

GEOLOGY, MINOR

College of Letters & Science

The minor in Geology offers students a chance to emphasize in one of four areas: General Geology, Engineering Geology, Geochemistry, or Paleobiology.

Students majoring in Geology (<https://catalog.ucdavis.edu/departments-programs-degrees/earth-planetary-sciences/geology-bs/>) may elect to complete a minor in Geophysics, Environmental Geology, or Oceanography. They may not complete a minor in Geology.

Students majoring in Marine & Coastal Science (<https://catalog.ucdavis.edu/departments-programs-degrees/earth-planetary-sciences/marine-coastal-science-bs/>) may elect to complete a minor in Geology, Geophysics, or Environmental Geology. They may not complete a minor in Oceanography.

The minor is sponsored by the Department of Earth & Planetary Sciences (<https://catalog.ucdavis.edu/departments-programs-degrees/earth-planetary-sciences/>).

Advising

Visit the staff major advisor (<https://eps.ucdavis.edu/students/undergrad/advising/>) for help navigating minor requirements, policies, prerequisites, and course offerings. Visit the faculty major advisors (<https://eps.ucdavis.edu/students/undergrad/advising/>) for additional advice on courses, careers, and graduate school. Faculty Advisors: Same as Geology Major Faculty Advisors (<https://catalog.ucdavis.edu/departments-programs-degrees/earth-planetary-sciences/geology-bs/>); except Paleobiology emphasis: R. Motani.

Work with your major advisor and college advisors to fit a minor into your overall academic plan.

Declare your minor using the OASIS Minor Declaration form (<https://students.ucdavis.edu/forms/instructions/minordeclaration.aspx?sv=true>), due the quarter before graduation.

Code	Title	Units
Choose one of four emphases:		19-24
General Geology Emphasis (p. 1)		
Engineering Geology Emphasis (p. 1)		
Geochemistry Emphasis (p. 1)		
Paleobiology Emphasis (p. 2)		
Total Units		19-24

General Geology Emphasis

Code	Title	Units
EPS 001/ GEL 050, GEL 001 DISCONTINUED FOR FALL 2026 **		3-4
EPS 102 or GEL 101 DISCON		3
GEL 050L	Physical Geology Laboratory	2
GEL 107	Earth History: Paleobiology	3
GEL 108	Earth History: Paleoclimates	3
GEL 109	Earth History: Sediments & Strata (Discontinued for fall 2026) **	3

or EPS 109		
GEL 116N/ ESP 116N DISCONTINUED FOR FALL 2026	Oceanography (Discontinued for fall 2026) **	3
or EPS 116		
or EPS 134		
or GEL 134 DISCONTINUED FOR FALL 2026 **		
Total Units		20-21

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Course(s) discontinued; see your advisor for course options.

Engineering Geology Emphasis

Code	Title	Units
ECI 171 & 171L	Soil Mechanics and Soil Mechanics Laboratory	5
GEL 050 & 050L	Physical Geology and Physical Geology Laboratory	5
Choose three:		9-14
GEL 134 or EPS 134	Environmental Geology & Land Use Planning (Discontinued for fall 2026) **	
GEL 156	Hydrogeology & Contaminant Transport (Discontinued for winter 2026) **	
GEL 161 or EPS 161	Geophysical Field Methods (Discontinued for fall 2026) **	
GEL 162 or EPS 162	Geophysics of the Solid Earth (Discontinued for fall 2026) **	
HYD 103N/ EBS 103	Fluid Mechanics Fundamentals	
HYD/EBS 144	Groundwater Hydrology	
HYD 146	Hydrogeology & Contaminant Transport (Discontinued for winter 2026)	
SSC 118	Soils in Land Use & the Environment	
SSC 120	Soil Genesis, Morphology, & Classification	
Total Units		19-24

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Course(s) discontinued; see your advisor for course options.

Geochemistry Emphasis

Code	Title	Units
GEL 060	Earth Materials: Introduction (Discontinued for fall 2026) **	4
GEL 146 or GEL 148 or EPS 146	Radiogenic Isotope Geochemistry & Cosmochemistry (Discontinued for fall 2026) ** Stable Isotopes & Geochemical Tracers	3
CHE 110A	Physical Chemistry: Introduction to Quantum Mechanics	4
CHE 110B	Physical Chemistry: Properties of Atoms & Molecules ¹	4
Choose two electives:		6-9

CHE 110C	Physical Chemistry: Thermodynamics, Equilibria & Kinetics
GEL 108	Earth History: Paleoclimates
GEL 146	Radiogenic Isotope Geochemistry & Cosmochemistry (Discontinued for fall 2026) **
or EPS 146	
GEL 148	Stable Isotopes & Geochemical Tracers
HYD 134	Aqueous Geochemistry
SSC 102	Environmental Soil Chemistry
Total Units	21-24

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Chemistry majors may substitute one of the elective courses for Chemistry CHE 110B.

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Course(s) discontinued; see your advisor for course options.

Paleobiology Emphasis

Code	Title	Units
GEL 107	Earth History: Paleobiology	3
GEL 107L	Earth History: Paleobiology Laboratory	2
GEL 108	Earth History: Paleoclimates	3
GEL 141	Evolutionary History of Vertebrates (Discontinued for fall 2026) **	3
or EPS 141		
or EPS 144		
or GEL 144 DISCON		
Choose at least 9 additional units:		9
ANT 151	Primate Evolution	
ANT 152	Human Evolution	
EVE 100	Introduction to Evolution	
EVE 101	Introduction to Ecology	
EVE 102	Population & Quantitative Genetics	
EVE 105	Phylogenetic Analysis of Vertebrate Structure (Discontinued for fall 2025) **	
EVE 112	Biology of Invertebrates	
EVE 112L	Biology of Invertebrates Laboratory	
EVE 140	Paleobotany (Discontinued for winter 2026) **	
EVE 149	Evolution of Ecological Systems (Discontinued for winter 2026) **	
GEL 109	Earth History: Sediments & Strata (Discontinued for fall 2026) **	
or EPS 109		
GEL 150C/	Biological Oceanography (GEL 150C	
ESP 150C DISCONTINUED FOR FALL 2026) **		
or EPS 150C		
Total Units		20

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Course(s) discontinued; see your advisor for course options.