

Name: _____
 Plan: Chemistry, B.S.
 SubPlan/Option: General Chemistry Option
 Min. Units Required: 120 units

Major Required Core **48 units**

CHM1210 - General Chemistry I (3) (B1)
 CHM1210L - General Chemistry Laboratory I (1) (B3)
 CHM1220 - General Chemistry II (3) (B1)
 CHM1220L - General Chemistry Laboratory II (1) (B3)
 CHM2210 - Quantitative Analysis (2)
 CHM2210L - Quantitative Analysis Laboratory (2)
 CHM2910A - Chemical Communication Activity (1)
 CHM3140 - Organic Chemistry I (4)
 CHM3140L - Organic Chemistry Laboratory I (1)
 CHM3150 - Organic Chemistry II (3)
 CHM3150L - Organic Chemistry Laboratory II (1)
 CHM3270 - Biochemistry I (3)
 CHM3270L - Biochemistry Laboratory I (1)
 CHM3420 - Spectroscopic Methods (1)
 CHM3420L - Spectroscopic Methods Laboratory (1)
 CHM3430 - Separation Methods (1)
 CHM3430L - Separation Methods Laboratory (1)
 CHM3520L - Physical Chemistry Laboratory (2)
 MAT1140 - Calculus I (4) (B4)
 MAT1150 - Calculus II (4) (B4)
 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)

Subplan/Option Required Core **10 units**

CHM3040 - Elements of Physical Chemistry I (3) and
 CHM3050 - Elements of Physical Chemistry II (3)
 OR
 CHM3110 - Classical Physical Chemistry (3) and
 CHM3120 - Quantum Physical Chemistry (3)

BIO1150 - Basic Biology (3) (B2)
 BIO1150L - Basic Biology Laboratory (1) (B3)

Subplan/Option Electives **23 units**

Students may take any 3000-4000 level chemistry courses not already counted in core to satisfy units. Up to 12 units may come from outside CHM. See advisor/dept for suggested courses that prepare for specific areas in chemistry or to tailor your curriculum to career goals.

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

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 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:

<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.