

Environmental Systems, M.S.

You want to make a difference in the world? A master's degree in Environmental Systems opens the door to making an impact on the world and its resources. The graduate program in Environmental Systems at Cal Poly Humboldt offers three options in Environmental Resources Engineering, Geology, and Energy Technology & Policy within a single graduate program.

Experience Your Learning

Environmental Systems is a lab-intensive master's degree program. Students have access to research facilities that include laboratories for thermodynamics, hydraulics, water quality, a rooftop solar energy lab, and abundant field labs.

The Schatz Energy Research Center is a national leader in areas including renewable energy microgrids and off-shore wind energy. It is also involved in international work related to energy access in off-grid areas.

Faculty and students from the Environmental Resource Engineering program were involved in the original design and development of the The Arcata Marsh and Wildlife Sanctuary's constructed wetland treatment system, and continue to play a key role in the continued optimization of the system.

The University is located along the active Cascadia subduction zone and south Cascades volcanic arc, as well as near the Six Rivers National Forest and Trinity Alps, giving student researchers unique opportunities to study diverse geologic processes.

The Campus Center for Appropriate Technology is a live-in demonstration home and educational center for appropriate technology and resource conservation on the campus.



Did you know?

- **Environmental Systems is an interdisciplinary Master of Science program that helps students better understand and shape the complex systems that underpin our society.**
- **Near empty beaches, mountain ranges, wild rivers, and ancient redwood forests, Cal Poly Humboldt is an ideal place to live and learn.**
- **At Cal Poly Humboldt, we believe strongly in the power of experiential education. Students learn through coursework, field work, and hands-on projects.**



Academics & Options

Environmental Systems, M.S.

Program Options

Environmental Resource Engineering

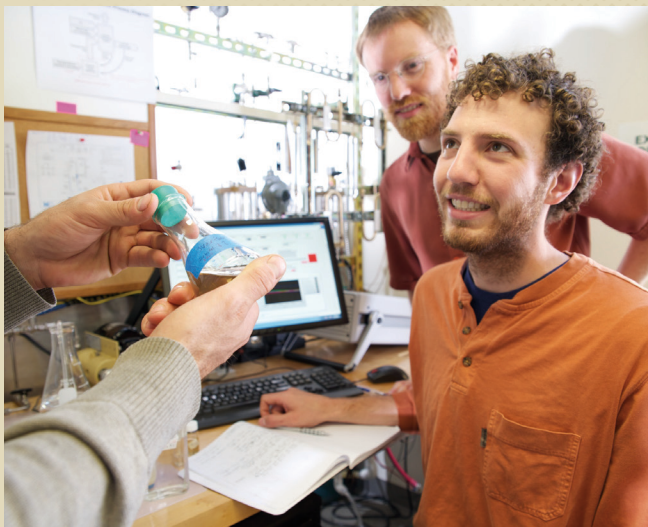
Emphasizes the application of engineering skills to planning, design, and management problems involving environmental resources. Three general areas of research activity are available in the program: water quality, water resources, and renewable energy resources.

Energy Technology & Policy

Efforts to end world poverty and sustain a robust global economy, while simultaneously working to mitigate global climate change and other energy induced environmental issues, are among the greatest challenges of the 21st century and the focus of this option.

Geology

Helps students gain expertise in subdisciplines such as glacial geology, tectonic geomorphology, volcanology, petrology, tectonics, and geochronology through faculty mentored original scientific research, extensive field opportunities in an active and diverse setting, and specialized coursework.



Careers

There are a variety of career opportunities for environmental systems professionals to pursue. These jobs span several specialties with a combined purpose to understand the earth and its resources, find solutions to environmental challenges, and encourage positive relationships between human-made systems and nature.

- Civil Engineer
- Energy Systems Engineer
- Energy Policy Specialist
- Environmental Consultant
- Environmental Engineer
- Geologist
- Natural Resource Specialist
- Transportation Planner
- Water and Wastewater Engineer
- Water Treatment Operator



Cal Poly Humboldt is a vibrant community with a great sense of responsibility towards local and global issues. The ETaP program at Humboldt has completely changed the way I think about energy and environment related issues. The small classroom size and focus on group discussions enhanced my understanding of development, energy poverty, and climate change."

AmitKumar ('15, Environmental Systems, M.S.),
International Clean Energy Expert,
IGF International