

## Minor in Physics

### Program

A minor in physics is a flexible program intended for students enrolled in any four-year degree at the University of Maine. It requires a minimum of 21 credits.

### Requirements

- Core Courses (12 credits) Credits

PHY 111/112 or PHY 121/122	General Physics I/II or Physics for Engineers and Physical Scientists I/II	8
PHY 223	Special Relativity	1
PHY 236	Introductory Quantum Physics	3

- Elective Courses: Minimum of 9 credits chosen from the following list of courses. Up to 3 credits of laboratory courses may be included. *Lab courses are listed in italics.* Note that many of these courses have prerequisites and/or co-requisites.

PHY 231	Mathematical Methods in Physics	3
PHY 241	Computational Physics	3
PHY 447	Molecular Biophysics	3
PHY 451	Mechanics	3
PHY 454	Electricity and Magnetism I	3
PHY 455	Electricity and Magnetism II	3
PHY 463	Statistical Mechanics	3
PHY 469	Quantum and Atomic Physics	3
PHY 470	Nuclear Physics	2
PHY 472	Geometrical and Fourier Optics	3
AST 451	Astrophysics I (3-credit course only)	3
<i>PHY 224</i>	<i>Special Relativity Laboratory</i>	<i>1-3</i>
<i>PHY 261</i>	<i>Physical Measurements Laboratory</i>	<i>2</i>
<i>PHY 262</i>	<i>Electronics</i>	<i>2</i>
<i>PHY 364</i>	<i>Modern Experimental Physics</i>	<i>2</i>
<i>PHY 365</i>	<i>Mechanics Laboratory</i>	<i>2</i>
<i>PHY 471</i>	<i>Nuclear Physics Laboratory</i>	<i>1</i>

- GPA requirement: Students graduating with a minor in a CLAS field must earn a cumulative GPA of 2.0 or better in the courses in the minor field that are credited toward completion of the minor.
- Residency requirement: Must complete a minimum of 9 credits at UMaine; at least 6 of these 9 credits must be from the Elective Courses.

Exceptions to this list may be considered on a case-by-case basis by the Minor Advisor with the advice and consent of the faculty.

### For More Information

Physics Minor Advisor: Dr. David E. Clark, [declark@maine.edu](mailto:declark@maine.edu), 205 Bennett Hall, 207-581-1040.  
[physics@maine.edu](mailto:physics@maine.edu)