts and Humanities Synthesis

Area D. Social Sciences (9 units)

At least 3 units from each sub-area

1. U.S. History and American Ideals
2. U.S. Constitution and California Government
4. Social Science Synthesis

Area E. Lifelong Learning and Self-Development (3 units)
Area F. Ethnic Studies (3 units)
Interdisciplinary General Education 18 Units

An alternate pattern for partial fulfillment of GE Areas A, C, and D available for students is the Interdisciplinary General Education (IGE) program. Students should see an advisor for specific GE coursework required by their major. Please refer to the University Catalog General Education Program section for additional information.

How IGE fulfills General Education Requirements:

Year	Completion of IGE Courses	Satisfies GE Requirements
First	IGE 1100, IGE 1200	A2 and C2
Second/Third	IGE 2150, IGE 2250	D1 and C2
	IGE 2350	C1
	IGE 3100	C3 or D4

American Institutions 6 Units

Courses that satisfy this requirement may also satisfy GE Area D1 and D2.

Graduation Writing Test

All persons who receive undergraduate degrees from Cal Poly Pomona must pass the Graduation Writing Test (GWT). The test must be taken by the semester following completion of 60 units for undergraduates.