

Name: Plan: Chemistry, B.S. SubPlan/Option: **American Chemical Society** Min. Units Required: 120 units

2020-2021 University Catalog **Degree Curriculum Sheet**

48 units Major Required 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 24 units BIO1150 - Basic Biology (3) (B2) BIO1150L - Basic Biology Laboratory (1) (B3) CHM3110 - Classical Physical Chemistry (3) CHM3120 - Quantum Physical Chemistry (3) CHM3440 - Electroanalytical Methods (1) CHM3440L - Electroanalytical Methods Laboratory (1) CHM4010 - Inorganic Chemistry (4) CHM4220 - Organic Synthesis (2) and CHM4220L - Organic Synthesis Laboratory (2) CHM4230 - Physical Organic Chemistry (2) and CHM4230L - Physical Organic Chemistry Laboratory (2) CHM4240 - Organic Analysis (2) and CHM4240L - Organic Analysis Laboratory (2) MAT2250 - Linear Algebra with Applications to Differential Equations (4) 7-9 units |Subplan/Option Electives CHM 3000/4000 level - Chemistry courses not already counted in Major/Option Required (2-4) CHM4610 - Senior Project I (2) CHM4620 - Senior Project II (2) CHM4630 - Research Student Seminar (1)

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)

At least 3 units from each sub-area

- 1. Oral Communication
- 2. Written Communication
- 3. Critical Thinking

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 (12 units)

At least 3 units from each sub-area

- 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:

Year	Completion of IGE Courses	Satisfies GE Requirements
First	IGE 1100, IGE 1200	A2 and C2
Second/Third	IGE 2100, IGE 2200	C1 and C2
	IGE 2300, IGE 2400	D1 and D3
Third/Fourth	IGE 3100	C3 or D4

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.

0-2 units

CHM 4610 / CHM 4620 / CHM 4630 recommended for graduate school.

Select a sufficient number of courses so that the total from "Major Required", "Subplan/Option Required", "Subplan/Option Electives", "GE", and "Unrestricted Electives" is at least 120 units.

Note(s):

Unrestricted Electives