

BA IN GEOLOGY


Units required for Major: 65-70

Total units required for BA: 120

Program Description

The BA degree program is designed as a shorter, more flexible preparation for some geology jobs, earth science teaching in high school, and jobs such as park naturalist, environmentalist, geologic planning specialist, or in geology-related businesses. The BA degree can be used in dual-track majors combining geology with biological sciences, chemistry, physics, or engineering.

Program Requirements

Code	Title	Units
Required Lower Division Courses (21-26 Units)		
CHEM 1A	General Chemistry I	5
GEOL 5	Geology Of Mexico ¹	4
or GEOL 10 & 10L	Physical Geology Physical Geology Lab	
GEOL 11	Digital Methods in Geoscience	1
GEOL 12	Historical Geology	3
GEOL 12L	Historical Geology Lab	1
MATH 26A	Calculus I for the Social and Life Sciences ¹	3 - 8
or MATH 29 & MATH 30	Pre-Calculus Mathematics Calculus I	
PHYS 5A	General Physics: Mechanics, Heat, Sound	4
or PHYS 11A	General Physics: Mechanics	
Required Upper Division Courses (44 Units)		
GEOL 100	Earth Materials - Rocks and Minerals	4
GEOL 103	Sedimentology/Stratigraphy	4
GEOL 110A	Structural Geology and Tectonics	4
GEOL 110B	Structural Geology Field	1
GEOL 111A	Field Geology	2
GEOL 111B	Field Techniques	2
GEOL 121	Geology of California	3
GEOL 130	Oceanography	3
or GEOL 180	Water Planet	
GEOL 140	Geology and the Environment 	3
GEOL 189	Geology Colloquium	2
Select at least 16 units of the following:		16
GEOL 101	Optical Mineralogy	
GEOL 102	Igneous and Metamorphic Petrology	
GEOL 105	Paleontology	
GEOL 112	Geophysics For Geologists	
GEOL 114	Volcanology	
GEOL 120	Surficial Processes	
GEOL 123	Geochemistry	
GEOL 125	Metallic Ore Deposits	
GEOL 126	Environmental Field Methods	
GEOL 127	Hydrogeology	
GEOL 132	Marine Geology	

GEOL 150	Computer Mapping in Geology
GEOL 171	Petroleum Geology
GEOL 190A	Geology and Tectonic Development of California Seminar
GEOL 193C	Engineering Geology
GEOL 198A	Senior Research Preparation
GEOL 198B	Senior Research Project
GEOL 188	Advanced Geologic Mapping

Total Units **65-70**

¹ Course also satisfies General Education (GE)/Graduation Requirement.

General Education Requirements ¹

Code	Title	Units
Area A: Basic Subjects (9 Units)		
A1 - Oral Communication		3
A2 - Written Communication		3
A3 - Critical Thinking		3
Area B: Physical Universe and Its Life Forms (6 Units)		
B1 - Physical Science ²		0
B2 - Life Forms		3
B3 - Lab (Note: Lab experience to be taken with one of the following: B1, B2 or B5) ²		0
B4 - Math Concepts ²		0
B5 - Additional Course (Any B to reach 12 units) - Take upper-division course to complete Area & upper division requirements.		3
Area C: Arts and Humanities (12 Units)		
C1 - Arts		3
C2 - Humanities		3
C1/C2 - Area C Course		3
C1/C2 - Area C Course - Take upper-division course to complete Area & upper division requirements.		3
Area D: The Individual and Society (9 Units)		
Area D Course		3
Area D Course		3
Area D Course - Take upper-division course to complete Area & upper division requirements.		3
Area E: Understanding Personal Development (3 Units)		
Area E Course		3
Area F: Ethnic Studies (3 Units)		
Area F Course		3
Total Units		42

¹ To help you complete your degree in a timely manner and not take more units than absolutely necessary, there are ways to use single courses to meet more than one requirement (overlap). For further information, please visit the General Education page (<http://catalog.csus.edu/colleges/academic-affairs/general-education/>). **Note:** There is no way to list all possible overlaps so please consult with a professional advisor. The Academic Advising Center can be visited online (<http://www.csus.edu/acad/>), by phone (916) 278-1000, or email (advising@csus.edu).

² Required in Major; also satisfies GE.

Graduation Requirements ¹

Code	Title	Units
Graduation Requirements (required by CSU) (6 Units)		
	American Institutions: U.S. History	3
	American Institutions: U.S. Constitution & CA Government	3
	Writing Intensive (WI) ³	0
Graduation Requirements (required by Sacramento State) (12 Units)		
	English Composition II	3
	Race and Ethnicity in American Society (RE)	3
	Foreign Language Proficiency Requirement ²	6

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² If not satisfied before entering Sacramento State, it may be satisfied in General Education Area C2 (Humanities). "C- or better required."
 The alternative methods for satisfying the Foreign Language Proficiency Requirement are described here: <https://www.csus.edu/college/arts-letters/world-languages-literatures/foreign-language-requirement.html> (<https://www.csus.edu/college/arts-letters/world-languages-literatures/foreign-language-requirement.html>)

³ Required in Major