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.

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.

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

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.
### Bachelor of Science in Environmental Sciences

#### First Year
- Explore your major
  - Familiarize yourself with ES major requirements.
  - Meet with the ES major advisor to sketch out a four-year plan.
  - Talk to a peer advisor about life at Rausser College.

- Connect and build community
  - Take advantage of the Rausser Student Resource Center.
  - Get to mentoring with Berkeley Connect in ESPM.
  - Join a student group like the Environmental Sciences Student Association.

- Discover your passions
  - Discover new interests in a Freshman Seminar or DeCal course like ESPM 46.
  - Attend the Undergraduate Research and Scholarships Fair in October.
  - Learn about research opportunities for Rausser students.
  - Apply for a research position through SPUR.

- Engage locally and globally
  - Attend the Calapalooza student activities fair and get involved with a student organization.
  - Find service opportunities through the Public Service Center.
  - Explore study, internship, and research abroad options with Berkeley Study Abroad.
  - Engage with campus sustainability issues via the Student Environmental Resource Fund.

- Reflect and plan your future
  - Visit the Career Center and Career Counseling Library.
  - Check out the Career Center Yearly Planner.
  - Sign up for Handshake and CareerMail.
  - Check out the Environmental Sciences Career Snapshot.

#### Second Year
- Explore your major
  - Complete lower division prerequisites and declare the major if currently undeclared.
  - Consider a minor, certificate, or course thread.
  - Meet with the ES major advisor if you plan to study abroad.

- Connect and build community
  - Start attending Rausser undergraduate events.
  - Explore ways to get involved at Rausser College through special programs and groups.
  - Get to know professors and graduate student instructors during office hours.

- Discover your passions
  - Enroll in a Sophomore Seminar, Big Ideas Course or Discovery Course.
  - Assist faculty and grad students in their research through URAF or SURF-SMART.
  - Check out research by your peers at a Rausser poster session.
  - Consider a course thread in Humanities & Environment or Sciences and Society.

- Engage locally and globally
  - Work with a community organization in an American Cultures Engaged Scholarship course.
  - Experience life at another UC or college on a student group like ESPM 98.
  - Apply for a research position through SPUR.

- Reflect and plan your future
  - 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 like ESPM 100ES.
  - Think about doing an internship and attend an internship fair.

#### Third Year
- Explore your major
  - 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 120ES during the spring semester, which culminates in a proposal for your senior thesis research topic.

- Connect and build community
  - Help other students as a Rausser Peer Advisor.
  - Become a Golden Bear Orientation Leader and welcome new students to UC Berkeley.
  - Seek mentorship from your professors, faculty, and graduate student instructors.

- Discover your passions
  - Apply for a Rausser Travel Grant to fund travel for academic conferences or research.
  - Find research and funding opportunities in the OURS database, SPUR, or URAF.
  - Work on energy and climate change solutions as part of Cal Energy Corps.
  - Enrich your studies with classes in other areas of academic interest.

- Engage locally and globally
  - Participate in a field science or ecology program at the UC Natural Reserve.
  - If interested in environmental policy, look into UCDC or Cal in the Capital.
  - Help youth learn about ecology and the environment through Berkeley SEEDS.

- Reflect and plan your future
  - Conduct informational interviews.
  - Discuss post-graduate options with advisors and professors.
  - Update your resume and LinkedIn profile.
  - Attend career and graduate school fairs like the Environmental and Sustainability Career Fair.

#### Fourth Year
- Explore your major
  - Take ESPM 175 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
  - Join a professional association such as the National Association of Environmental Professionals or Society for Conservation Biology.
  - Connect with alumni groups such as the Rausser College Alumni Association and build your network as you prepare to graduate.

- Discover your passions
  - Teach your own DeCal course.
  - Participate in the college Honors Program.
  - Present your research at a poster session or submit to the Berkeley Scientific Journal.
  - Keep pursuing your interests through a fellowship or by taking a gap year.

- Engage locally and globally
  - 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 Cal in the Capital.
  - Apply for a fellowship or teach for America.

- Reflect and plan your future
  - Utilize job search tools from the Career Center.
  - Ask professors and graduate student instructors for recommendation letters.
  - Meet employers at Employer Info Sessions and On-Campus Recruiting.
  - Apply to jobs, graduate school, and other opportunities.

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### What Can I Do With My Major?

ES graduates are well-prepared for careers in fields such as environmental consulting, education, health, law, or 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

- 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, Remedy
  - Environmental Scientist, Americorps
  - Forestry Tech., Collins Company
  - GIS Data Specialist, City of San Mateo
  - Naturalist, Aquarium of the Bay
  - Software Ops. Specialist, Nuro

### Graduates Programs

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

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