

PHYSICS, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Description

The Department of Physics offers a minor for students who wish to expand upon their study in this fundamental discipline, beyond the introductory courses (PHYS 211, PHYS 212, PHYS 213, PHYS 214). In addition to an additional course in modern physics (PHYS 237, which includes introductions to relativity and quantum theory, as well as applications), students take two 400-level PHYS courses for a total of 6-8 credits. The Physics minor is useful for students in many STEM disciplines who wish to extend their studies in this fundamental field, as a background for graduate study or work in a variety of technical fields.

What is Physics?

Physicists study natural phenomena in the universe, from the smallest length scales to the largest in the cosmos, to discover the basic principles or laws which govern the physical world. Knowledge of physics is crucial to truly understanding the world around us, the world inside us, and the world beyond us. The Physics minor will extend your studies at the fundamental level, as a background for graduate study or for future work in a variety of technical fields.

You Might Like This Program If...

You are interested in supplementing your education with a strong foundation in the physical principles behind applications.

Program Requirements

Requirement	Credits
Requirements for the Minor	29-31

Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (<https://senate.psu.edu/students/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/>). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better</i>		
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
PHYS 211	General Physics: Mechanics	4
PHYS 212	General Physics: Electricity and Magnetism	4
PHYS 213	General Physics: Fluids and Thermal Physics	2
PHYS 214	General Physics: Wave Motion and Quantum Physics	2
PHYS 237	Introduction to Modern Physics	3
Supporting Courses and Related Areas		
<i>Supporting Courses and Related Areas: Require a grade of C or better</i>		
Select two 400-level PHYS courses ¹		6-8

¹ Select two 400-level PHYS courses, except:

- PHYS 444
- PHYS 446
- PHYS 457
- PHYS 457W
- PHYS 494
- PHYS 494H
- PHYS 495
- PHYS 496
- PHYS 496H
- PHYS 499

Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<https://senate.psu.edu/students/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

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Career Paths

INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES
WITH A MINOR IN PHYSICS (<https://www.aps.org/careers/>)

INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES
(<https://gradschoolshopper.com/browse/>)

Contact

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<https://www.phys.psu.edu/undergraduate> (<https://science.psu.edu/physics/undergraduate/>)

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