

Geophysics graduates are employed to use their skills in many of the same fields as geology graduates, as well as:

Earthquake science: Carrying out cutting-edge research into the physics and geology of earthquakes.

Exploration geophysics: Using geophysical techniques to find oil, gas, water, and mineral deposits.

Production geophysics: Using geophysical techniques to assist the efficient recovery of oil and gas from the ground.

In addition to being hired in the above fields, many of our graduates move on to graduate school to pursue M.S. and Ph.D. degrees.

FIELDWORK

Rocks and minerals, volcanoes and glaciers, landslides and wildfires, fossils and fault-lines; so much of what we study is found outdoors. Geology courses take you off campus to the mountains, deserts, and seashores for practical experience. We climb volcanoes, peer into tide-pools, skip across salt flats, all for academic credit. Add optional field trips with the student club, work with research expeditions, or internships with the County Geologist and your college curriculum maintains that healthy balance of physical and intellectual exercise. Our outdoor classroom may be huge but the field groups are small and the instruction personal, bringing you close to your instructors and strengthening your professional network.

ADVISING

Current course requirements are available online in the UCR General Catalog at catalog.ucr.edu.



For help in selecting courses, and for information about policies and procedures, contact:
Professional Academic Advisor Michelle Butler
CNAS Undergraduate Academic Advising Center
1223 Pierce Hall
Phone: (951) 827-3581
Email: michelle.butler@ucr.edu

For advice about careers, graduate programs, and letters of recommendation for Geology majors, contact:
Undergraduate Faculty Advisor Nigel Hughes
Email: nigel.hughes@ucr.edu
Phone: (951) 827-3098
Geophysics majors should contact:
Faculty Advisor Gareth Funning
Email: gareth.funning@ucr.edu
Phone: (951) 827-2037
More information is also available on the department website: earthsciences.ucr.edu.

Undergraduate studies in **Earth Sciences**



Growing great science
Making new discoveries
Building great minds



Earth Sciences at the University of California, Riverside

EARTH SCIENCES

The Department of Earth Sciences focuses on understanding Earth's dynamic nature and history, investigating geological processes operating at a wide range of spatial and temporal scales. In particular, we explore how knowledge of Earth history can help us prepare for the future challenges of global change, resource location and usage, and earthquake hazards. Our graduates receive a strong training in both geological theory and its practical application.

ABOUT THE DEPARTMENT

The department, which maintains a relatively small number of majors, offers many opportunities for undergraduate students to become involved in faculty research projects soon after they arrive on campus. This work contributes to our department's outstanding record of research publication in the world's top science journals, some of which include undergraduates as co-authors. Our strong emphasis on fieldwork provides further opportunities for students and faculty to get to

know each other. These features of our program give our graduates a special competitive edge when they leave UCR and enter the work world or proceed to graduate study.

ABOUT THE MAJOR

The Department of Earth Sciences offers B.S. degrees in Geology, Earth Sciences, and Geophysics. These degree programs are designed for students with a strong interest in various aspects of the Earth Sciences, and for students interested in secondary teaching with a science emphasis. The Geology and Geophysics programs place a particular emphasis on fieldwork with field courses, field trips in all appropriate courses, and excursions between quarters. The Earth Sciences program stresses the interdisciplinary and interlinked nature of all aspects of Earth Sciences, with concentrations in various aspects of this broad field. Specific course requirements can be found in the UCR catalog at catalog.ucr.edu.

CAREER PATHS

Graduates in Geology and Earth Sciences are typically employed in the following fields, both for

private companies and public agencies:

Geological research: Preparing for graduate school and careers in cutting-edge research across a wide spectrum of geosciences.

Engineering geology / geotechnical engineering: Assessing the geological stability and suitability of sites for construction, including exposure to geological hazards (landslides and earthquakes).

Environmental geology: Assessing and mitigating the environmental hazards due to human activity, such as pollution and global climate change.

Hydrogeology: Finding and managing groundwater resources.

Mining geology: Locating and exploiting coal and mineral resources.

Petroleum geology: Identifying and exploiting oil and gas resources.

Risk assessment: Determining the potential economic and societal impacts of geological hazards, such as earthquakes.

Science teaching: Earth Science is taught in California in 6th grade, as well as in an elective in grades 9-12.