ASTRONOMY MINOR

Everything around you is influenced or governed by physics — the study of matter, energy, and their interactions with one another. Physics seeks to understand the way the universe “works,” from the smallest neutrinos to the structure of the cosmos. It is the foundation of all other natural sciences, including chemistry, biology, oceanography, geography, and radiography.

The Department of Physics and Astronomy offers six B.A. and two B.S. degree tracks:

• B.A. Tracks
  • Physics
  • Astronomy
  • Computational Physics
  • Energy
  • Medical and Biological Physics
  • Quantitative Finance

• B.S. Tracks
  • Physics
  • Astrophysics

Consider a B.A. degree if you’re interested in physics but want to apply your training toward a wider variety of career paths after graduation. Students who completed this program have launched careers as lab researchers, application engineers, data scientists, and financial analysts, among other occupations. Some have also pursued an advanced degree in physics, medical physics, business, law, or computer science.

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASTR 100</td>
<td>Understanding the Universe</td>
<td>3</td>
</tr>
<tr>
<td>or ASTR 101</td>
<td>Introduction to Astronomy: The Solar System</td>
<td></td>
</tr>
<tr>
<td>or ASTR 102</td>
<td>Introduction to Astronomy: Stars, Galaxies &amp; Cosmology</td>
<td></td>
</tr>
<tr>
<td>or ASTR 103</td>
<td>Alien Life in the Universe</td>
<td></td>
</tr>
<tr>
<td>ASTR 100L</td>
<td>Astronomy with Skynet: Our Place in Space</td>
<td>1</td>
</tr>
<tr>
<td>or ASTR 111</td>
<td>Educational Research in Radio Astronomy</td>
<td></td>
</tr>
<tr>
<td>ASTR 202</td>
<td>Introduction to Astrophysics</td>
<td>3</td>
</tr>
</tbody>
</table>

PHYS 118  Introductory Calculus-based Mechanics and Relativity $H, F$ 4
PHYS 119  Introductory Calculus-based Electromagnetism and Quanta $H, F$ 4

Total Hours 15

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.

1 Fall course.
2 Prerequisite, MATH 231; pre- or corequisite, MATH 232; permission of the instructor for students lacking the prerequisites.
3 Prerequisites, MATH 232 and PHYS 118; pre- or corequisite, MATH 233; permission of the instructor for students lacking the prerequisites.

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 Major, B.S. (https://catalog.unc.edu/undergraduate/programs-study/physics-major-bs/)

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

Department of Physics and Astronomy
Visit Program Website (http://physics.unc.edu)
Phillips Hall, CB# 3255
(919) 962-2078

Chair
Frank Tsui
ftitsu@physics.unc.edu

Academic Affairs Coordinator
Jacob Hurst
hurstj@email.unc.edu
**Director of Undergraduate Studies**
Tamara Branca
tbranca@unc.edu

**Physics Advisor (Students with Last Names Beginning with A–M)**
Lu-Chang Qin
lcqin@email.unc.edu

**Physics Advisor (Astrophysics and Astronomy Majors and Minors with Last Names Beginning with A–L)**
Andrew Mann
awmann@physics.unc.edu

**Physics Advisor (Students with Last Names Beginning with N–R, and Astrophysics and Astronomy Majors and Minors with Last Names Beginning with M–Z)**
Dan Reichart
reichart@physics.unc.edu

**Physics Advisor (Quantitative Finance Majors)**
Stefan Jeglinski
jeglin@physics.unc.edu

**Physics Advisor and Associate Director of Undergraduate Studies (Students with Last Names Beginning with S–Z)**
Jennifer Weinberg-Wolf
jweinber@physics.unc.edu