

Requirement - Bachelor of Arts Degree in Earth Science

This major is not intended to prepare professional scientists. It is designed for Earth Science Teachers, Park Rangers, Environmental Lawyers and Science Writers.

Units required for Major: 63-72

Minimum total units required for BA: 120

Courses in parentheses are prerequisites.

A. Required Lower Division Courses (35-43units)

Select one of the following introductory Geology lecture-lab combinations:

- | | | | |
|---|------|-------|---|
| 4 | GEOL | 005 | Geology of Mexico; OR |
| 3 | GEOL | 007 | Natural Disasters and |
| 1 | GEOL | 008L | Earth Science Lab (GEOL 7 may be taken concurrently); OR |
| 3 | GEOL | 008 | Earth Science and |
| 1 | GEOL | 008L | Earth Science Lab (GEOL 8 may be taken concurrently); OR |
| 3 | GEOL | 010* | Physical Geology and |
| 1 | GEOL | 010L* | Physical Geology Lab (GEOL 10 may be taken concurrently) |

Each of the following courses

- | | | | |
|---|------|-------|--|
| 3 | GEOL | 012 | Historical Geology (GEOL 10) |
| 1 | GEOL | 012L | Historical Geology Lab (GEOL 10L) |
| 4 | GEOL | 017 | Earth Materials (GEOL 5, GEOL 7, GEOL 8 or GEOL 10) |
| 5 | CHEM | 006A | Intro to General Chem (One year high school algebra; high school chemistry strongly recommended); OR |
| 5 | CHEM | 001A* | General Chemistry I (High school algebra [two years] and high school chemistry; or equivalent) |
| 4 | BIO | 007 | Introduction to the Science of Biology OR |
| 5 | BIO | 001* | Biodiversity, Evolution and Ecology AND |
| 5 | BIO | 002* | Cells, Molecules and Genes |
| 4 | PHYS | 005A | General Physics: Mechanics, Heat Sound (Recently completed three years of high school algebra and geometry; and a college course in algebra and trigonometry for those having an inadequate mathematics background) AND |
| 4 | PHYS | 005B | General Physics: Light, Electricity, Magnetism and Modern Physics (PHYS 005A or instructor permission) |
| 3 | ASTR | 004 | Introduction to Astronomy (One year of high school geometry or instructor permission) |
| 1 | ASTR | 006 | Astronomy Observation Lab (ASTR 004, may be taken concurrently) |
| 4 | MATH | 026A | Calculus I for Social and Life Sciences ASTR 004, may be taken concurrently) |

B. Required Upper Division Courses (26 units)

Each of the following courses

- | | | | |
|---|------|------|--|
| 4 | GEOL | 103A | Sedimentology/Stratigraphy (GEOL 17 or GEOL 100) |
|---|------|------|--|

2	GEOL	111A	Field Geology (GEOL 103A)
2	GEOL	111B	Field Techniques (GEOL 111A must be taken concurrently)
3	GEOL	130	Oceanography
3	GEOG	111	Elements of Meteorology

Plus any 6 units from the following courses

3	GEOL	105	Paleontology (GEOL 12, GEOL 12L)
4	GEOL	110A	Structural Geology and Tectonics (GEOL 111A, 111B)
3	GEOL	114	Volcanology (GEOL 5, GEOL 7, GEOL 8, or GEOL 10)
3	GEOL	120	Surficial Processes (GEOL 111A, GEOL 111B)
4	GEOL	121	Geology of California (GEOL 5, GEOL 7, GEOL 8, or GEOL 10)
3	GEOL	140	Geology and the Environment
3	GEOL	170	Geology of the Planets (GEOL 5, GEOL 7, GEOL 8, or GEOL 10)
2	GEOL	184	Geology Field Trip (GEOL 5, GEOL 7, GEOL 8, or GEOL 10)

Plus 6 units from the following courses or from listed above but not previously taken

3	GEOG	113*	Climate
3	GEOG	116	Global Climate Change
3	GEOG	117	Landforms
3	GEOG	161	California Water Resources
3	ANTH	151	Human Paleontology (ANTH 001, ANTH 001A or permission)
3	ANTH	124	Environmental Archaeology
3	RLS	153	Environmental Interpretation and Outdoor Education
3	PHIL	125	Philosophy of Science
3	ENGL	118T	Professional Writing
3	JOUR	131	Column and Review Writing
3-5	Other upper-division geology courses with permission of instructor		

* Indicates courses recommended for students wishing to prepare for CSET Exam for teaching high school science