PHYSICS MINOR

A minor in physics is a great option for students in any STEM field that is interested a deeper understanding of the physical principles that form the basis of chemistry, biology, astronomy, and earth sciences. It is also a good choice for students interested in pursuing advanced degrees in any of those fields.

Regulations Governing Minor Course Work
1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Physics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PHYS 231</td>
<td>Physics 1 with Calculus</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 232</td>
<td>Physics 2 with Calculus</td>
<td>5</td>
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<tr>
<td>PHYS 233</td>
<td>Wave-Particle Theory</td>
<td>3</td>
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<td>PHYS 334</td>
<td>Macroscopic Physics</td>
<td>3</td>
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<td>Physics Elective Course - Choose 1 of the following:</td>
<td>2-3</td>
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<tr>
<td>PHYS 311</td>
<td>Mechanics 1</td>
<td></td>
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<tr>
<td>PHYS 317</td>
<td>Introduction to Astronomy</td>
<td></td>
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<tr>
<td>PHYS 321</td>
<td>Electromagnetic Fields 1</td>
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<tr>
<td>PHYS 331</td>
<td>Fundamentals of Optics</td>
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<tr>
<td>PHYS 395</td>
<td>Techniques of Mathematical Physics</td>
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<tr>
<td>PHYS 431</td>
<td>Solid State Physics</td>
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<tr>
<td>PHYS 435</td>
<td>Statistical Mechanics</td>
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<tr>
<td>PHYS 471</td>
<td>Quantum Mechanics</td>
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Total Hours 18-19