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.

AMPLIFY YOUR MAJOR

• Join the Undergraduate Astronomical Society.
• Learn how to program in Python early by taking our DeCal course, PHYSICS 77/88, 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.

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 (121), and the data science (128) labs. Courses are taught by expert faculty, ensuring a more enlightened and thorough educational experience.

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

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.
**ASTROPHYSICS DESIGN YOUR JOURNEY**

**FIRST YEAR**
- Meet with your Astro advisor and L&S advisor to discuss your academic plan.
- Review major and college requirements.
- Complete MATH 1A + 1B and PHYSICS 5A/7A.
- Learn more about the major with the Astrophysics FAQ, Plaza page, and Berkeley Astronomy Wiki.

**SECOND YEAR**
- Complete MATH 31, PHYSICS 89/MAHT 54, PHYSICS 58B/78, 57CYC and ASTRO 7A + 7B.
- Take Astro Python coding DeCal course, PHYSICS 77BB, 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, KAT room, and study lounge.

**THIRD YEAR**
- 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 198, Introduction into Research (you must already be involved in research).

**FOURTH YEAR**
- Do a degree check to ensure you are on track to graduate.
- Complete any “bucket list” courses and remaining major, college, and campus requirements.
- Register for the department and campus-wide commencement ceremonies.

**WHAT CAN I DO WITH MY MAJOR?**

The undergraduate program prepares students for astrophysics graduate work or other advanced degrees in related science and engineering fields. It also prepares students for careers in teaching or for working in data science and other technical fields. Our students graduate with research and lab experience, computational and analytical skills, and an education that will position them in their chosen fields and professional endeavours.

**Jobs and Employers**

- Chemist, Argonne National Lab
- Data Scientist, Lockheed Martin
- Mission Integration Engineer, SpaceX
- Process Engineer, DiCon Fiberoptics
- Quantitative Analyst, BoF

**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.**