INTRODUCTION TO THE MAJOR

The UC Berkeley Astrophysics Undergraduate program prepares students to understand the world beyond our own! The Department of Astronomy endeavors to meet that need by providing students access to a broad spectrum of courses taught by prize-winning faculty, state-of-the-art facilities, first-class scientists and researchers, and opportunities to conduct research projects. The Astrophysics major provides students physical reasoning, computational and analytical skills and prepares them for a career in academia, data science, tech and space industry, and many other fields.

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.

ADVISORY

Brianna Franklin is the Academic Advisor. Contact her for more information on major and minor requirements, policies, procedures, department resources, events and activities. Advising appointments can be made using CalCentral. For general information, please contact astroadvising@berkeley.edu.

Join our Advising Discord and view our Astro wiki page for information about courses, resources and more.

Eugene Chiang is the Undergraduate Faculty Advisor. Email him for office hours and assistance with content of courses, research, graduate school and career development.

Climate Advisors and Undergraduate Student Representative
Do you have any feedback or concerns on climate, curriculum, etc.? Check-in with the Undergraduate Climate Advisors or the Undergraduate Student Representative, and join our bi-annual Town Hall meeting with the Chair and Faculty Advisor.

CONNECT WITH US

Events
Attend department events with students, staff, and faculty. Join our Advising Discord, follow us on Instagram, Facebook, and Twitter, and visit our Astro events and news.

THE ASTROPHYSICS CURRICULUM

Berkeley Astronomy courses cover an array of topics. The lower division ASTRO 7A & 7B courses give a comprehensive overview of our Universe, from exoplanets to cosmology. The upper division courses offer an in-depth view on planetary astrophysics (162), stellar physics (160), and relativistic astrophysics and cosmology (161). Our program stands out by its unique and rigorous lab courses, including the optical-IR (120), the radio astronomy (92), and the data science (128) labs. Courses are taught by expert faculty, ensuring a more enlightened and thorough educational experience.

AMPLIFY YOUR MAJOR

- Join the Undergraduate Astronomical Society.
- Learn how to program in Python early by taking our DeCal course, PHYSICS 77B, or CS 61A.
- Conduct a research project with one of our world-renowned scientists in the Astronomy Department, SSL, or LBL.
- Apply to a summer REU program
- Apply to an undergraduate student instructor (UGSI) or grader position.
- Join CalTeach to prepare for a career in education. Talk to CalTeach faculty director Eugene Chiang.

“I like the closeness of the Astronomy department, how there are frequent chances to interact with other undergraduates, graduates, postdocs, and faculty alike.”
- Nicholas Rui, Class of ’20

Photo credit: UC Regents / Lick Observatory

Photo credit: Astronomy Department

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Explore your major

- Meet with your Astro advisor and L&S advisor to discuss your academic plan.
- Reflect on your passions.
- Discover your passions.
- Apply for the Physics & Astronomy Scholars Program or Berkeley SEED Scholars Program.
- Attend the Undergraduate Research and Scholarships Fair in October.
- Get involved in campus research with ULAB.
- Enroll in a Sophomore Seminar. Big Ideas Course or Discovery Course.
- Attend the Calapalooza student activities fair and get involved with a student organization.
- Find service opportunities through the Public Service Center.
- Explore study, internship, and research abroad opportunities with Berkeley Study Abroad or Berkeley Global Internship.
- Attend the Astrophysics “Success after Berkeley” seminar series on academic resources, graduate school, career development and more.
- Visit the Career Center and Career Counselling Library. Sign up for Handshake and CareerMail.
- Explore career fields through the Career Connections Networking Series or a winter externship.
- Meet with a Career Center counselor. Astro Advisor or Undergraduate Faculty Advisor to discuss your career options and goals.
- Learn about graduate and professional schools. See Step-by-Step for planning help.
- Consider an internship and attend internship fairs. Try some self-assessment activities to explore different directions within Astrophysics.

Connect and build community

- Sign up for the Astronomy mailing list and follow us on Facebook, Twitter, and Instagram.
- Join the Undergraduate Astronomy Society.
- Participate in the Astro Buddy Program, Berkeley Connect, or L&S Mentors Program.
- Take advantage of (STEM) community and resources from programs like Cal NERDS and EOP.
- Participate in stargazing and science talks at Astro Night and Science@Cal.
- Get to know your Astronomy professors and graduate student instructors by attending office hours.
- Explore other student groups like Society of Women in the Physical Sciences. Out in STEM, or AstroQ.
- Become a buddy in the Astro Buddy Program.
- Get involved in student organizations like LEAD.
- Interested in astro instrumentation? Attend Professor Jessica Lu’s AstroTech summer school.
- Apply to be an Astro UGSI or grader.
- Attend our “Success after Berkeley” seminar series or through CalTeach.
- Enjoy teaching? Explore a career in education while getting teaching skills with CalTeach.
- Become a Golden Bear Orientation Leader and welcome new students to UC Berkeley.
- Go on a service-learning trip with the Alternative Breaks Program.
- Enrich your studies with a certificate, course thread, or summer minor.
- Attend weekly Undergraduate Faculty Advisor Advisor Astronomy workshops on graduate school and career exploration, as well as Career and Graduate School Fairs.
- Update your resume and LinkedIn profile.
- Apply to jobs, graduate school, and other opportunities.
- Planning to go to graduate school? Apply to the NSF-GRFP and other fellowships.
- Utilize job search tools from the Career Center.
- Meet employers at Employer Info Sessions and On-Campus Recruiting.

Discover your passions

- For planning help.
- Complete MATH 1A + 1B and PHYSICS 5A/7A.
- Learn more about the major with the Astrophysics FAQ, Piazza page, and Berkeley Astronomy Wiki.
- Complete MATH 53, PHYSICS 89/MATH 54, PHYSICS 88/7B + 5CYC and ASTRO 7A + 7B.
- Take Astro Python coding DeCal course, PHYSICS 77/7B, or CS 61A.
- Submit the required forms to declare the major to your major advisor.
- Get access to Campbell Hall for use of lab space, KAIT room, and study lounge.
- Focus on upper division requirements and electives.
- Review your degree progress with your major and college advisor. See the Astro Degree Check Template and Advising Table.
- Enroll in ASTRO 98: Introduction into Research (you must already be involved in research).
- Do a degree check to ensure you are on track to graduate.
- Complete any “bucket list” courses and remaining major, college, and campus requirements.
- Complete MATH 53, PHYSICS 89/MATH 54, PHYSICS 88/7B, or CS 61A.
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Graduate Programs

- Applied Mathematics, PhD
- Astronomy, PhD
- Astrophysics, PhD
- Chemical Engineering, PhD
- Computer Science, PhD
- Data Science, PhD
- Earth and Planetary Science, PhD
- Geophysics and Seismology, PhD
- Neuroscience, PhD
- Physics, PhD

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