

Photo credit: Nuclear Engineering

## 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 **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.

NUCLEAR ENGINEERING

Bachelor of Science

## 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.

**C** 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.

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

Medical Applications

THE NE CURRICULUM

- Fission Energy
- Fusion Energy
- Radioactive Waste Management.

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





Photo credit: Nuclear Engineering

- Emily Greer, Undergraduate NE student and researcher with Radwatch

## **AMPLIFY YOUR MAJOR**

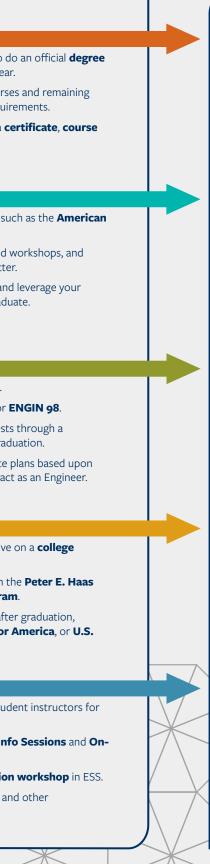
- Get involved with a local nuclear startup such as **Deep Isolation** or **Kairos** Power.
- Pursue a research opportunity at a National Laboratory.
- Explore your mission and impact as an Engineer through the **LeaderShape** Institute.

# NUCLEAR ENGINEERING DESIGN YOUR JOURNEY

Bachelor of Science

	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Explore				
your major	Meet with your <b>ESS advisor</b> to discuss your academic plans. Familiarize yourself with <b>major</b> and <b>college</b>	Talk to <b>ESS peer advisors</b> about life in the major. Meet with your <b>ESS advisor</b> to discuss your academic progress and any challenges hindering	Focus on upper division requirements and electives. Continue meeting with your <b>ESS advisor</b> to review your academic progress.	Meet with your <b>ESS advisor</b> to do <b>check</b> and plan for your final year. Complete any "bucket list" courses major, college, and campus require Complement your major with a <b>ce</b> <b>thread</b> , or <b>summer minor</b> .
	requirements. Talk to the Nuclear Engineering advisor about	your academic success. Complete lower division prerequisites and start	Submit paperwork for a double major, simultaneous degree, minor, or study abroad.	
	department programs and research opportunities. Enroll in <b>ENGIN 98: The Insider's Guide to</b>	planning your upper division courses. Plan now if considering a <b>double major</b> ,		
	Berkeley Engineering	simultaneous degree, minor, or study abroad.		
<b>Connect</b> and build community	Take advantage of <b>tutoring</b> and <b>workshops</b> for Engineering students from the <b>Center for Access</b> <b>to Engineering Excellence</b> .	Join an <b>Engineering student group</b> such as the <b>Nuclear Engineering Design Collaborative</b> or <b>American Nuclear Society Student Chapter</b> to	Give back by becoming an <b>ESS peer advisor</b> . Join the <b>Berkeley Engineering group</b> on LinkedIn.	Join a professional association suc Nuclear Society.
	Find student opportunities in the <b>ESS newsletter</b> and <b>new student podcast</b> .	meet students and professionals that share your passion for nuclear technology.	Explore <b>student groups</b> outside of Engineering, and deepen your involvement with an <b>Engineering</b>	Continue attending tutoring and v reading the weekly ESS newsletter Connect with <b>alumni groups</b> and
	Find study space and resources in the <b>Kresge Engineering Library</b> .	Start attending Nuclear Engineering <b>department</b> events.	student group.	<b>network</b> as you prepare to gradua
		Get to know Engineering professors and graduate student instructors during their office hours.		
Discover				
your passions	Browse research taking place in Engineering centers, institutes, and labs.	Consider pursuing a <b>research opportunity</b> for Nuclear Engineering students.	Get involved with a local nuclear start-up such as <b>Deep Isolation</b> or <b>Kairos Power</b> .	Teach your own <b>DeCal course</b> . Consider being an instructor for <b>E</b> Continue to pursue your interests <b>fellowship</b> or gap year after gradu Choose your post-baccalaureate p your intended mission and impact
	Visit the Office of Undergraduate Research and Scholarships.	Develop your technical abilities with the <b>Nuclear</b> Engineering Design Collaborative.	Apply innovation to healthcare through a <b>Fung</b> Fellowship.	
	Discover new interests in a <b>Freshman Seminar</b> or student-run <b>DeCal course</b> .	Apply to a <b>REU</b> research program. Check <b>Berkeley</b> <b>Lab</b> and UCSF for more research options.	Explore entrepreneurship through the <b>Sutardja</b> <b>Center</b> and <b>Skydeck</b> .	
	Broaden your perspective by attending <b>Newton</b> Series or View from the Top lectures.	Check out design and maker opportunities at the <b>Jacobs Institute</b> .	Apply for a research opportunity if you haven't done so already.	
Engage	Attend the <b>Calapalooza</b> student activities fair and	Contribute to a community organization in an	Learn how to be an ethical and inclusive global	Serve as a student representative of
locally and globally	get involved with a student organization.	American Cultures Engaged Scholarship course such as ENGIN 157AC. Consider a Berkeley Global Internship such as the Engineering Internship in Toronto. Mentor local youth with Pioneers in Engineering or Berkeley Engineers and Mentors.	leader through the <b>LeaderShape Institute</b> .	committee
	Explore <b>Engineering student organizations</b> . Find service opportunities through the <b>Public</b>		Experience life at another UC or college on a <b>visitor</b> and exchange program.	Hone your leadership skills with th <b>Public Service Leaders program</b>
	Service Center. Explore study, internship, and research abroad		Study and intern in Washington D.C. with <b>UCDC</b> or <b>Cal in the Capital</b> .	Explore service opportunities after such as <b>Peace Corps</b> , <b>Teach for A</b> Department of State.
	options with <b>Berkeley Study Abroad</b> .			
Reflect				
and plan your future	Visit Berkeley Career Engagement and the Career Counseling Library.	Discuss career options and goals with a <b>Career Educator</b> .	Attend <b>career and graduate school fairs</b> such as the STEM Career & Internship Fair.	Ask professors and graduate stude recommendation letters.
	<b>Develop a plan</b> for getting career ready. Sign up for <b>Handshake</b> and <b>CareerMail</b> .	Explore career opportunities through the <b>GLOBE</b> Ambassadors program, a winter externship, and	Discuss graduate school options with your faculty advisor and professors.	Meet employers at <b>Employer Info</b> Campus Recruiting
	Explore career resources on the <b>Engineering</b> website.	informational interviews. Learn about graduate and professional school.	Sign up for a ESS <b>career workshop</b> , <b>networking</b> <b>dinner</b> , <b>speaker series</b> , or <b>career conference</b> .	Attend the <b>job offer negotiation</b> Apply to jobs, graduate school, and opportunities.
	Attend an <b>ESS workshop</b> to create a resume and LinkedIn page.	Pursue an <b>internship</b> and attend an <b>internship</b> career fair.	Make a <b>graduate school advising appointment</b> in ESS and explore a 5th year MS or MEng, or a PhD.	





## WHAT CAN I DO WITH MY MAJOR?

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.

## Jobs and Employers

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

## Graduate Programs

Engineering, Masters Nuclear Engineering, PhD

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

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