

# Geology, B.S. & B.A.

Humboldt Geology students learn the field, lab, and scientific reasoning skills necessary to mitigate a variety of geological and environmental challenges. Our North Coast location near the Mendocino triple junction and the Klamath and Cascade mountains provides unparalleled opportunities to study active geological processes like tectonics, volcanoes, glaciers, and rivers in an inclusive and safe learning environment where we can learn and thrive together.

### **Experience Your Learning**

Geology students have the opportunity to apply their knowledge to real world issues, like working to make communities more sustainable and resilient in the face of local geologic hazards such as earthquakes, tsunamis, and rising sea level. Geology students also work to better understand climate change through studies that combine stratigraphic analysis, geomorphology, and sustainable water management.

Our "Field Camp" course is a 24/7 immersive field-based experience, where students and faculty camp, cook, learn, and map together in a wilderness setting for 4 weeks in their final summer semester. Field camp is a critical component of the education and training of a geologist.

Examples of field trips include visits to local active fault zones to measure surface displacement during (and in between) earthquakes, the Arcata Marsh to core for records of past earthquakes and tsunami, Big Lagoon to measure coastal erosion, Lassen Volcanic National Park to observe recent volcanic eruptive material, Trinidad State Beach to piece together a complicated rock record of subduction, and Jacoby Creek to measure creek discharge and assess watershed health.

Geology students have the opportunity to work directly with a faculty member on a research project that aligns with their interests. Faculty provide mentoring and expert guidance as the student engages in field work, laboratory analyses, and scientific writing that culminates in an undergraduate thesis.

#### X Did you know?

- Stars to Rocks, our first-year learning community, gets you connected to professors quickly, as well as a cohort of like-minded students who support each other throughout college.
- The Geology Club hosts activities that include field trips throughout the year, an annual rock auction, and end-of-the-year picnic and campout.
- Students can take part in a series of in-person and virtual presentations and seminars from geological researchers and professionals.





# **Academics & Options**

Geology B.S. & B.A.

#### **Geology B.S.**

The Bachelor of Science is a comprehensive degree designed to prepare students for professional careers in the geological sciences, like geotechnical and environmental consulting, engineering geology, or natural resource geology. The program also prepares students for graduate school and geoscientist research careers. Students who earn a B.S. degree in geology will be eligible for professional geologist licensing by the State of California.

#### Geology B.A.-Geosciences concentration

The Bachelor of Arts degree is designed for students who desire an education that combines a strong geological background with another field of study, such as (but not limited to) geospatial analysis, environmental science, education, business, hazard/resource management and planning, environmental policy, and teaching. As part of the degree, students take at least 12 units within one of many approved second disciplines to broaden their interests.

#### **Minor**

Geology Minor



## **Careers**

Career opportunities include positions with government scientific and resource management agencies, geotechnical and environmental consulting firms, nonprofit conservation agencies, and universities, colleges, and schools. Our B.S. degree will meet all requirements you need to apply for an M.S. or Ph.D. program in geosciences in the United States. Examples of possible job titles you might find after earning your B.S. or B.A. degree include:

- Consulting Geologist
- Environmental Geologist
- Geomorphologist
- Environmental Scientist
- Journalist/Technical Writer
- Emergency Manager
- Field Geologist
- Marine Geologist
- Hydrogeologist
- Science Teacher

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Humboldt's Geology program provided me with extensive opportunities to get involved in research. The field work I learned during my degree has propelled me through my further education and employment. Professors also encouraged individual undergraduate research but were always around to assist. The skill set and mindset to think about problems in multiple ways, and to bounce these ideas off of others has carried me through all of my post-graduation career."

Brandon Crawford ('15, Geology), is a Geoscientist at the Los Alamos National Laboratory, working on a wide variety of projects relating to seismic hazards, geotechnology, and national security

