

Major Required Core 82 units

CHM1210 - General Chemistry I (3) (B1)
 CHM1210L - General Chemistry Laboratory I (1) (B3)
 EGR1000 - Engineering, Society, and You (2) (E)
 EGR1000L - Engineering, Society, and You Laboratory (1) (E)
 EGR4810 - Project Design Principles and Applications (1) (B5)
 EGR4820 - Project Design Principles and Applications (1) (B5)
 EGR4830 - Project Design Principles and Applications (1) (B5)
 ETE1151 - C/C++ Programming (3)
 ETE1151L - C/C++ Programming Laboratory (1)
 ETE2011 - Electrical Networks (3)
 ETE2011L - Electrical Networks Laboratory (1)
 ETE3211 - Electronic Systems (3)
 ETE3211L - Electronic Systems Laboratory (1)
 ETE4751 - Introduction to Robotics Control and Application (3)
 ETE4751L - Introduction to Robotics Control and Applications Laboratory (1)
 ETM2101 - Applied Statics (3)
 ETM2111 - Applied Dynamics (3)
 ETM2171 - Material Science for Engineering Technology (3)
 ETM2201 - Strength of Materials (3)
 ETM2201L - Strength of Materials Laboratory (1)
 ETM3061 - Applied Thermodynamics I (3)
 ETM3081 - Applied Heat Transfer (3)
 ETM3101 - Applied Fluid Mechanics I (3)
 ETM3121 - Applied Fluid Mechanics II (3)
 ETM3141L - Thermal Fluids Laboratory (1)
 ETM3151 - Machine Elements (3)
 ETM3151L - Machine Elements Laboratory (1)
 ETM3301 - Instrumentation and Control (3)
 ETM3301L - Instrumentation and Control Laboratory (1)
 ETM3341 - Heating Ventilation and Air Conditioning I (3)
 IME4020 - Ethical Concepts in Technology and Applied Science (3) (B5 or C4)
 MAT1300 - Technical Calculus I (4) (B4)
 MAT1310 - Technical Calculus II (4)
 PHY1210 - Physics of Motion, Fluids, and Heat (3) (B1)
 PHY1210L - Physics of Motion, Fluids, and Heat Laboratory (1) (B3)
 PHY1220 - Physics of Electromagnetism, Circuits, and Light (3)
 PHY1220L - Electromagnetism, Circuits, and Light Laboratory (1)

Major Electives 13 units

Select at least 1 course from each group:
 Group 1
 ETM3051 - Engineering Economics (3)
 ETM4871 - Human Factors (3)
 Group 2
 ETM3351 - Heating Ventilation and Air Conditioning II (3)
 ETM4101 - Internal Combustion Engines (3) and
 ETM4101L - Internal Combustion Engines Laboratory (1)
 ETM4151 - Renewable Energy Systems (3)
 Group 3
 ETE3501 - Feedback Control Systems (3) and
 ETE3501L - Feedback Control Systems Laboratory (1)
 ETM4191 - Applied Thermodynamics II (3)
 ETM4211 - Hydraulics (3)
 ETM4851 - Mechanical Building Systems (3)
 ETM4990 - Special Topics for Upper Division Students (1-3)
 ETM4990L - Special Topics for Upper Division Students Laboratory (1-3)

General Education Requirements 48 Units

Students should consult the Academic Programs website
<https://www.cpp.edu/~academic-programs/general-education-course-listings.shtml>
 for current information regarding this requirement. Unless specific courses are required, please refer to the list of approved courses under General Education Requirements, Areas A through E.

- Area A. English Language Communication and Critical Thinking (9 units)**
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)**
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)**
1. Visual and Performing Arts
 - 2a. Philosophy and Civilization
 - 2b. Literature and Language Other than English
 3. Arts and Humanities Synthesis

- Area D. Social Sciences (12 units)**
1. U.S. History and American Ideals
 2. U.S. Constitution and California Government
 3. Social Sciences: Principles, Methodologies, Value Systems, and Ethics
 4. Social Science Synthesis

- Area E. Lifelong Learning and Self-Development (3 units)**

Interdisciplinary General Education 21 Units

An alternate pattern for partial fulfillment of GE Areas A, C, and D available for students in 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:

<i>Year</i>	<i>Completion of IGE Courses</i>	<i>Satisfies GE Requirements</i>
<i>Freshman</i>	<i>IGE 1100, IGE 1200</i>	<i>A2 and C2b</i>
<i>Sophomore</i>	<i>IGE 2100, IGE 2200</i>	<i>C1 and C2a</i>
<i>Junior</i>	<i>IGE 2300, IGE 2400</i>	<i>D1 and D3</i>
<i>Senior</i>	<i>IGE 3100</i>	<i>C3 or D4</i>

American Institutions 6 Units

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

American Cultural Perspectives Requirement 3 Units

Refer to the University Catalog General Education Program section for a list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.

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.