Oceanography, B.S.

Among the few undergraduate programs of its kind in California and the oldest on the West Coast, the Bachelor of Science in Oceanography at Cal Poly Humboldt provides a firm foundation in the study of the physical, chemical, geological, and biological aspects of the ocean through a rigorous combination of academics and practical oceangoing experience on the North Coast.

Experience Your Learning

Throughout your time at Humboldt, you’ll learn and practice the techniques needed to conduct research at sea and in the laboratory.

Aboard our 90-foot ocean-going research vessel, the Coral Sea, you’ll use key research techniques. Learn to use trawls, plankton nets, box-corers, sediment grab samplers, CTD/Rosette samplers, side-scanning sonar, and other oceanographic sampling equipment. By the time you graduate, you can expect to log around 100 hours at sea.

First-year, first-time students majoring in Oceanography and Marine Biology will be automatically enrolled in Rising Tides. One of several place-based learning communities at Cal Poly Humboldt, this year-long program of science and general education (GE) courses and activities focuses on one theme: Humboldt and Trinidad bays in Humboldt County.

In addition to being in the open ocean, you’ll have access to the Marine Lab in nearby Trinidad where several of the core Oceanography courses are taught and often used for student and faculty research projects. The lab is well equipped for marine education and research, including a constantly recharged seawater system with chiller, a wet laboratory for rearing marine invertebrates and fishes, and more.

Oceanography students have the opportunity to learn SCUBA to assist their research.

Did you know?

- Oceanography examines the entire range of ocean processes, including the physics, chemistry, and geology, as well as the biology. Oceanography requires understanding a broad range of scientific fields and techniques to engage with the ocean as a whole system.
- The ocean covers 70 percent of the planet and is crucial to our survival.
- Oceanographers pick a specialization based on the aspect of the oceans of most interest to them.
Academics & Options

Oceanography, B.S.

Sub-disciplines
Students who major in Oceanography can also tailor the program to a range of sub-disciplines that have an oceanic focus, making it easy to earn a minor in other disciplines such as Biology, Chemistry, and Geology.

- **Biological Oceanography**: the study of marine ecosystems and how they function.
- **Chemical Oceanography**: the study of how chemicals move through the marine environment.
- **Geological Oceanography**: the study of plate tectonics, classification of major bathymetric features, and the distribution, transport and deposition of recent sediments in the marine environment.
- **Physical Oceanography**: the study of the physical conditions and physical processes within the ocean such as waves, currents, eddies, gyres and tides.

Minor
- Oceanography Minor

Careers
With a strong foundation in science and oceanic studies, you will have the knowledge and skills to tackle some of the most pressing issues that affect the health of our oceans and planet. Those issues include rising seawater, pollutants, the impact of human activity on marine ecosystems, and seismic activity.

- Oceanographer
- Marine Biologist
- Hydrographic Survey Technician
- Marine Resource Specialist
- Ocean Technician
- Hydrologist
- Scientific Diver
- Coastal/Ocean Engineer
- NOAA Corps Officer
- Aquaculture Technician

I liked how the program was really close and intimate. The professors are accessible and the students are very close with one another. You spend four years with a group of people who have similar interests to you, and you get to work very well together, it’s just a very good experience that way!”

Meredith Hayes ('00, Oceanography), Project Scientist, GZA Geo-Environmental Consultants