Physics Minor

Students may complete a minor in physics with the flexibility of emphasis on classical physics, modern physics, or a combination of the two areas. The following physics courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICS 1099</td>
<td>Windows on Physics</td>
<td>1</td>
</tr>
<tr>
<td>PHYSICS 2111</td>
<td>Physics: Mechanics and Heat</td>
<td>4</td>
</tr>
<tr>
<td>PHYSICS 2112</td>
<td>Physics: Electricity, Magnetism, and Optics</td>
<td>4</td>
</tr>
<tr>
<td>PHYSICS 3200</td>
<td>Mathematical Methods of Theoretical Physics</td>
<td>3</td>
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</tbody>
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Select two additional emphasis courses from the following: 6

- PHYSICS 3221 Mechanics
- PHYSICS 3223 Electricity and Magnetism
- PHYSICS 3231 Introduction to Modern Physics I
- PHYSICS 4310 Modern Electronics

Total Hours 18

A GPA of at least 2.0 is required in courses presented for a minor. It is required that a student completes a minimum of 6 hours of graded work in 2000 level or above courses on the UMSL campus.

Program Purpose

The purpose of the Minor in Physics at the University of Missouri at St. Louis is to provide students with a core knowledge of physics concepts to complement their major degree program.

Learning Outcomes

- Students will be able to demonstrate an understanding of basic physics concepts such as classical mechanics, electricity and magnetism, modern physics, and modern electronics
- Students will be skilled in problem-solving, critical thinking and analytical reasoning as applied to scientific problems
- Students will be proficient in both written and oral communication of the results of scientific work
- Students will have the skills necessary to identify possible errors in scientific data, and to assess the significance of observed results