INTRODUCTION TO THE MAJOR

The Engineering Science (ES) program is a multi-departmental and interdisciplinary undergraduate program that encompasses closely-related areas of the physical sciences, mathematics and engineering. Students in the ES program acquire knowledge of engineering methods and can pursue their interests in areas of natural science, as well as advanced study in engineering, science, or mathematics. Students choose one of four majors: energy engineering, engineering mathematics and statistics, engineering physics, or environmental engineering science. A minor in energy engineering is also offered.

AMPLIFY YOUR MAJOR

- Get involved with a student group such as Society of Engineering Sciences
- Apply to GLOBE Ambassadors, a learning and travel program for Engineering students.
- Pursue a research opportunity for Engineering students.
- Enrich your studies with a minor in Energy and Resources or Sustainability.

MAJOR OPTIONS

- **Energy Engineering** interweaves the fundamentals of classical and modern physics, chemistry, and mathematics with energy engineering applications.
- **Engineering Mathematics and Statistics** is the study of pure and applied mathematics as essential components of modern engineering.
- **Engineering Physics** interweaves classical and modern physics, chemistry, and mathematics with their engineering applications.
- **Environmental Engineering** pairs engineering fundamentals with courses in the environmental and natural sciences.

"The classes across a variety of departments have allowed me to take a very interdisciplinary approach to engineering. And the great community within this major has taught me how to work with a team." – T.G. Mekenzi Roberts, Energy Engineering Science, Class of 2020

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 engineeringscience.berkeley.edu for news and updates.

ADVISING

Visit Engineering Student Services in 230 Bechtel for advising on academic difficulty, change of major/double majors/simultaneous degrees, withdrawal/readmission, degree completion, education abroad, academic progress, and petitions and exceptions. See engineering.berkeley.edu/students/advising-counseling/

Contact the ES Undergraduate Advisor at engineeringscience@berkeley.edu about registration, departmental policy, and campus resources. Meet with an ES Faculty Advisor about coursework, careers in ES, graduate school, letters of recommendation, and summer internships. See engineeringscience.berkeley.edu/faculty/.

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

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Explore your major
Meet with your ESS advisor to discuss your academic plan.
Familiarize yourself with major and college requirements.
Talk to an ESS advisor about department programs and research opportunities.

Connect and build community
Take advantage of tutoring and workshops for Engineering students.
Find academic support at the Student Learning Center and Center for Access to Engineering Excellence.
Find student opportunities in the ESS newsletter and new student podcast.

Discover your passions
Browse research taking place in Engineering centers, institutes, and labs.
Attend the Undergraduate Research and Scholarships Fair in October.
Discover new interests in a Freshman Seminar or student-run DeCal course.
Broaden your perspective by attending Newton Series or View from the Top lectures.

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.
Connect with other students during Engineers Week.

Reflect and plan your future
Visit the Career Center and Career Counseling Library.
Sign up for Handshake and CareerMail.
Explore career resources on Engineering.
Attend an ESS workshop to create a resume and LinkedIn page.

What can I do with my major?
Graduates in Engineering Science gain a broad foundation for graduate studies in theoretical branches of engineering, as well as in mathematics, and are prepared for careers in specific sectors of industry or business, such as green technology, solar engineering, and environmental firms to name a few.

Jobs and Employers
Data Engineer, Capital One
Data Scientist, Barclays Capital
Engineer, Northrop Grumman
Hybrid Calibration Engineer, General Motors
Project Coordinator, Climate Corps
Software Engineer, Primus Power
Project Engineer, New Energy Equity Research Assistant, California Institute of Technology

Graduate Programs
Aerospace, Aeronautical, and Astronautical Artificial Intelligence
Robotics, PhD
Atomic/Molecular Physics, PhD
Electrical, Electronics, and Communications Engineering, Masters
Engineering, Masters
Materials Engineering, PhD
Physics, PhD

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