Geology, B.S.

DEPARTMENT

Department of Earth and Environment 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 - Contin

CERT in Geographic Information Systems, Certificate of Adv Study - Continuing & Global Education

CRED in Single Subject Credential - Geological Science

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.

Our applied geology option specializes in engineering geology, hydrogeology, or exploration geology fields, which have the strongest employment potential.

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 in Geology Degree Requirements

Major requirements (49 units)

Lower-division requirements EES 1, 2, 12, and 30 (13 units)

Upper-division requirements

EES 100, 101, 102, 104, 106, 107, 178, 199; two of the following: EES 105, 110, 122; one of the following: EES 114, 117, 118, 124 (33 units)

Upper-division geology elective (see Note 2) (3 units)

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

Remaining General Education requirements (45 units)*

Electives and remaining degree requirements (4 units)

Upper-division writing skills; (see Degree Requirements); may be used toward a minor

Total (120 units)

* Of the 51 required General Education units, 6 units will be satisfied by the following two courses in additional requirements: 3 units of CHEM 1A in G.E. Breadth B1 and 3 units of MATH 75 in G.E. Foundation B4. Consult the department chair or faculty adviser for details.

Advising Notes

- 1. "Additional requirements" courses may be applied to satisfy requirements of General Education, or a minor, as appropriate. They also may be taken CR/NC (see Credit/No Credit Grading).
- 2. 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.
- 3. No General Education Integration course offered by the Department of Earth and Environmental Sciences may be used to satisfy the General Education requirements for geology majors.
- 4. CR/NC is not permitted in the geology major with the exception of EES 3, 30, and 160.
- 5. No more than 1 unit of EES 3 will be permitted.
- 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 adviser for further information.
- 7. Students planning to pursue graduate study in geology are strongly encouraged to take MATH 76 or EES 177.

FACULTY

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