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# **PHYSICS 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 physics consists of five courses:

Code Title Hours

Core Requirements

PHYS 118 Introductory Calculus-based Mechanics and Relativity 1, H, F

**PHYS 119** 

Introductory Calculus-based Electromagnetism and Quanta <sup>2, H, F</sup>

Three additional courses chosen from ASTR 202, ASTR (numbered above 300), and PHYS (numbered above 200). Each course must be 3 credit hours or more.  $^{\rm 3}$ 

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#### Total Hours

- 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.
- Prerequisite, MATH 231; pre- or corequisite, MATH 232; permission of the instructor for students lacking the prerequisites.
- Prerequisites, MATH 232 and PHYS 118; pre- or corequisite, MATH 233; permission of the instructor for students lacking the prerequisites.
- Mentored research courses (PHYS 295, PHYS 395, and PHYS 293) cannot be used to fulfill this requirement.

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

Astronomy (ASTR) and Physics (PHYS) course descriptions (https://catalog.unc.edu/undergraduate/departments/physics-astronomy/#coursestext).

See the program page here (https://catalog.unc.edu/undergraduate/programs-study/physics-major-ba/#opportunitiestext) 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 (https://catalog.unc.edu/undergraduate/programsstudy/astronomy-minor/)
- · Physics Minor (p. 1)

### **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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