

# BA IN EARTH SCIENCE

Units required for Major: 62-64

## 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
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### Required Lower Division Courses (37-38 Units)

Select one of the following introductory Geology lecture-lab combinations:	4
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GEOL 5	Geology Of Mexico	
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GEOL 7 & GEOL 8L	Natural Disasters Earth Science Lab	
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GEOL 8 & 8L	Earth Science Earth Science Lab	
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GEOL 10 & 10L	Physical Geology Physical Geology Lab	
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Each of the remaining courses as follows:

ASTR 4B	Introduction to Stars, Galaxies, and Cosmology	3
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ASTR 6	Astronomical Observation Laboratory	1
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BIO 1 & BIO 2	Biodiversity, Evolution and Ecology Cells, Molecules and Genes	9 - 10
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or BIO 7	Introduction to the Science of Biology	
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CHEM 1A	General Chemistry I	5
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or CHEM 6A	Introduction to General Chemistry	
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GEOL 12	Historical Geology	3
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GEOL 12L	Historical Geology Lab	1
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MATH 26A	Calculus I for the Social and Life Sciences	3
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PHYS 5A & PHYS 5B	General Physics: Mechanics, Heat, Sound General Physics: Light, Electricity and Magnetism, Modern Physics	8
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### Required Upper Division Courses (26 Units)

GEOG 111	Elements Of Meteorology	3
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GEOL 103	Sedimentology/Stratigraphy	4
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GEOL 111A	Field Geology	2
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GEOL 111B	Field Techniques	2
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GEOL 130	Oceanography	3
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Select 6 units from the following:	6
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GEOL 105	Paleontology	
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GEOL 110A	Structural Geology and Tectonics	
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GEOL 114	Volcanology	
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GEOL 120	Surficial Processes	
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GEOL 121	Geology of California	
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GEOL 140	Geology and the Environment	
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GEOL 184	Geological Field Trip	
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Select 6 units not taken previously from the following:	6
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ANTH 124	Environmental Archaeology	
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ANTH 151	Human Paleontology
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ENGL 120P	Professional Writing
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GEOG 113	Climate <sup>1</sup>
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GEOG 116	Global Climate Change
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GEOG 117	Landforms
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GEOG 161	California's Water Resources
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JOUR 131	Data Journalism
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PHIL 125	Philosophy Of Science
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RPTA 153	Environmental Interpretation
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Select 3-5 other upper-division geology courses with permission of instructor

**Total Units**

**63-64**

<sup>1</sup> Indicates courses recommended for students wishing to prepare for CSET Exam for teaching high school science.