



Photo credit: Sarah Wittmer

## 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 [physics.berkeley.edu](https://physics.berkeley.edu) for news and updates.

## ADVISING

Advising is available in 368 or 374 Physics North for all students who would like academic counseling related to physics. We can help maximize your educational experience! Students interested in the Physics major should come in for pre-major advising as soon as possible. Visit [physics.berkeley.edu/administration/student-services](https://physics.berkeley.edu/administration/student-services) for more information.

## 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](https://ue.berkeley.edu/majormaps) for the latest version of this major map.

# Berkeley

**Physics**

366 Physics North  
Berkeley, CA 94720-7300  
[physics.berkeley.edu](https://physics.berkeley.edu)

# PHYSICS

Bachelor of Arts

# Berkeley

UNIVERSITY OF CALIFORNIA

## INTRODUCTION TO THE MAJOR

**Physics** is the study of the universe, from the very large (star formation, cosmic microwave background radiation) to the very small (nanotechnology, atomic cooling and trapping, string theory), and everything in between (biophysics, and the physics of solid state devices).

Students studying physics develop strong mathematical and analytical skills, good laboratory skills, effective written and oral communication skills, and a solid understanding of the fundamental laws that govern the universe.

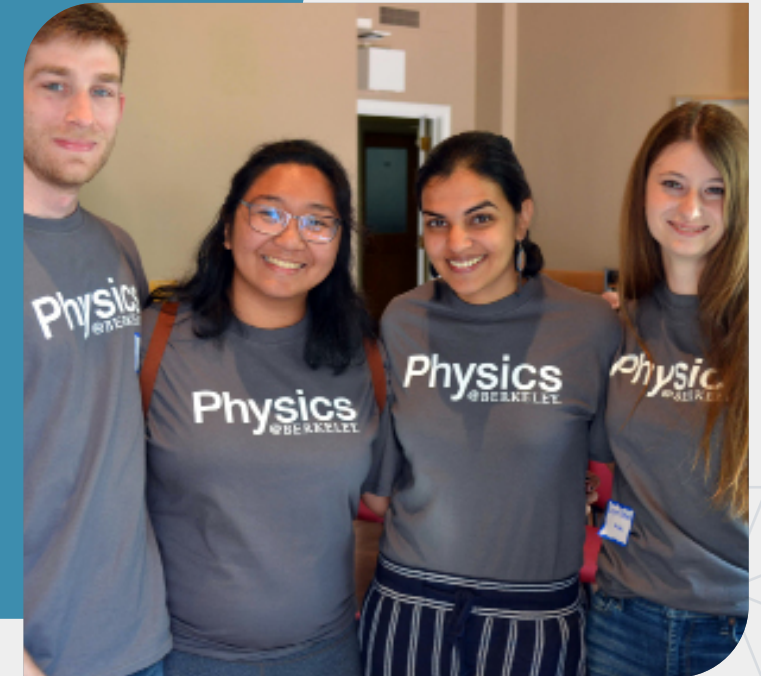


Photo credit: Sarah Wittmer

“ *The physics skillset fosters acumen in modeling and understanding diverse systems, reducing complexity into intuition.* ”

– Physics Major

## THE UNDERGRADUATE PROGRAM

Our undergraduate program begins with courses designed to help you build a strong foundation, regardless of your prior background in physics. Upper division work deepens your understanding of the basics while introducing more modern and advanced topics. The program culminates in our upper division lab course, where you have a unique opportunity among physics departments nationwide to choose from many different experiments, ranging from classic Nobel Prize winning work (e.g., Optical Pumping or the Mossbauer Effect), to areas of current research interest (nonlinear dynamics and laser manipulation of atoms, among others).

## AMPLIFY YOUR MAJOR

- Join a **Physics student organization** to help build community and foster leadership.
- Transfer students: enroll in **PHYSICS 153** to connect to resources at Cal.
- Pursue opportunities for **research** with faculty and peers.
- Write an **honors thesis** or execute an independent study project.
- Add a Teaching Concentration to your major and join **CalTeach** to prepare for a career in education.

