

Photo credit: CEE Department

## **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 **ce.berkeley.edu** for news and updates.

#### **ADVISING**

Connect with the CEE Undergraduate Advisor for class information and support. Email Erin Leigh Inama at **cee-ug@berkeley.edu** or stop by 750 Davis Hall.

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

Berkeley
Civil and Environmental Engineering
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Berkeley, CA 94720-1710
ce.berkeley.edu

# CIVIL ENGINEERING

Berkeley
UNIVERSITY OF CALIFORNIA

Bachelor of Science

## INTRODUCTION TO THE MAJOR

The **Civil Engineering** major offers opportunities for rigorous academic learning, fellowship, handson experience, and leadership. Classes are relatively small, so students get to know both the faculty and fellow students. The program provides students with a strong fundamental background in engineering science, design, and practice. Students learn to solve societal problems—in California, the United States, and the world—such as:

- Improving civil infrastructure
- Protecting resources
- Mitigating hazards
- Creating efficient and sustainable civil systems

The program is top-ranked nationally and is accredited by the Engineering Accreditation Commission of ABET.



Photo credit: Ziran Zhang

CEE at Cal is amazing because it is such a small community in such a large university. You really get to know your classmates and professors.

- Amber Chau, CEE class of 2020

## **DESIGN YOUR STUDIES IN CEE**

The undergraduate curriculum provides flexibility and exploration within the major. Students may choose courses that span the breadth of civil and environmental engineering, or students can focus their studies by choosing courses within specific areas: engineering and project management; environmental engineering; geosystems; structural engineering, mechanics and materials; or transportation engineering.

### **AMPLIFY YOUR MAJOR**

- Join one of the seven competitive CEE teams.
- Hone your leadership skills through ASCE,
   Chi Epsilon or CEE-JFC.
- Apply for research through the **UROP** program.
- Attend weekly company info sessions, hosted by ASCE.

# CIVIL ENGINEERING

Program.

# **DESIGN YOUR JOURNEY**

interning at an engineering firm.



	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
<b>Explore</b> your major	Review the CEE <b>4-Year Plan</b> and College of Engineering <b>requirements</b> .	Continue fulfilling <b>lower division</b> CEE foundational requirements.	Continue working on upper division coursework.	Complete any remaining major requirements and electives.
	Plan your lower division courses to avoid taking too many technicals at once.  Get info on classes and careers at the	Plan now if you are considering a <b>minor</b> or <b>summer minor</b> .  Consider applying to the department's	Choose electives that will give you specialized skills in a specific area of CEE.  Check in with your <b>CEE advisor</b> on major	Take a CEE Capstone Design class.  Check in with an <b>ESS advisor</b> to ensure you are on track to graduate.
	Departmental Advising Forum hosted by <b>Chi Epsilon</b> .	Undergraduate Research Opportunity Program.	requirements during office hours or at the Departmental Advising Forum.	Apply to graduate school, if interested.
Connect and build community	Explore CEE <b>student life</b> at events hosted by the student chapter of the American Society of Civil Engineers (ASCE).	Attend office hours to learn about professors' work and how it's applicable to the profession.	Attend field trips, info sessions, and networking events hosted by CEE student groups.	Give back by becoming an <b>Engineering peer advisor</b> or <b>tutor</b> at the Student Learning <b>Center.</b>
	Explore student organizations at <b>Calapalooza</b> and on <b>CalLink</b> .	Seek out mentorship from upper division students in the major.  Attend field trips and networking events hosted	Develop your professional skills by taking a leadership position in a CEE student group.  Mentor younger students through CEE student	Reconnect with any alumni who helped you succeed in previous years.
	Gain practical experience by joining a CEE competition team.	by ASCE.	organizations.	Mentor younger students at the Departmental Advising Forum hosted by Chi Epsilon.
scover ur passions	Visit the Office of Undergraduate Research and Scholarships to learn about research opportunities and resources on campus.  Learn how Engineering students can get involved in student research.  Explore new topics through DeCal courses.	Explore <b>research opportunities</b> and how to earn <b>credit for research</b> .  Gain leadership experience through ASCE or another engineering student group.	Submit your research to an undergraduate journal.  Learn a marketable software tool such as GIS or AutoCad.	Enroll in non-major courses on your bucket list.  Earn a certificate through the <b>Sutardja Center for Entrepreneurship &amp; Technology</b> or <b>Jacobs Institute for Design and Innovation.</b>
Engage locally and globally	Meet with your advisor to discuss studying abroad in your 4-year plan.	Apply to study abroad through <b>Berkeley Study Abroad</b> .	Study for and take the GRE, LEED, or FE exams.  Consider a <b>Berkeley Global Internship</b> such	Apply for <b>fellowships</b> available to recent Berkeley graduates.
	Explore volunteering opportunities on campus.  Learn about community service with the <b>Public Service Center</b> .	Mentor young STEM students with <b>Pioneers</b> in Engineering and Berkeley Engineers and Mentors.	as the Engineering Internship in Toronto.  Talk with faculty about career advice.	Explore gap year opportunities prior to embarking on your next academic or career adventure.
		Consider the <b>Alternative Breaks</b> program to go on service-learning trips over school breaks.		
eflect	Visit Berkeley Career Engagement and use	Join College of Engineering naturates for	loin CEE Connections to find montarchip and	Attend career fairs including the American
and plan your future	the <b>Yearly Planner</b> to guide your career path.	Join College of Engineering <b>networks</b> for students and alumni.	Join <b>CEE Connections</b> to find mentorship and opportunities in Civil Engineering.	Attend career fairs, including the American Society of Civil Engineers.
	Join <b>Handshake</b> to find Berkeley-specific career opportunities and resources.	Meet alumni and learn about their career paths in the <b>Career Connections Networking Series</b> .	Attend the department's Graduate School Night and learn how to prepare for graduate school.	Attend info sessions hosted by <b>CEE-JFC</b> .  Utilize <b>job board tools</b> in your job search.
	Apply to shadow an engineer.  Shadow alumni in the <b>Cal Job Shadow</b>	Attend <b>CEE Career Fairs</b> to find summer jobs, internships and full-time positions.	Spend your summer doing research or interning at an engineering firm.	Apply to jobs, graduate school and other opportunities.

internships and full-time positions.

# WHAT CAN I DO WITH MY MAJOR?

#### **Jobs and Employers**

Asst. Proj. Eng., Turner Constr Assoc. Field Eng., Roux Assoc. Civil Analyst, Kimley Horn & Assoc Civil Engineer, FPL & Associates Consultant, Navigant Consulting Engineer, Boomi Environmental Entry Level Engineer, SGH Hardware Engineer, Raytheon Project Engineer, Lendlease Structural Engineer, Boeing Research Associate, Synvitrobio Transportation Engineer, CalTrans

#### **Graduate Programs**

Architecture
Artificial Intelligence and Robotics
City Planning
Civil Engineering
Environmental Engineering
Mechanical Engineering
Structural Engineering
Systems Engineering
Transportation Engineering

Examples gathered from the

First Destination Survey of recent
Berkeley graduates.

Updated: 10.31.23