Physics, B.S. & B.A.

Hands-on learning and research are at the heart of our program. Small class sizes make it easier to get one-on-one attention from professors who are eager to help. And our graduates are in high demand in this high tech world. When you’re considering graduate study—which is required for many careers in the field—we will guide you based on your strengths and our excellent reputation.

Experience Your Learning

Cal Poly Humboldt is all about hands-on experiences. From the beginning of your undergraduate career to graduation, you’ll have access to research facilities and equipment such as our Fickle Hill Observatory, electronics laboratory, and optics lab.

Many of our students also engage in summer study as part of National Science Foundation research at other institutions nationwide—a great way to gain applicable skills and experiences. Students in research projects have discovered a galaxy, tested fundamental gravitational physics through our facilities on-site as well as with collaborations in Seattle and Indianapolis, spent the summer at CERN in Europe to work on the ATLAS particle detector, participated in research programs in Optics at the University of Paris and more.

You’ll have full access to our very own observatory, complete with a new 16-inch telescope and a 12-inch telescope—both GPS-located and computer-controlled—as well as several smaller telescopes.

After over 300 years of experimentation, the true nature and implications of gravity are not fully understood. Here at Humboldt, we created a laboratory to investigate the subtle properties of this familiar force of nature through work on-site and collaborations with other research institutions.

Stars to Rocks, our first-year learning community, gets you connected to professors quickly, as well as a cohort of like-minded students who support each other throughout college.

Did you know?

- Starting salaries in the private sector can range on average from around $60,000 for Bachelor’s degree recipients to more than $100,000 for those with a Ph.D. The median wage for Physicists and Astronomers in 2020, according to the Bureau of Labor Statistics, is $129,000.
- Undergraduates can join the American Physical Society, the main professional organization for those studying physics and working in the field, for free for their first year.
Academics & Options

**Physics, B.S.**

**Physical Science, B.A.**

The Bachelor of Science in Physics in physics is designed for those students who expect to enter one of the various fields of research or development in government or in private industry. Students can also move onto graduate studies and teaching at all levels.

**Bachelor of Science in Physics with a concentration in Astronomy** includes three specialized courses for those interested in a career in astronomy or astrophysics and is relevant for those who would like to pursue careers or graduate work in these fields, including the rapidly evolving area of gravitational wave astrophysics.

**Bachelor of Arts in Physical Science** is less specialized and more adaptable to studies in various fields, including preparation for teaching at the secondary school level.

**Minors**
- Physics Minor
- Astronomy Minor

Careers

Whether your interests lie in the far reaches of the universe or in the subatomic workings of our own world, we have a course of study and the enthusiastic teachers to prepare you for an exciting and fulfilling career.

- Physicist
- Astronomer/Astrophysicist
- Secondary science teacher
- Geophysicist
- Biophysicist
- Telescope operator
- Semiconductor Engineer
- Renewable Energy Scientist/Engineer
- Nuclear engineer
- Scientific Writer/Editor

I always had a love for science, and at the time, Indigenous physicists were virtually non-existent. I wanted to help change that by pursuing a degree in physics. The physics program at Humboldt provided me with the foundation in studies needed to pursue a career in physics/astronomy.”

Corey Gray (‘97, Physics & Applied Mathematics)
Senior Gravitational Wave Detector Operations Specialist for the Laser Interferometer Gravitational-Wave Observatory (LIGO) at Cal Tech.
Member of the Siksika Nation (Northern Blackfoot)

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