



Photo credit: Nuclear Engineering

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 nuc.berkeley.edu for news and updates.

ADVISING

Students can reach the Nuclear Engineering Advisor through email at kirstenw@berkeley.edu or by visiting 4149 Etcheverry Hall.

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

Nuclear Engineering
4153 Etcheverry Hall
Berkeley, CA 94720-1730
nuc.berkeley.edu

NUCLEAR ENGINEERING

Bachelor of Science

Berkeley
UNIVERSITY OF CALIFORNIA

INTRODUCTION TO THE MAJOR

The **Nuclear Engineering** major prepares students to propel innovations in nuclear science and technology, and beyond. Our program features a strong foundation in nuclear energy and radiation detection, as well as a broad set of in-depth elective topics such as medical imaging, fusion energy, radioactive waste management, medical physics, and nuclear materials. The undergraduate program is accredited by the Engineering Accreditation Commission of ABET.

In addition to the **major**, the department offers a **minor** in nuclear engineering that is open to all students who are not majoring in NE and who have completed the necessary prerequisites. Joint majors with computer science, materials science or chemical engineering are also available.



Photo credit: Nuclear Engineering

“ *The Nuclear Engineering department at Berkeley gives me the opportunity to explore and research anything I'm passionate about. It is a welcoming, inclusive, positive environment.* ”

– Emily Greer, Undergraduate NE student and researcher with Radwatch

THE NE CURRICULUM

Students in the Nuclear Engineering major have the option to pursue a specific focus of study, choosing between four different subject areas:

- Medical Applications
- Fission Energy
- Fusion Energy
- Radioactive Waste Management.

AMPLIFY YOUR MAJOR

- Get involved with a local nuclear start-up such as **Deep Isolation** or **Kairos Power**.
- Pursue a research opportunity at a National Laboratory.
- Explore your mission and impact as an Engineer through the **LeaderShape Institute**.

NUCLEAR ENGINEERING DESIGN YOUR JOURNEY

Bachelor of Science

	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR	WHAT CAN I DO WITH MY MAJOR?
Explore your major	<p>Meet with your ESS advisor to discuss your academic plans.</p> <p>Familiarize yourself with major and college requirements.</p> <p>Talk to the Nuclear Engineering advisor about department programs and research opportunities.</p> <p>Enroll in ENGIN 98: The Insider's Guide to Berkeley Engineering.</p>	<p>Talk to ESS peer advisors about life in the major.</p> <p>Meet with your ESS advisor to discuss your academic progress and any challenges hindering your academic success.</p> <p>Complete lower division prerequisites and start planning your upper division courses.</p> <p>Plan now if considering a double major, simultaneous degree, minor, or study abroad.</p>	<p>Focus on upper division requirements and electives.</p> <p>Continue meeting with your ESS advisor to review your academic progress.</p> <p>Submit paperwork for a double major, simultaneous degree, minor, or study abroad.</p>	<p>Meet with your ESS advisor to do an official degree check and plan for your final year.</p> <p>Complete any "bucket list" courses and remaining major, college, and campus requirements.</p> <p>Complement your major with a certificate, course thread, or summer minor.</p>	<p>WHAT CAN I DO WITH MY MAJOR?</p> <p>The Nuclear Engineering major prepares students for a lifetime of technical achievement and professional leadership in academia, government, the national laboratories, and industry. Students often choose to pursue a one-year master's degree program after graduation, and students interested in scientific or academic research go on to complete the doctorate.</p> <p>Jobs and Employers</p> <p>Engineer, Berkeley Applied Analytics Engineer, Space & Naval Warfare Systems Hardware Reliability Engineer, Amazon Nuclear Engineer, Duke Energy Product Engineer, Lam Research Corporation Software Engineer, Cisco Systems</p> <p>Graduate Programs</p> <p>Engineering, Masters Nuclear Engineering, PhD</p> <p>Examples gathered from the First Destination Survey of recent Berkeley graduates.</p>
Connect and build community	<p>Take advantage of tutoring and workshops for Engineering students from the Center for Access to Engineering Excellence.</p> <p>Find student opportunities in the ESS newsletter and new student podcast.</p> <p>Find study space and resources in the Kresge Engineering Library.</p>	<p>Join an Engineering student group such as the American Nuclear Society Student Chapter to meet students and professionals that share your passion for nuclear technology.</p> <p>Start attending Nuclear Engineering department events.</p> <p>Get to know Engineering professors and graduate student instructors during their office hours.</p>	<p>Give back by becoming an ESS peer advisor.</p> <p>Join the Berkeley Engineering group on LinkedIn.</p> <p>Explore student groups outside of Engineering, and deepen your involvement with an Engineering student group.</p>	<p>Join a professional association such as the American Nuclear Society.</p> <p>Continue attending tutoring and workshops, and reading the weekly ESS newsletter.</p> <p>Connect with alumni groups and leverage your network as you prepare to graduate.</p>	
Discover your passions	<p>Browse research taking place in Engineering centers, institutes, and labs.</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>Broaden your perspective by attending Newton Series or View from the Top lectures.</p>	<p>Consider pursuing a research opportunity for Nuclear Engineering students.</p> <p>Develop your technical abilities with the Nuclear Engineering Design Collaborative.</p> <p>Apply to a REU research program. Check Berkeley Lab and UCSF for more research options.</p> <p>Check out design and maker opportunities at the Jacobs Institute.</p>	<p>Get involved with a local nuclear start-up such as Deep Isolation or Kairos Power.</p> <p>Apply innovation to healthcare through a Fung Fellowship.</p> <p>Explore entrepreneurship through the Sutardja Center and Skydeck.</p> <p>Apply for a research opportunity if you haven't done so already.</p>	<p>Teach your own DeCal course.</p> <p>Consider being an instructor for ENGIN 98.</p> <p>Continue to pursue your interests through a fellowship or gap year after graduation.</p> <p>Choose your post-baccalaureate plans based upon your intended mission and impact as an Engineer.</p>	
Engage locally and globally	<p>Attend the Calapalooza student activities fair and get involved with a student organization.</p> <p>Explore Engineering student organizations.</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 in an American Cultures Engaged Scholarship course such as ENGIN 157AC.</p> <p>Consider a Berkeley Global Internship such as the Engineering Internship in Toronto.</p> <p>Mentor local youth with Pioneers in Engineering or Berkeley Engineers and Mentors.</p>	<p>Learn how to be an ethical and inclusive global leader through the LeaderShape Institute.</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>Serve as a student representative on a college committee.</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. Sign up for Handshake and CareerMail.</p> <p>Explore career resources on the Engineering website.</p> <p>Attend an ESS workshop to create a resume and LinkedIn page.</p>	<p>Discuss career options and goals with a Career Educator.</p> <p>Explore career opportunities through the GLOBE Ambassadors program, a winter externship, and informational interviews.</p> <p>Learn about graduate and professional school.</p> <p>Pursue an internship and attend an internship career fair.</p>	<p>Attend career and graduate school fairs such as the STEM Career & Internship Fair.</p> <p>Discuss graduate school options with your faculty advisor and professors.</p> <p>Sign up for a ESS career workshop, networking dinner, speaker series, or career conference.</p> <p>Make a graduate school advising appointment in ESS and explore a 5th year MS or MEng, or a PhD.</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>Attend the job offer negotiation workshop in ESS.</p> <p>Apply to jobs, graduate school, and other opportunities.</p>	