

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

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

Certificate of Advanced Study in Geographic Information Systems (GIS) Requirements

GIS uses digital technology to assist the evaluation of spatial information. GIS professionals acquire, manage, analyze, visualize, and represent geospatial data, or information related to geographical locations. The certificate requires 12 units. This is an online course of study. See the Continuing and Global Education site for more.

Required Coursework:

EES 211: Fundamentals of Geographical Information Systems (3 units)
EES 212: Introduction to Geospatial Technologies (3 units)
EES 214: Advanced Spatial Analysis (3 units)
EES 216: Practicum (3 units)

Total (12 units)

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.