

# ASTRONOMY MINOR

Everything around you is influenced or governed by physics. Physics seeks to understand the fundamental workings of the universe, from the smallest particles like neutrinos to the vast structure of the cosmos. It unveils the underlying principles governing the world around us and serves as the cornerstone of all natural sciences, including chemistry, biology, oceanography, and geography.

The Department of Physics and Astronomy offers a range of degree tracks tailored to various interests and career paths:

- B.A. Tracks
  - Physics
  - Astronomy
  - Computational Physics
  - Energy
  - Engineering Physics
  - Medical and Biological Physics
  - Quantitative Finance
- B.S. Tracks
  - Physics
  - Astrophysics

These tracks align with diverse employment opportunities (<https://www.aps.org/careers/physicists/prospects.cfm>) for physics graduates, spanning high schools, government laboratories, financial institutions, medical facilities, data science, and high-tech industries.

Upon graduation, approximately 50 percent of physics bachelors transition directly into the workforce, while others pursue advanced degrees in physics, medical physics, business, law, or computer science.

Opt for a B.A. degree if you seek to blend your passion for physics with complementary disciplines such as computer science, environmental science, biophysics, medicine, engineering, or finance.

Consider a B.S. degree if you intend to pursue graduate study in physics, astronomy, or a related field, or a career practicing physics.



## Requirements







In addition to the program requirements listed below, students must:

- take at least nine hours of their minor "core" requirements at UNC-Chapel Hill
- earn a minimum cumulative GPA of 2.000 in the minor core requirements. Some programs may require higher standards for minor or specific courses.

For more information, please consult the degree requirements section of the catalog (<https://catalog.unc.edu/undergraduate/degree-requirements/>).

The minor in astronomy consists of five courses:

Code	Title	Hours
<b>Core Requirements</b>		
ASTR 100	 Understanding the Universe	3
or ASTR 101	 Introduction to Astronomy: The Solar System	

or ASTR 102	 Introduction to Astronomy: Stars, Galaxies & Cosmology	
or ASTR 103	 Alien Life in the Universe	
ASTR 100L	 Astronomy with Skynet: Our Place in Space	1
or ASTR 111	 Educational Research in Radio Astronomy	
ASTR 202	Introduction to Astrophysics <sup>1</sup>	3
PHYS 118	 Introductory Calculus-based Mechanics and Relativity <sup>2, H, F</sup>	4
PHYS 119	 Introductory Calculus-based Electromagnetism and Quanta <sup>3, H, F</sup>	4
<b>Total Hours</b>		<b>15</b>

H Honors version available. An honors course fulfills the same requirements as the nonhonors version of that course. Enrollment and GPA restrictions may apply.

F FY-Launch class sections may be available. A FY-Launch section fulfills the same requirements as a standard section of that course, but also fulfills the FY-SEMINAR/FY-LAUNCH First-Year Foundations requirement. Students can search for FY-Launch sections in ConnectCarolina using the FY-LAUNCH attribute.

<sup>1</sup> Fall course.

<sup>2</sup> Prerequisite, MATH 231; pre- or corequisite, MATH 232; permission of the instructor for students lacking the prerequisites.

<sup>3</sup> Prerequisites, MATH 232 and PHYS 118; pre- or corequisite, MATH 233; permission of the instructor for students lacking the prerequisites.

Due to restrictions on course sharing, students are not allowed to complete both the minor in Physics and the minor in Astronomy.

See program page here (<https://catalog.unc.edu/undergraduate/programs-study/physics-major-ba/#opportunities>) for special opportunities.

## Department Programs

### Majors

- Physics Major, B.A (<https://catalog.unc.edu/undergraduate/programs-study/physics-major-ba/>).
  - Physics
  - Astronomy
  - Computational Physics
  - Energy
  - Engineering Physics
  - Medical and Biological Physics
  - Quantitative Finance
- Physics Major, B.S. (<https://catalog.unc.edu/undergraduate/programs-study/physics-major-bs/>)
  - Physics
  - Astrophysics

### Minors

- Astronomy Minor (p. 1)
- Physics Minor (<https://catalog.unc.edu/undergraduate/programs-study/physics-minor/>)

### **Graduate Programs**

- M.S. in Physics (<https://catalog.unc.edu/graduate/schools-departments/physics-astronomy/>)
- Ph.D. in Physics (<https://catalog.unc.edu/graduate/schools-departments/physics-astronomy/>)

## **Contact Information**

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