COLLEGE OF THE ENVIRONMENT

UNIVERSITY of WASHINGTON

Ever wondered how our world works? Or how humans affect our planet? Could you make it better?

At the University of Washington's College of the Environment, you can explore the environment from the Earth's core to outer space, using high tech approaches to solve sustainability issues.

Board a research ship to survey Pacific Ocean marine life. Trek into the Cascade Mountains to monitor volcanoes in the ancient Ring of Fire. Build computer models to predict how the climate is changing. Learn about natural resources from the communities who depend upon them.

Not sure what you want to do? We get that. Try out a bunch of classes and experiences to find what you like. You'll be challenged and supported.

I knew I wanted to study the environment. I was interested in a lot of different things - temperate rainforests, tide pools, the impacts of climate change. The depth and breadth of UW's College of the Environment allows me to follow my passion for the environment wherever I want to go.

ESAAC MAZENGIA Environmental Science and Terrestrial Resource Management major, class of 2021



Yep, we're a big university. But big means eight unique majors. Big creates lots of research opportunities. And you won't get lost. As you find your path, we're here to help you do amazing work. Our faculty are committed to their students, and our programs will help you build community.



In my lab the undergraduates come from diverse backgrounds. Each brings huge enthusiasm and smarts. Together they create solutions. I love working with them.

PETER KAHN Professor, School of Environmental and Forest Sciences

What's your path in the College of the Environment?

Whether you already know your path, or need the time to explore, that's okay! Unlike other science majors at the UW, you can declare a major* in the College of the Environment at any time, starting on your first day of freshman year.



ENGINEERING

MAJOR: BIORESOURCE SCIENCE AND ENGINEERING

BIORESOURCE SCIENCE AND ENGINEERING: (BS*) In the only program of its kind in the western U.S. to link chemistry and engineering to bio-sustainability, BSE students learn to create and innovate sustainable and renewable materials, from paper to biofuels and batteries. BSE applies chemical engineering and materials science to design natural and fiber-based materials, creating environmentally sound systems for their production.

*Capacity constrained: Students must apply to the major.

- 100% job placement!
- Fully accredited by the Engineering Accreditation Commission of ABET.



EARTH SCIENCES

MAJORS: ATMOSPHERIC SCIENCES | EARTH AND SPACE SCIENCES | OCEANOGRAPHY

ATMOSPHERIC SCIENCES: (BS, minor) ATMS students use physics, chemistry and math to study our planet's weather and model our current and future climate. Simulate the atmospheric circulation on Mars. Discover how atmospheric chemistry affects cloud patterns. Use computer simulations to investigate climate change. This quantitative major uses big data to focus on issues critical to how our world works and to societal welfare.



Ranked in the top 10 atmospheric science and meteorology programs in the U.S.

EARTH AND SPACE SCIENCES: (BA,

BS, minor) ESS students study the physical processes that shape planets, from the core to the crust. Study fossils and minerals to learn about our planet's beginnings. Create model rockets to explore space. Monitor earthquakes and volcanoes to help create early warning systems. Hone your skills at Field Camp.

ESS fully prepares you for the Washington state geology licensing exam.





OCEANOGRAPHY: (BA, BS, minor) More than 70% of the Earth's surface is covered in ocean. OCEAN students study the chemistry, physics and geology of the oceans. Sample seawater from extreme environments like deep sea hydrothermal vents. Develop high-tech tools that fly across the ocean collecting temperature and pH data. Dive into big data science and contribute to models of ocean circulation and ocean warming.



Ranked #1 in international polls!



MARINE SCIENCES

MAJORS: AQUATIC AND FISHERY SCIENCES | MARINE BIOLOGY | OCEANOGRAPHY

AQUATIC AND FISHERY SCIENCES: (BS, minor) AFS students dive deep into marine science and resource management, from kelp, to salmon to whales. Examine the physiology and genetics of individual organisms. Study the population dynamics of fished species. Explore the complex ecosystems that are home to both fish and people. Understand how people can protect and sustainably use marine resources.



The longest-running marine science program at the University of Washington.





coastlines, tropical reefs, kelp forests and the open ocean beckon you? The marine realm is the oldest, most biodiverse place on the planet. Build your understanding of marine systems through a physical, biological and social exploration of all things wet and salty. A required quarter of field experience allows students to live and study at Friday Harbor Marine Laboratories.

The newest—and fastest growing— major in the College of the Environment. I came to UW because of Friday Harbor Labs: A quarter there was the best decision of my undergraduate career. Diving in at the Labs resulted in lifelong friendships, a passion for marine invertebrates, and the decision to continue on the research path in graduate school.

