

# GEOLOGICAL SCIENCES

This major includes a spectrum of disciplines focused on understanding the processes that influence the tectonics and environment of the planet, on using this understanding to read the record of earth history written in rocks and sediments, and on developing models that can be used to predict future changes due to natural phenomena and recent perturbations caused by humans.

## BACHELOR OF SCIENCE (BS) GENERAL OVERVIEW

One introductory course. Examples include:

- Planet Earth
- Oceanography
- Crises of a Planet
- Climate Change
- Earthquakes

Eight required courses:

- General Chemistry A & B
- Calculus I and II
- Mineral and Earth Systems
- Undergraduate Team Research
- Field Geology or Direct Research
- Senior Thesis

Choose one pair from the following options:

- Physics for the Life Sciences A & B
- Fundamentals of Physics I & II
- Two semesters of General Biology

Seven elective courses. Examples include:

- Structural Geology and Tectonics
- Data Analysis in the Earth & Environmental Sciences
- Geobiology and Astrobiology
- Paleontology and Evolution in Deep Time

## ACADEMIC OPPORTUNITIES

**Southern California Earthquake Center:** Geology majors in their sophomore, junior, or senior year are eligible to intern with the SCEC headquarters at USC.

**Earth Science Team Research:** This eight-unit, multidisciplinary student research experience takes place largely outside of the classroom. Students teams work closely with faculty to collect data in the field, interpret their findings, and present at a symposium held in the spring semester.

**Maymester:** Field-based research is an essential part of Geological Sciences, and students have the opportunity to participate in this unique spring program in which they travel and complete field work in the Southern Andes, Argentina during the month of May.