Physics, Minor

Do you have a desire to better understand the world around you? With a minor in physics, you'll extend your studies in nature, structure and interactions of matter and radiation while developing the fundamental scientific basis and problem-solving skills needed to succeed in a variety of challenging career opportunities.

Description

The physics minor provides students with the fundamental concepts of physics beyond the introductory level. Through rigorous hands-on experience, students deepen their understanding of foundational concepts and develop their quantitative skills.

Students can tailor the minor through upper-division electives to enhance their career outlook.

At a Glance

- College/School: The College of Liberal Arts and Sciences
- Location: Tempe campus or online

Program Requirements

Minor Map (Archives)
2021 - 2022 Minor Map

The minor in physics requires a minimum of 24 credit hours, at least 12 of which must be completed at the upper-division level. Each course must be completed with a grade of "C" (2.00 on a 4.00 scale) or higher.

Required Courses -- 12 credit hours
PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (SQ) or PHY 150: Physics I (SQ) (4)
PHY 131: University Physics II: Electricity and Magnetism (SQ) AND PHY 132: University Physics Laboratory II (SQ) or PHY 151: Physics II (SQ) (4)
PHY 252: Physics III (SQ) or PHY 241: University Physics III AND PHY 202: Programming for Physicists (4)

Electives -- 12 credit hours

Choose one of the following options for the remaining required coursework. (12-15)

Option 1

PHY 361: Introductory Modern Physics (3)
PHY 333: Electronic Circuits and Measurements or PHY 334: Advanced Laboratory I (L) (3)
PHY Upper Division Elective (6)

Option 2

PHY 201 and PHY 302 are required.
PHY 201: Mathematical Methods in Physics I (CS) (3)
PHY 302: Mathematical Methods in Physics II (3)
Select 9 additional credit hours (3 courses) from the below list.

PHY 310: Classical Particles, Fields, and Matter I (3)
PHY 311: Classical Particles, Fields, and Matter II (3)
PHY 314: Quantum Physics I (3)
PHY 315: Quantum Physics II (3)

Depending on a student's undergraduate program of study, prerequisite courses may be needed in order to complete the requirements of this minor.

Enrollment Requirements

GPA Requirement: None

Incompatible Majors: BS in applied physics; BS in biophysics; BA and BS in physics; BS in physics (secondary education)

Other Enrollment Requirements: None

Current ASU undergraduate students may pursue a minor and have it recognized on their ASU transcript at graduation. Students interested in pursuing a minor should consult their academic advisor to declare the minor and to ensure that an appropriate set of courses is taken. Minor requirements appear on the degree audit once the minor is added. Certain major and minor combinations may be deemed inappropriate by the college or department of either the major program or the minor. Courses taken for the minor may not
count toward both the major and the minor. Students should contact their academic advisor for more information.

**Attend Online**

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may view the program description and request more information [here](#).

**Career Opportunities**

A minor can help students enhance the marketable skills they acquire in their major program and help them develop new skills apart from it, though most career areas do require more training than a minor alone can provide.

Graduates with a minor in physics have additional analytical and problem-solving skills which are of benefit as they pursue careers in technical fields.

**Contact Information**

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