SANNA TITUS Marine Biology major, class of 2020

OCEANOGRAPHY: (BA, BS, minor) OCEAN students interested in biological pathways will venture near and far to investigate issues of scientific and societal interest. Explore Puget Sound marine life on the R/V Rachel Carson. Participate in open ocean research on the R/V Thomas G. Thompson, sampling plankton along the ship-track. Investigate the connection between the ocean and global climate.



The first undergraduate oceanography program in the U.S.

ECOLOGY AND CONSERVATION

MAJORS: AQUATIC AND FISHERY SCIENCES | ENVIRONMENTAL SCIENCE AND TERRESTRIAL RESOURCE MANAGEMENT

AQUATIC AND FISHERY SCIENCES: (BS, minor) Freshwater is essential to life on Earth and is home to many of the aquatic resources we rely on for food and culture. In addition to marine resources, AFS students will explore river and lake systems from the pristine to the degraded, work on non-native and invasive species, and use sophisticated computational approaches to help conserve, manage, and use our planet's aquatic resources.



Consistently ranked in the top 10 in national polls.





ENVIRONMENTAL SCIENCE AND TERRESTRIAL RESOURCE

MANAGEMENT: (BS, minor) ESRM students study forests and other terrestrial ecosystems from microbial to landscape scales and from urban to wildland settings. Tackle environmental management, conservation and restoration issues. Track wildlife, map habitats and model ecosystem change with the latest field and lab technology, from camera traps to Lidar remote sensing to GIS. Explore cultural and economic issues. Experience handson learning at the Olympic Natural Resources Center (Olympic Peninsula) and Pack Experimental Forest (Cascades).

The largest major in the College of the Environment.

ENVIRONMENTAL STUDIES

MAJOR: ENVIRONMENTAL STUDIES

ENVIRONMENTAL STUDIES: (BA, minor) Interested in environmental issues at home and around the world? If you want to be part of the solution, Environmental Studies is an exciting liberal arts major examining the world through a mosaic of natural science, social science and humanities approaches. Understand where food really comes from as a UW Farm intern, get involved in environmental justice projects, create a team for the Environmental Innovation Challenge. Students also gain professional experience and career skills through a year-long capstone internship program.



100% of students complete year-long senior internships.



My students inspire me. They're willing to do the hard work to make some big changes to sustain the world we live in, and I'm stoked to be able to support them. It's incredibly gratifying to see the impact they're making—not in the distant future, but right now.

SEAN MCDONALD Lecturer, Program on the Environment

Minors

See more than one major you like? College of the Environment majors can also be sampled as specially-designed minors (except Bioresource Science & Engineering).

In addition, there are four interdisciplinary minors:

ARCTIC STUDIES – the intersection between science and policy in the Arctic, with a focus on international organizations, national governments and non-governmental organizations.

CLIMATE SCIENCE – a quantitative foundation in climate science blending earth science, atmospheric science, ocean science and computation, with opportunities to explore policy, energy, and human dimensions of climate change.

ECOLOGICAL RESTORATION – address the complex relationships of human communities and ecological sustainability through a hands-on, team-based, real-world project.

QUANTITATIVE SCIENCE – the application of statistical and mathematical tools to problems in ecology, conservation, renewable resource management and the environment.



Careers

From National Geographic to the National Oceanic and Atmospheric Administration (NOAA), our graduates take leading roles in both public and private sectors. And as part of a growing network of alums, they give back.

Our degrees will prepare you for a highend career, equipping you with the ability to think, problem-solve, work in teams, meet deadlines and creatively put yourself out there.

GRADUATES' NEXT STEPS:





First jobs for our alumni have included:

- Process Engineer
- Marine Renewable Energy Associate
- Climate Analyst
- Environmental Geologist
- GIS Specialist
- Resource Conservation Specialist
- Wildlife Scientist
- Fisheries Scientist
- National Park Ranger
- Community Relations Planner
- Meteorologist/Weather Communications

Many graduates are directly admitted into highly competitive graduate school programs in: physical, biological and environmental sciences, policy and law, and engineering.



Each year we've hired at least one College of the Environment student for our summer program. They get real-life job experience. As a UW alum, I know firsthand how great the program there is. I felt very prepared for my role here based on what I learned as an Environmental Studies major.

ELIZABETH SZORAD Waste Zero Specialist, Recology (class of 2014)

Action Steps

CONNECT

Sign up for updates! Contact us at coenvadv@uw.edu or 206-543-3141.

VISIT

Come see us! Tour with a Student Ambassador.

APPLY

Want to start changing the world for a living? Apply before November 15th.

FUNDING

Finances shouldn't limit your options—explore scholarship information on our website.

Find us at: environment.uw.edu/undergrads

COLLEGE OF THE ENVIRONMENT

BE BOUNDLESS