Geology, B.S.

DEPARTMENT

Department of Earth and Environmental Sciences

Robert Dundas, Chair
Science II Building, Room 114
559.278.3086
www.fresnostate.edu/csm/ees/

MN in Geology, Minor
BS in Geology, B.S.
MS in Geology, M.S.
BS in Environmental Sciences, B.S.
MS in Water Resource Management, M.S. - Continuing & Global Education
CERT in Geographic Information Systems, Certificate of Adv Study - Continuing & Global Education
CRED in Single Subject Credential - Geological Science

Courses Offered

The Department of Earth and Environmental Sciences at California State University, Fresno offers courses leading to the Bachelor of Science and Master of Science in Geology -- as well as the Bachelor of Arts in Natural Sciences and the Minor in Geology -- which are especially well-suited for primary and secondary teachers.

Coursework and research emphasize field and laboratory investigations of geologic and environmental problems. Our field orientation takes advantage of the university's proximity to the Sierra Nevadas, the California Coast Ranges, coastal California, and the desert provinces. This unique location gives faculty and students access to an unparalleled outdoor laboratory, all within short trips from the university.

The department's close relationship with state agencies and the private sector enables many students to pursue internships or part-time employment in geologic and environmental work while they complete their degrees.

The Bachelor of Science in Geology prepares students for employment in petroleum geology, mineral exploration, land-use planning, environmental assessment, hydrology, and engineering geology, or for teaching earth science or physical science at the secondary level. The Master of Science program provides a graduate degree for students who want to work in industry or government on the professional level, for students who want to teach earth science in junior college, or for students who wish to pursue further graduate study.

The Bachelor of Science in Environmental Sciences offers an interdisciplinary approach to the natural sciences with an emphasis on biology, chemistry, and geology. This degree is designed for students interested in areas such as pollution abatement, water resources, ecosystem protection, restoration, or management.

Students may also participate in coursework and research in marine geology and oceanography offered through Moss Landing Marine Laboratories in Monterey Bay. Consult the chairs of the Earth and Environmental Sciences and Biology departments. See Moss Landing Marine Laboratories, Biology Department.

REQUIREMENTS

Bachelor of Science Degree Requirements

Geology Major

1. Major requirements (50 units) and additional requirements (22 units)

Major requirements (50 units)
Lower-division requirements: EES 1, 2, 12, and 30 (13 units)
Upper-division requirements: EES 100, 101, 102, 104W, 106, 107, 178, 199; two of the following: EES 105, 110, 122; one of the following: EES 114, 117, 118, 124 (34 units)
Upper-division geology elective (see Note 2) (3 units)

Additional requirements (22 units)
CHEM 1A, 1AL, 1B, 1BL; MATH 75; PHYS 2A, 2B

2. General Education requirements (49 units)*

3. Other requirements (6 units)
   Upper-division writing and Multicultural and International (MI)

4. Sufficient elective units to meet required total units (varies)
   (See Degree Requirements); may be used toward a double major or minor

5. Total units (120)*

* G.E. and MI courses can be double-counted with major requirements. The writing requirement may be met by taking the upper-division writing exam. Of the 49 required General Education units, 7 units of G.E. will be satisfied by the following two courses in additional requirements: 4 units of CHEM 1A/1AL in G.E. Breadth B1 and 3 units of MATH 75 in G.E. Foundation B4. Consult the department chair or faculty advisor for details. See advisor for details.

Advising Notes
1. No more than 1 unit of EES 160 may be used to fulfill the upper-division elective requirement. EES 154, 155, and 168 are not applicable toward geology major requirements.
2. CR/NC is not permitted in the geology major with the exception of EES 3, 30, and 160.
3. No more than 1 unit of EES 3 will be permitted.
4. General Education and elective units may be used toward a double major or minor (see double major or departmental minor). Consult the appropriate department chair, program coordinator, or faculty advisor for further information.
5. Students planning to pursue graduate study in geology are strongly encouraged to take MATH 76 or EES 177.

FACULTY

For faculty phone numbers and e-mail, see the campus directory.

For more on the faculty, see the faculty pages.
The faculty pages are updated by the department or program.