

Name: \_\_\_\_\_  
 Plan: Geology, B.S.  
 SubPlan/Option: \_\_\_\_\_  
 Min. Units Required: **120 units**

**Major Required Core 62 units**

BIO1110 - Life Science (2) (B2)  
 BIO1110L - Life Science Laboratory (1) (B3)  
 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)  
 GSC1110 - Principles of Geology (3) (B1)  
 GSC1120 - Earth, Time, and Life (3) (B1)  
 GSC1410L - Principles of Geology Laboratory (1) (B3)  
 GSC1450L - Megascopic Petrography Laboratory (1)  
 GSC1510L - Earth, Time, and Life Laboratory (1) (B3)  
 GSC2150 - Mineralogy (2)  
 GSC2150L - Mineralogy Laboratory (1)  
 GSC2550L - Field Methods Laboratory (1)  
 GSC3000 - Geochemistry (2)  
 GSC3000L - Geochemistry Laboratory (1)  
 GSC3070 - Introduction to Global Geophysics (2)  
 GSC3070L - Introduction to Global Geophysics Laboratory (1)  
 GSC3230 - Geomorphology (2)  
 GSC3230L - Geomorphology Laboratory (1)  
 GSC3330 - Structural Geology (2)  
 GSC3330L - Structural Geology Laboratory (1)  
 GSC3600 - Hydrogeology (2)  
 GSC3600L - Hydrogeology Laboratory (1)  
 GSC4230 - Sedimentary Geology (2)  
 GSC4230L - Sedimentary Geology Laboratory (1)  
 GSC4910L - Field Module Laboratory (1-2) (1 unit required)  
 GSC3040 - Meteorology (3) (B5)  
 OR  
 GSC3200 - Studies of a Blue Planet (3) (B5)  
 OR  
 GSC3210 - Engineering Geology I (2) (B5) and  
 GSC3210L - Engineering Geology I Laboratory (1) (B5)  
 OR  
 GSC3350 - Exploring Earth's Oceans: Oceanography (3) (B5)  
 OR  
 GSC3500 - Natural Disasters (3) (B5)  
 MAT1140 - Calculus I (4) (B4)  
 MAT1150 - Calculus II (4) (B4)  
 PHY1210 - Physics of Motion, Fluids, and Heat (3) (B1) and  
 PHY1210L - Physics of Motion, Fluids, and Heat Laboratory (1) (B3)  
 OR  
 PHY1510 - Introduction to Newtonian Mechanics (3) (B1) and  
 PHY1510L - Newtonian Mechanics Laboratory (1) (B3)  
 PHY1220 - Physics of Electromagnetism, Circuits, and Light (3) and  
 PHY1220L - Electromagnetism, Circuits, and Light Laboratory (1)  
 OR  
 PHY1520 - Introduction to Electromagnetism and Circuits (3) and  
 PHY1520L - Introductory Laboratory on Electromagnetism and Circuits (1)

**Major Electives 22 units**

**Select 4 units from the list below:**  
 GSC4100 - Presentation, Writing and Research Skills in the Geosciences (2)  
 GSC4610 - Senior Project and Presentation (2)  
 GSC4620 - Senior Thesis (2)  
 GSC 3XXX/4XXX - Any 3000/4000-level GSC course(s) (2-4)  
 GSC3200 - Studies of a Blue Planet (3) (B5) or  
 GSC4950 - Planetary Science (3)  
 GSC4340 - Shallow Subsurface Geophysics (2)  
 GSC4340L - Shallow Subsurface Geophysics Laboratory (1)  
 GSC4500 - Introduction to Seismology, Earthquakes and Earth Structure (2)  
 GSC4500L - Introduction to Seismology, Earthquakes and Earth Structure Laboratory (1)  
**Emphasis Electives 9 units**  
 GSC3040 - Meteorology (3) (B5)  
 GSC3210 - Engineering Geology I (2) (B5) and  
 GSC3210L - Engineering Geology I Laboratory (1) (B5)  
 GSC4010 - GIS Applications for Earth and Environmental Scientists (1) and  
 GSC4010L - GIS Applications for Earth and Environmental Scientists Laboratory (2)

**Select 18 units from courses listed below to fulfill a chosen Emphasis:**

**Geology Emphasis 18 units**  
**Emphasis Required Core 10 units**  
 GSC3310 - Paleontology (2) and  
 GSC3310L - Paleontology Laboratory (1)  
 OR  
 GSC4440 - Tectonics (2) and  
 GSC4440L - Tectonics Laboratory (1)  
 OR  
 GSC4700 - Volcanology (2) and  
 GSC4700L - Volcanology Laboratory (1)  
 GSC4240 - Igneous and Metamorphic Petrology (2)  
 GSC4240L - Igneous and Metamorphic Petrology Laboratory (2)  
 GSC4910L - Field Module Laboratory (1-2) (3 units required)  
**Emphasis Electives 8 units**  
 GSC4010 - GIS Applications for Earth and Environmental Scientists (1) and  
 GSC4010L - GIS Applications for Earth and Environmental Scientists Laboratory (2)  
 GSC4150 - Engineering Geology II (2) and  
 GSC4150L - Engineering Geology II Laboratory (1)  
 GSC4320 - Soil Physics (2) and  
 GSC4320L - Soil Physics Laboratory (1)  
 GSC4340 - Shallow Subsurface Geophysics (2) and  
 GSC4340L - Shallow Subsurface Geophysics Laboratory (1)  
 GSC4400 - Exploration and Mining Geology (2) and  
 GSC4400L - Exploration and Mining Geology Laboratory (1)  
 GSC4500 - Introduction to Seismology, Earthquakes and Earth Structure (2) and  
 GSC4500L - Introduction to Seismology, Earthquakes and Earth Structure Laboratory (1)  
 GSC4800 - Quantitative and Computer Skills in the Geosciences (3)  
 GSC5030L - Field Investigations Laboratory (1)  
 GSC5330 - Advanced Topics in Structural Geology and Tectonics (2) and  
 GSC5330L - Advanced Topics in Structural Geology and Tectonics Laboratory (1)  
 GSC5340 - Quaternary Geology (2) and  
 GSC5340L - Quaternary Geology Laboratory (1)  
 GSC5850 - Isotope Geochemistry (2) and  
 GSC5850L - Isotope Geochemistry Laboratory (1)  
 GSC5950 - Advanced Topics in Sedimentology/Stratigraphy (2) and  
 GSC5950L - Advanced Topics in Sedimentology/Stratigraphy Laboratory (1)  
 GSC XXXX - Other GSC course by petition (varies)

