

Photo credit: ESPM

#### **HOW TO USE THIS MAP**

Use this map to help plan and guide your experience at UC Berkeley, including academic, co-curricular, and discovery opportunities. Everyone's Berkeley experience is different and activities in this map are suggestions. Always consult with your advisors whenever possible for new opportunities and updates.

#### **CONNECT WITH US**

#### **Cal Day**

Come to UC Berkeley's annual **Open House** in April for information sessions, campus tours, special talks, and more.

#### **Golden Bear Orientation**

Join your peers in the campus-wide UC Berkeley **orientation** program for all new students.

#### **Events**

Attend department events with students, faculty, and staff. Visit **nature.berkeley.edu** for news and updates.

#### **ADVISING**

The Undergraduate Advisors for all Rausser College majors are located in the Office of Instruction and Student Affairs in 260 Mulford Hall.

Visit nature.berkeley.edu/advising/meet-rausser-advisors for detailed office hours and appointment booking links. You may email general advising questions to envsci.ugrad@berkeley.edu.

Visit **ue.berkeley.edu/majormaps** for the latest version of this major map.

## Berkeley

Rausser College of Natural Resources 130 Mulford Hall #3110 Berkeley, CA 94720-3110 nature.berkeley.edu

## **ENVIRONMENTAL SCIENCES**

Bachelor of Science



#### **INTRODUCTION TO THE MAJOR**

**Environmental Sciences** (ES) is a broad, interdisciplinary major that examines the impact of human activities on natural systems. Students learn how to apply tools and techniques from a variety of disciplines such as biology, ecology, chemistry, toxicology, geology, hydrology, meteorology, geography, engineering, statistics, behavioral science, policy analysis, economics, and law.

All ES majors complete a senior thesis in which they investigate an environmental issue, design and execute independent research, and present their results in oral and written form.



Photo credit: Julia Gipple

What makes ES such a great major is its interdisciplinary nature and the structured execution of a senior thesis of your choosing.

- Aileen Lavelle, ES Student & Peer Advisor

#### THE ES CURRICULUM

ES has three concentrations: Biological Science, Social Science or Physical Science. For all concentrations, lower division coursework emphasizes basic science in a rigorous curriculum drawn from biology, chemistry, mathematics, physics, economics and environmental science.

For upper division courses, students take electives in their area of interest and courses in research methodology and environmental modeling to prepare for the senior research seminar. This yearlong course is the capstone of the major where students design and conduct their own research with guidance from faculty.

#### **AMPLIFY YOUR MAJOR**

- Apply to the Sponsored Project for Undergraduate Research (SPUR) program to pursue joint research with a faculty member.
- Get 1:1 mentoring from graduate students with **Berkeley Connect in ESPM**.
- Conduct field research in the Sierra Nevada at Forestry Field Camp or in French Polynesia through the Moorea Program.
- Join a student group such as the Environmental Sciences Student Association.

# ENVIRONMENTAL SCIENCES

### **DESIGN YOUR JOURNEY**

Apply to jobs, graduate school, and other

opportunities.



