



Photo credit: Shannon Ciston

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 chemistry.berkeley.edu for news and updates.

ADVISING

Staff advisors are located in 121 Gilman Hall and are available to assist with schedule planning, course enrollment, study abroad, and other academic matters.

Faculty mentors are available to talk with you about career planning, research, internships, graduate school, and many other questions related to becoming a scientist.

Visit chemistry.berkeley.edu/ugrad/current-students/advisers to find your staff advisor and faculty mentor, and to book an appointment.

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.

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

Berkeley

College of Chemistry Undergraduate Student Services

121 Gilman Hall
Berkeley, CA 94720-1460

chemistry.berkeley.edu/ugrad/student-services

CHEMICAL ENGINEERING

Bachelor of Science

Berkeley
UNIVERSITY OF CALIFORNIA

INTRODUCTION TO THE MAJOR

The **Chemical Engineering** major equips students for professional work in development, design, and operation of chemical processes and of process equipment, as well as preparing students for graduate study. The program incorporates both breadth requirements and a technical curriculum to ensure that students develop a foundation in engineering and science along with developing the skills to write clearly, persuasively, and read critically and effectively.

Students go on to careers of leadership and innovation in chemical engineering and related fields, and expand the base of engineering knowledge through original research and creating new technologies that can benefit the public. The program is accredited by the Engineering Accreditation Commission of ABET.



Photo credit: Shannon Ciston

“*Chemical engineering allows you to craft elegant solutions to seemingly unsolvable problems—the program and faculty will transform you.*”

– Aditya Nandy, recent graduate

STUDY OPTIONS

Students can pursue a **concentration** in biotechnology, chemical processing, environmental technology, materials science and technology, applied physical science, and business and management.

Students can also choose to pursue a **joint major** with the College of Engineering in Materials Science or Nuclear Engineering, or a **simultaneous degree** in Business Administration through the Haas School of Business.

AMPLIFY YOUR MAJOR

- Apply to the **Chemistry and Chemical Engineering Scholars Program** to be an Undergraduate Student Instructor.
- Join a ChemE **student organization** such as **AIChE**, Aurum Cosmetics, Biofuels Technology Club, or ChemE Car.
- Present your research at the College of Chemistry poster session in April.
- Apply to the **CBE Innovation Incubator**, a lab to conduct student-directed projects.