# PHYSICS

Bachelor of Arts

## DESIGN YOUR JOURNEY

	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR	WHAT CAN I DO WITH MY MAJOR?
<b>Explore</b> your major	<p>Meet with your <b>major</b> and <b>college advisor</b> to discuss your academic plans.</p> <p>Review <b>major</b> and <b>college requirements</b>.</p> <p>Map out a 4-year plan on <b>CalCentral</b>.</p> <p>Visit <a href="https://physics.berkeley.edu/academics/tutoring">physics.berkeley.edu/academics/tutoring</a> to learn more about options for tutoring.</p>	<p>Complete lower division prerequisites and <b>declare the major</b>.</p> <p>Review major guidelines for study abroad.</p>	<p>Focus on upper division requirements and electives.</p> <p>Review your degree progress with your major and college advisors.</p> <p>Ask the major advisor about the Physics honors program.</p>	<p>Meet with your major advisor and with your college advisor to verify your completion of all major and college requirements.</p> <p>Register for the department and campus-wide commencement ceremonies.</p>	<p><b>WHAT CAN I DO WITH MY MAJOR?</b></p> <p>We believe a Physics degree represents strong training for a broad range of careers. Approximately half of our recent graduates have continued to graduate school in Physics and related fields; others have taken jobs in high tech industries or as management consultants, and still others have entered medical school or law school.</p> <p><b>Jobs and Employers</b></p> <p>Data Scientist, SeatGeek Process Engineer, DiCon fiberoptics Research Asst., Lawrence Berkeley Lab Software Engineer, Fuzzy Software Engineer, LimeBike Software Quality Ops. Assoc., Waymo Technical Consultant, Bridgepoint Consulting</p> <p><b>Graduate Programs</b></p> <p>AI &amp; Robotics, Masters Astronomy, PhD Astrophysics, PhD Electrical Engineering, PhD Law, JD Operations Research, Masters Physics, PhD</p> <p>Examples gathered from the <b>First Destination Survey</b> of recent Berkeley graduates.</p>
<b>Connect</b> and build community	<p>Complete the MPS Scholars and PA Scholars registration forms for physics mentoring and community-building opportunities. Contact a physics advisor for more information.</p> <p>Get 1:1 mentoring with <b>Berkeley Connect in Physics</b> and <b>L&amp;S Mentors Program</b>.</p> <p>Be sure to explore membership in Physics student organizations and STEM programs.</p>	<p>Join a student organization such as <b>Society of Physics Students</b> or <b>Society of Women in the Physical Sciences</b>.</p> <p>Sign up for the Physics email list and start attending <b>department events</b>.</p> <p>Get to know professors during office hours and events like <b>Faculty-Student Lunches</b>.</p>	<p>Give back by becoming a Physics <b>peer tutor</b>, PHYSICS 153 transfer student mentor, or PA Scholars mentor.</p> <p>Become a <b>Golden Bear Orientation Leader</b> and welcome students to the UC Berkeley campus and community.</p> <p>Join the <b>UC Berkeley Physics group</b> on LinkedIn.</p>	<p>Join a professional association such as the <b>American Institute of Physics</b>.</p> <p>Connect with <b>alumni groups</b> and build your <b>network</b> as you prepare to graduate.</p>	
<b>Discover</b> your passions	<p>Discover new interests in a <b>Freshman Seminar</b> or student-run <b>DeCal course</b>.</p> <p>Visit the <b>Office of Undergraduate Research and Scholarships</b>.</p> <p>Learn about <b>research opportunities</b> for Physics majors.</p> <p>Get introduced to research via <b>Undergraduate Laboratory at Berkeley</b>.</p>	<p>Enroll in a <b>Sophomore Seminar, Big Ideas Course</b> or <b>Discovery Course</b>.</p> <p>Assist faculty in their research through <b>URAP</b>.</p> <p>Enjoy teaching? Explore a career in education while gaining teaching skills with <b>CalTeach</b>.</p>	<p>Planning a senior thesis or project? Apply to the <b>Haas Scholars Program</b> or <b>SURF</b>.</p> <p>Pursue summer research.</p> <p>Get involved with research with Physics faculty-consider applying to the <b>Berkeley Physics Undergraduate Research Scholars Program</b>.</p>	<p>Teach your own <b>DeCal course</b> or give a public talk as part of an <b>Undergraduate Seminar</b>.</p> <p>Undertake an optional honors thesis or independent study.</p> <p>Keep pursuing your interests through a <b>fellowship</b> or gap year after graduation.</p>	
<b>Engage</b> locally and globally	<p>Explore study abroad options now, so you can start planning your upcoming semesters.</p> <p>Check out volunteer opportunities on campus, such as those offered by the <b>Public Service Center</b>.</p>	<p>Contribute to a community organization with an <b>American Cultures Engaged Scholarship course</b>.</p> <p>Engage in STEM education and mentorship of local youth with <b>Bridging Berkeley, Expand Your Horizons</b>, or <b>SENDforC</b>.</p> <p>Consider a <b>Berkeley Global Internship</b> in the United States or abroad.</p>	<p>Tutor students at the Student Learning Center or through peer residential tutoring.</p> <p>Go on a service-learning trip with the <b>Alternative Breaks Program</b>.</p>	<p>Hone your leadership skills with the <b>Peter E. Haas Public Service Leaders program</b>.</p> <p>Explore service opportunities after graduation, such as <b>Peace Corps, Teach for America</b>, or <b>U.S. Department of State</b>.</p>	
<b>Reflect</b> and plan your future	<p>Visit <b>Berkeley Career Engagement</b> and the <b>Career Counseling Library</b>.</p> <p><b>Develop a plan</b> for getting career ready.</p> <p>Sign up for <b>Handshake</b> and <b>CareerMail</b>.</p> <p>Explore <b>career fields</b> through the <b>Career Connections Series</b> or a <b>winter externship</b>.</p> <p>Attend Career Workshops offered by the Physics Department.</p>	<p>Discuss career options and goals with a <b>Career Educator</b>.</p> <p>Learn about <b>graduate and professional school</b>. See <b>Step-by-Step</b> for planning help.</p> <p>Think about doing an <b>internship</b> and attend an <b>internship fair</b>.</p> <p>Reflect on your education so far and skills and experience you still wish to build.</p>	<p>Conduct <b>informational interviews</b>.</p> <p>Discuss graduate school options with advisors and professors.</p> <p>Update your resume and <b>LinkedIn</b> profile.</p> <p>Attend campus-wide <b>career and graduate school fairs</b> such as the STEM Career &amp; Internship Fair, as well as workshops from the Physics Department.</p>	<p>Utilize <b>job board tools</b> in your job search.</p> <p>Ask professors and graduate student instructors for recommendation letters.</p> <p>Meet employers at <b>Employer Info Sessions</b> and <b>On-Campus Recruiting</b>.</p> <p>Apply to jobs, graduate school, and other opportunities.</p>	