INTRODUCTION TO THE MAJOR

Bioengineering is the application of engineering principles to biological systems. Students in the Bioengineering major study math, physics, chemistry, and biology, in addition to computer sciences, electrical and mechanical engineering, and/or materials sciences. They bring these skills together in bioengineering courses where they learn to analyze, understand, repair, and alter biological materials and systems.

Collaboration and interdisciplinary perspectives are key skills we encourage in all of our students, and we prize cooperation over competition whenever possible. BioE graduates pursue successful careers in industry, further study in medical school, and graduate studies in bioengineering and related disciplines at top universities.

THE FUTURE OF BIOLOGY.
THE FUTURE OF ENGINEERING.

Our curriculum provides a strong foundation in engineering and the biological sciences, with the freedom to explore a variety of topics and specialize in advanced areas of research. All students take bioengineering fundamentals courses in areas such as biomechanics, instrumentation, and computational biology, and choose from a growing list of bioengineering topics for specialized advanced coursework. In addition, students will take BioE laboratory courses and complete a design or research project under faculty supervision.

Students can pursue a concentration in Biomedical Devices; Biomedical Imaging; Cell & Tissue Engineering; or Synthetic & Computational Biology.

The Bioengineering faculty care about my learning and success both as a student and as a future professional.

– Bioengineering student

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.

ADVISING

Set an appointment or drop-in to meet with a Bioengineering undergraduate advisor.

Advising Appointment Hours:
Monday - Friday 9am-1:30pm

Advising Drop-in Hours:
Tuesday - Thursday 1:15-4pm
Friday 2-4pm

Appointments can be made in person at 306 Stanley Hall or via email at mariselal@berkeley.edu. It is strongly recommended you email or call ahead to schedule an appointment.

AMPLIFY YOUR MAJOR

- Engage in undergraduate research on a faculty-initiated project or your own research topic.
- Get teaching experience as an Undergraduate Student Instructor or DeCal facilitator.
- Berkeley offers a wealth of opportunities, from supplemental classes like Bioprinting @ Berkeley to the Summer Biodesign Immersion Experience, and the Fung Fellowship in wellness and technology.

ADVISE 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 bioeng.berkeley.edu for news and updates.

BIOENGINEERING
Bachelor of Science

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

Discover community
Connect globally and locally
Locate your major
Explore Bachelor of Science concentrations
Review the Bioengineering concentrations and general degree requirements.
Look for classes that spark your interest (such as Freshman Seminars).
Choose your concentration.
Attend the BioE Town Hall.

FIRST YEAR

SECOND YEAR

Complete your major's general degree requirements.
Take lower-division courses.
Talk with advisor(s) and use the multi-year teaching plan to plan your prerequisites.
Consider a minor or summer minor.
Sketch out how it'll fit into your 4-year plan.
Attend the BioE Town Hall.

THIRD YEAR

THIRD YEAR

FOURTH YEAR

Choose classes from your concentration that will build the career skills you need.
Check in with a major advisor on degree progress.
Plan time for non-major courses on your bucket list.
Attend the BioE Town Hall.

Meet with your major and college advisor to ensure you are fulfilling all major, college, and campus requirements.
Take the Bioengineering Capstone Design course you haven't fulfilled your Design Requirement.
Attend the BioE Town Hall.

Don't stop going to events and seminars to hide in the lab. Time at Berkeley is precious.
Push your boundaries - connect with new student groups through the LEAD Center or become a Golden Bear Orientation Leader.

You've made it! Now be a mentor for others.
Cement your knowledge by teaching: become an Engineering peer advisor or tutor at the Student Learning Center.
Do your BioE and UCUES student surveys. Your perspective is at its most valuable.

Graduate Programs
Biological Sciences
Biomedical Engineering
Chemical Engineering
Computer Science
Genetics
Medicine
Molecular Biology
Natural Resources Mgmt & Policy
Neurology

WHAT CAN I DO WITH MY MAJOR?

Jobs and Employers
Clinical Research Coordinator, UCSF Engr. Tech. - Verly Life Sciences
Junior Specialist, UC Berkeley Optometric Asst., Golden Gate Opt.

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