CHEMICAL ENGINEERING

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DESIGN YOUR JOURNEY

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	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR	WHAT CAN I DO WITH MY MAJOR?
Explore your major	<p>Meet with your staff advisor to discuss your academic plans.</p> <p>Familiarize yourself with major and college requirements.</p> <p>Learn about undergraduate student services from the college.</p> <p>Talk to peer advisors about life in the major.</p>	<p>Complete lower division prerequisites and start planning your upper division courses.</p> <p>Review the college guidelines for study abroad.</p>	<p>Focus on upper division requirements.</p> <p>Review your degree progress with your staff advisor.</p> <p>Declare a concentration to give more focus to your upper division coursework.</p> <p>Ask the staff advisor about the college honors programs.</p>	<p>Do a degree check to ensure you are on track to graduate.</p> <p>Complete any “bucket list” courses and finish remaining major, college, and campus requirements.</p> <p>Complement your major with a certificate, course thread, or summer minor.</p>	<p>Jobs and Employers</p> <p>Applications Engineer, KLA-Tencor Associate Analyst, ZS Associates Consultant, IBM Corp Engineer, ExxonMobil Lab Technician, Full Cycle Bioplastics Process Engineer, Abaxis R&D Process Engineer, PLANTPV Research Assistant, Zymergen</p> <p>Graduate Programs</p> <p>BioPhysics, PhD Chemical Engineering, PhD Materials Engineering, PhD Physical & Theoretical Chem. PhD</p> <p>Examples gathered from the First Destination Survey of recent Berkeley graduates.</p>
Connect and build community	<p>Visit peer tutors in Bixby Commons for help with chemistry, math, physics, and other classes.</p> <p>Find study groups, tutoring, and academic support at the Student Learning Center.</p> <p>Get help from peer advisors in 121 Gilman Hall.</p> <p>Join the College of Chemistry group on LinkedIn.</p>	<p>Join a College of Chemistry student organization such as AICHE, Aurum Cosmetics, Biofuels Technology club, or ChemE Car.</p> <p>Explore the college’s centers & institutes.</p> <p>Attend college seminars and events to learn about new research and meet guest speakers.</p>	<p>Give back by becoming a peer advisor or peer tutor in the college.</p> <p>Welcome new students to UC Berkeley as a Golden Bear Orientation Leader.</p> <p>Get to know professors and graduate student instructors during their office hours.</p>	<p>Join a professional organization related to your interests, such as Alpha Chi Sigma.</p> <p>Connect with alumni groups and build your network as you prepare to graduate.</p>	
Discover your passions	<p>Talk to your faculty mentor about research, internships, careers, and graduate school.</p> <p>Explore research opportunities in ChemE.</p> <p>Visit the Office of Undergraduate Research and Scholarships.</p> <p>Discover new interests in a Freshman Seminar or student-run DeCal course.</p>	<p>Browse the faculty research taking place in the college and talk to faculty about research opportunities for students.</p> <p>Apply to a REU research program. Check Berkeley Lab and UCSF for more options.</p> <p>Explore a career in education while gaining teaching skills with CalTeach.</p>	<p>Become an apprentice instructor, mentor, or an Undergraduate Student Instructor through the Chemistry Undergraduate Teacher Scholar Program or the Chemistry and Chemical Engineering Scholars Program.</p> <p>Apply to the CBE Innovation Incubator, a lab to conduct student-directed projects.</p>	<p>Apply for a Conference Travel Grant.</p> <p>Teach your own DeCal course.</p> <p>Keep pursuing your interests through a fellowship or gap year after graduation.</p> <p>Present your research at the College of Chemistry poster session in April.</p>	
Engage locally and globally	<p>Attend the Calpalooza student activities fair and get involved with a student organization.</p> <p>Find service opportunities through the Public Service Center.</p> <p>Explore study, internship, and research abroad options with Berkeley Study Abroad.</p>	<p>Contribute to a community organization with an American Cultures Engaged Scholarship course.</p> <p>Go on a service-learning trip with the Alternative Breaks Program.</p> <p>Consider a Berkeley Global Internship in the United States or abroad.</p>	<p>Experience life at another UC or college on a visitor and exchange program.</p> <p>Study and intern in Washington D.C. with UCDC or Cal in the Capital.</p>	<p>Hone your leadership skills with the Peter E. Haas Public Service Leaders program.</p> <p>Explore service opportunities after graduation, such as Peace Corps, Teach for America, or U.S. Department of State.</p>	
Reflect and plan your future	<p>Visit Berkeley Career Engagement and the Career Counseling Library.</p> <p>Develop a plan for getting career ready.</p> <p>Sign up for Handshake and CareerMail.</p> <p>Learn about chemical engineering as a profession and explore career resources on the College of Chemistry website.</p>	<p>Discuss career options and goals with a Career Educator.</p> <p>Explore career fields through the Career Connections Series or a winter externship.</p> <p>Learn about graduate and professional school. See Step-by-Step for planning help.</p> <p>Think about doing an internship and attend an internship fair.</p>	<p>Conduct informational interviews.</p> <p>Discuss post-graduate options with advisors and professors.</p> <p>Attend career and graduate school fairs such as the STEM Career & Internship Fair.</p> <p>Join industry information sessions hosted by the CBE Department or affiliated clubs.</p>	<p>Utilize job board tools in your job search.</p> <p>Ask professors and graduate student instructors for recommendation letters.</p> <p>Meet employers at Employer Info Sessions and On-Campus Recruiting.</p> <p>Apply to jobs, graduate school, and other opportunities.</p>	