

GEOLOGY MINOR

Offered at: San Luis Obispo Campus

The Geology Minor is offered in conjunction with the Natural Resources Management and Environmental Sciences Department. It provides a background useful for careers in environmental consulting or geotechnical fields. Interested students should consult with a Geology Minor advisor. Students preparing for the geology minor should take SS 1120 and CHEM 1120, and have credit for MATH 1007 or higher to fulfill the prerequisites for the required courses in the minor. Depending on chosen elective courses in the minor additional prerequisites may apply. This minor is not open to students in the Earth Sciences' Geology concentration. For more information about the Geology concentration, please see the Earth Sciences program in the Natural Resources Management and Environmental Sciences Department (<https://catalog.calpoly.edu/agriculture-food-environmental-sciences/natural-resources-management-environmental-sciences/>).

Program Learning Objectives

1. Demonstrate knowledge of the physical and chemical properties of the lithosphere and hydrosphere, Earth history and geologic time, and crustal materials and dynamics in the context of plate tectonics theory.
2. Interpret field and laboratory data presented in tables, graphs, geologic maps, cross-sections, graphical columnar sections, and three-dimensional visualizations, in the context of both academic and applied geologic problems.
3. Work effectively in diverse groups in the field and laboratory to identify minerals, rocks, and soils, and characterize geologic structures and landscapes to solve local and regional scale academic and applied geologic problems.
4. Communicate scientific ideas effectively in a variety of contexts using written, oral, and visual presentations in a manner consistent with accepted professional norms.

Minor Requirements and Curriculum

The minor must be completed prior to, or at the same time as, the requirements for the bachelor's degree. A major and a minor may not be taken in the same degree program, and a minor is not required for a degree. Requirements for the minor include:

- At least half of the units must be from upper-division courses (3000-4000 level).
- At least half of the units must be taken at Cal Poly (in residence).
- No more than one-third of the units will be taken with credit-no credit grading (CR/NC), not counting courses with mandatory CR/NC. Departments may further limit CR/NC grading if desired.
- A minimum 2.0 GPA is required in all units counted for completion of the minor.

Code	Title	Units
REQUIRED COURSES		
GEOL 2240	Physical Geology	3
GEOL 2241	Physical Geology Laboratory	1
GEOL 3330	Principles of Stratigraphy	3
or GEOL 4415	Structural Geology	
Approved Electives		
Select from the following: ^{1, 2, 3}		9
ERSC 4450	Geomorphology	
GEOL 2206	Geologic Excursions	
GEOL 3305	Seismology and Earth Structure	
or GEOL 4420	Field Geophysics	
GEOL 3310	Igneous and Metamorphic Petrology	
GEOL 3330	Principles of Stratigraphy ⁴	
GEOL 4400	Special Problems for Advanced Undergraduates	
GEOL 4415	Structural Geology ⁴	
GEOL 4417	Field Geology Methods and Mapping	
Total Units		16

¹ A maximum of 3 units may be from either GEOL 3305 or GEOL 4420.

² A maximum of 2 units may be from GEOL 2206.

³ A maximum of 2 units may be from GEOL 4400.

⁴ Course may be taken if not used to satisfy a requirement listed above.