# Physics B.S.P.

## Degree Requirements: 126 Credit Hours

*See Core Curriculum for required courses in Area A1 through Area E.*

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Area</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area A1 - Communication Skills</strong></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select 6 credit hours from Area A1 of the Core Curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area A2 - Quantitative Skills</strong></td>
<td>3</td>
<td>MATH 1113</td>
<td>Pre-Calculus</td>
</tr>
<tr>
<td>or MATH 1441</td>
<td>Calculus I</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area B - Global Engagement</strong></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select 4 credit hours from Area B of the Core Curriculum</td>
<td></td>
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<tr>
<td><strong>Area C - Humanities, Fine Arts, and Ethics</strong></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select 6 credit hours from Area C of the Core Curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area D - Natural Sciences, Mathematics, and Technology</strong></td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select 11 credit hours from Area D of the Core Curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area E - Social Sciences</strong></td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select 12 credit hours from Area E of the Core Curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area F - Courses Appropriate to Major</strong></td>
<td>1</td>
<td>MATH 1441</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 2242</td>
<td>Calculus II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 2243</td>
<td>Calculus III</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 2211</td>
<td>Principles of Physics I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 2212</td>
<td>Principles of Physics II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Additional hours in physics, math, computer science or chemistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Health and Physical Education Activities</strong></td>
<td>2</td>
<td>HLTH 1520</td>
<td>Healthful Living</td>
</tr>
<tr>
<td>Physical Education Activities</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Orientation</strong></td>
<td>2</td>
<td>FYE 1220</td>
<td>First-Year Seminar</td>
</tr>
<tr>
<td><strong>Specific Requirements</strong></td>
<td>3</td>
<td>MATH 3230</td>
<td>Ordinary Differential Equations</td>
</tr>
<tr>
<td><strong>Required Physics Courses</strong></td>
<td>24</td>
<td>PHYS 3536</td>
<td>Modern Physics I</td>
</tr>
<tr>
<td>PHYS 3537</td>
<td>Modern Physics II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHYS 4421</td>
<td>Advanced Physics Lab I</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PHYS 4422</td>
<td>Advanced Physics Lab II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PHYS 5151</td>
<td>Classical Mechanics</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PHYS 5152</td>
<td>Classical E and M Theory</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PHYS 5530</td>
<td>Thermal Physics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHYS 5557</td>
<td>Quantum Mechanics</td>
<td>5</td>
<td></td>
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<tr>
<td>Students must complete 5 credit hours of Advisor approved upper level Physics or Astronomy courses.</td>
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<tr>
<td><strong>Electives</strong></td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select 24 credit hours of Electives</td>
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<td></td>
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<tr>
<td>Carry over from Area F, if applicable (3)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Carryover from Physics Electives, if applicable (3)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>126</td>
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</tbody>
</table>

\(^1\) While Pre-Calculus (MATH 1113) and Calculus I (MATH 1441) are 4 credit hours, only 3 credit hours will count toward fulfilling Area A2. The remaining credit hour will be applied toward Area F.

\(^2\) Students must complete Calculus I (MATH 1441), Calculus II (MATH 2242), and Calculus III (MATH 2243).

## Other Program Requirements

- No more than 40 credit hours of upper division course work in Physics may count toward the 126 credit hour minimum for graduation.

## Advisement

COSM Advisement Center, Engineering Building, Room 1116, (912) 478-0649