

# PHYSICS MINOR

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**Program Director:** Carter Hall, Ph.D.

This minor provides a rigorous foundation in physics for students who choose not to complete the entire physics major.

Students interested in earning a minor in physics should contact the undergraduate advisor for the Physics Department.

## REQUIREMENTS

The minor begins with a set of two introductory courses (6 credits) in electromagnetic fields (PHYS260 or PHYS272) and waves (PHYS270 or PHYS273). As part of this introduction to Physics, the minor also requires a one-credit introductory physics laboratory (PHYS174, PHYS261, or PHYS271) involving techniques of data gathering and analysis. To obtain a deeper understanding of physics, the minor requires three additional upper-level courses (3-4 credits each), which students can select from the list below.

- Other upper level Physics courses can be substituted only with approval from the Department's undergraduate director and the Faculty Minor Advisor.
- All courses must be completed with a grade of "C-" or better to be counted towards the minor.
- No more than 7 credits in this minor can count toward major requirements. Students with more than 7 credits of overlap must substitute non-overlapping 300 or 400 level courses from the above list to reduce the overlap to no more than 7 credits.
- Physics majors and students majoring in Astronomy are not eligible to complete the Physics Minor due to the large number of overlapping course requirements.

## Courses Required for the Minor

Course	Title	Credits
Select one of the following:		1
PHYS174	Physics Laboratory Introduction	
PHYS261	General Physics: Mechanics, Vibrations, Waves, Heat (Laboratory)	
PHYS271	General Physics: Electrodynamics, Light, Relativity and Modern Physics (Laboratory)	
PHYS272	Introductory Physics: Fields	3
or PHYS260	General Physics: Vibration, Waves, Heat, Electricity and Magnetism	
PHYS273	Introductory Physics: Waves	3
or PHYS270	General Physics: Electrodynamics, Light, Relativity and Modern Physics	
Select three of the following:		9-12
PHYS371	Modern Physics	
PHYS373	Mathematical Methods for Physics II	
PHYS375	Experimental Physics III: Electromagnetic Waves, Optics and Modern Physics	
PHYS401	Quantum Physics I	

PHYS402	Quantum Physics II
PHYS404	Introduction to Statistical Thermodynamics
PHYS410	Classical Mechanics
PHYS411	Intermediate Electricity and Magnetism
PHYS474	Computational Physics
<b>Total Credits</b>	<b>16-19</b>

## Prerequisites

MATH140, MATH141, MATH241, MATH240, MATH246, PHYS171 are prerequisites for some of the courses in this program.