**Geophysics/Earth Exploration Emphasis 18 units**

**Emphasis Required Core 9 units**  
 GSC3200 - Studies of a Blue Planet (3) (B5) or  
 GSC4950 - Planetary Science (3)  
 GSC4340 - Shallow Subsurface Geophysics (2)  
 GSC4340L - Shallow Subsurface Geophysics Laboratory (1)  
 GSC4500 - Introduction to Seismology, Earthquakes and Earth Structure (2)  
 GSC4500L - Introduction to Seismology, Earthquakes and Earth Structure Laboratory (1)  
**Emphasis Electives 9 units**  
 GSC3040 - Meteorology (3) (B5)  
 GSC3210 - Engineering Geology I (2) (B5) and  
 GSC3210L - Engineering Geology I Laboratory (1) (B5)  
 GSC4010 - GIS Applications for Earth and Environmental Scientists (1) and  
 GSC4010L - GIS Applications for Earth and Environmental Scientists Laboratory (2)

**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:**

Year	Completion of IGE Courses	Satisfies GE Requirements
Freshman	IGE 1100, IGE 1200	A2 and C2b
Sophomore	IGE 2100, IGE 2200	C1 and C2a
Junior	IGE 2300, IGE 2400	D1 and D3
Senior	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.

# CAL POLY POMONA

Name: \_\_\_\_\_

Plan: \_\_\_\_\_

**Geology, B.S.**

SubPlan/Option: \_\_\_\_\_

Min. Units Required: **120 units**

**2018-2019 University Catalog  
Degree Curriculum Sheet**

GSC4150 - Engineering Geology II (2) and  
GSC4150L - Engineering Geology II Laboratory (1)

GSC4320 - Soil Physics (2) and  
GSC4320L - Soil Physics Laboratory (1)

GSC4440 - Tectonics (2) and  
GSC4440L - Tectonics Laboratory (1)

GSC4700 - Volcanology (2) and  
GSC4700L - Volcanology Laboratory (1)

GSC4800 - Quantitative and Computer Skills in the Geosciences (3)  
GSC4910L - Field Module Laboratory (1-2)

GSC5330 - Advanced Topics in Structural Geology and Tectonics (2) and  
GSC5330L - Advanced Topics in Structural Geology and Tectonics Laboratory (1)

GSC5640 - Advanced Shallow Subsurface Geophysics (2) and  
GSC5640L - Advanced Shallow Subsurface Geophysics Laboratory (1)

GSC5680 - Topics in Advanced Seismology (2) and  
GSC5680L - Topics in Advanced Seismology Laboratory (1)

GSC XXXX - Other GSC course by petition (varies)

***Environmental Resources Emphasis* 18 units**

***Emphasis Required Core* 12 units**

GSC3040 - Meteorology (3) (B5) or  
GSC3200 - Studies of a Blue Planet (3) (B5)

GSC3350 - Exploring Earth's Oceans: Oceanography (3) (B5)  
GSC4010 - GIS Applications for Earth and Environmental Scientists (1)  
GSC4010L - GIS Applications for Earth and Environmental Scientists Laboratory (2)  
GSC4320 - Soil Physics (2)  
GSC4320L - Soil Physics Laboratory (1)

***Emphasis Electives* 6 units**

BIO3040 - Environment and Society (3) (B5)  
GEO3030 - Climatology (3) (B5)

GEO4400 - Advanced GIS (2) and  
GEO4400L - Advanced GIS Laboratory (1)

GEO4430 - Quantitative Spatial Analysis (2) and  
GEO4430L - Quantitative Spatial Analysis Laboratory (1)

GSC1100 - Water in a Changing World (3) (B1)

GSC4340 - Shallow Subsurface Geophysics (2) and  
GSC4340L - Shallow Subsurface Geophysics Laboratory (1)

GSC4910L - Field Module Laboratory (1-2)

GSC5450 - Advanced Hydrogeology (2) and  
GSC5450L - Advanced Hydrogeology Laboratory (1)

GSC5850 - Isotope Geochemistry (2) and  
GSC5850L - Isotope Geochemistry Laboratory (1)

PLT2310 - Basic Soil Science (2) and  
PLT2310L - Basic Soil Science Laboratory (1)

PLT4310 - Soil Chemistry (2) and  
PLT4310L - Soil Chemistry Laboratory (1)

RS4200 - Watershed Restoration (2) and  
RS4200L - Watershed Restoration Laboratory (1)

URP4820 - California Water (3) (D4)