	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR	
<b>Explore</b> your major	Familiarize yourself with <b>ES major requirements</b> .  Meet with the <b>ES major advisor</b> to sketch out a four-year plan.  Talk to a <b>peer advisor</b> about life at Rausser College.	Complete lower division prerequisites and <b>declare the major</b> if currently undeclared.  Consider a <b>minor</b> , <b>certificate</b> , or <b>course thread</b> .  Meet with the ES major advisor if you plan to study abroad.	Complete the statistics requirement no later than the fall semester.  Start brainstorming research topics for your senior thesis and reach out to potential faculty mentors.  Take ESPM 100ES during the spring semester, which culminates in a proposal for your senior thesis research topic.	Take <b>ESPM 175</b> and find a faculty mentor for your senior thesis.  Do a degree check to ensure you are on track to graduate.  Complete any "bucket list" courses and remaining major, college, and campus requirements.  Present your research at the ES Symposium to your peers, friends, and family.	
Connect and build community	Take advantage of the Rausser Student Resource Center.  Get 1:1 mentoring with Berkeley Connect in ESPM.  Join a student group like the Environmental Sciences Student Association.	Start attending Rausser <b>undergraduate events</b> .  Explore ways to <b>get involved</b> at Rausser College through special programs and groups.  Get to know professors and graduate student instructors during office hours.	Help other students as a Rausser <b>Peer Advisor</b> .  Become a <b>Golden Bear Orientation Leader</b> and welcome new students to UC Berkeley.  Seek mentorship from your professors, faculty, and graduate student instructors.	Join a professional association such as the <b>National Association of Environmental Professionals</b> or <b>Society for Conservation Biology</b> .  Connect with <b>alumni groups</b> such as the <b>Rausser College Alumni Association</b> and build your <b>network</b> as you prepare to graduate.	Ī
<b>Discover</b> your passions	Discover new interests in a <b>Freshman Seminar</b> or <b>DeCal course</b> like ESPM 98.  Attend the Undergraduate Research and Scholarships Fair in October.  Learn about <b>research opportunities</b> for Rausser students.  Apply for a research position through <b>SPUR</b> .	Enroll in a Sophomore Seminar, Big Ideas Course or Discovery Course.  Assist faculty in their research through URAP.  Check out research by your peers at a Rausser poster session.  Consider a course thread in Humanities & Environment or Sciences and Society.	Apply for a <b>Rausser Travel Grant</b> to fund travel for academic conferences or research.  Find research and funding opportunities in the <b>OURS database</b> , <b>SPUR</b> , or <b>URAP</b> .  Work on energy and climate change solutions as part of the <b>CITRIS Workforce Innovation Program</b> .  Enrich your studies with classes in other areas of academic interest.	Teach your own <b>DeCal course</b> .  Participate in the college <b>Honors Program</b> .  Present your research at a poster session or submit to the <b>Berkeley Scientific Journal</b> .  Keep pursuing your interests through a <b>fellowship</b> or by taking a gap year.	
Engage locally and globally	Attend the <b>Calapalooza</b> student activities fair and get involved with a student organization.  Find service opportunities through the <b>Public Service Center</b> .  Explore study, internship, and research abroad options with <b>Berkeley Study Abroad</b> .  Engage with campus sustainability issues via the <b>Student Environmental Resource Center</b> .	Work with a community organization in an American Cultures Engaged Scholarship course.  Experience life at another UC or college on a visitor and exchange program.  Check out the Moorea program for fieldwork opportunities abroad.  Apply your skills in projects for Solar Spring Break or the Green Initiative Fund.	Participate in a field science or ecology program at the <b>UC Natural Reserve</b> .  If interested in environmental policy, look into <b>UCDC</b> or <b>Cal in the Capital</b> .  Help youth learn about ecology and the environment through <b>Berkeley SEEDS</b> .	Explore service opportunities after graduation, such as Peace Corps, Teach for America, or U.S. Department of State.  Attend a conference such as the Clinton Global Initiative: University Conference. Look into travel grants from the college and ASUC.  Help farm and forest communities in California through Grizzlycorps.	Ī
Reflect and plan your future	Visit Berkeley Career Engagement and the Career Counseling Library.  Develop a plan for getting career ready.  Sign up for Handshake and CareerMail.  Check out the Environmental Sciences Career	Take advantage of career and pre-health advising for Rausser students.  Explore career fields through the Career Connections Series or a winter externship.  Learn about graduate and professional school.  See Step-by-Step for planning help.	Conduct <b>informational interviews</b> .  Discuss post-graduate options with advisors and professors.  Update your resume and <b>LinkedIn</b> profile.  Attend <b>career and graduate school fairs</b> like the	Utilize <b>job search tools</b> from the Career Center.  Ask professors and graduate student instructors for recommendation letters.  Meet employers at <b>Employer Info Sessions</b> and <b>On-Campus Recruiting</b> .	

Environmental and Sustainability Career Fair.

internship fair.

Think about doing an **internship** and attend an

Snapshot.

## WHAT CAN I DO WITH MY MAJOR?

ES graduates are well-prepared for careers in fields such as environmental consulting, education, health, or law, as well as community, urban, or regional planning and other related areas of environmentalism. Graduates are well-qualified for a variety of graduate programs, including environmental policy and management, law school, medical school, and environmental engineering.

#### **Jobs and Employers**

Analyst Consultant, Accenture
Biological Tech., Dept. of Agriculture
Biologist Intern, UCSF
Business Associate, Next Jump
Consultant, NASA
Data Analyst, Lucid Software
Environmental Compliance Intern,
Recology
Environmental Scientist, Americorps
Forestry Tech., Collins Company
GIS Data Specialist, City of San

Mateo Naturalist, Aquarium of the Bay Software Ops. Specialist, Nuro

#### **Graduate Programs**

Civil Engineering, PhD
Ecology, PhD
Environmental Science, Masters
Forestry, PhD
Law, JD
Molecular Biology, PhD
Public Health, Masters
Public Policy Analysis, Masters

Examples gathered from **LinkedIn** and the **First Destination Survey** of recent Berkeley graduates.