Bachelor of Arts Degree in Physics

The Bachelor of Arts degree in Physics provides opportunities for careers in several professional fields. It is not recommended for students planning to pursue graduate studies in physics or related fields.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

All majors in physics are required to complete all required and elective physics courses with a grade of “C” or better.

All candidates seeking this degree must fulfill the Core Curriculum requirements and the degree requirements, which are listed below.

Core Curriculum requirements: Students seeking the Bachelor of Arts degree in Physics must fulfill University Core Curriculum requirements in the same manner as other students. The courses listed in the table below satisfy both degree requirements and Core Curriculum requirements; however, if these courses are taken to satisfy both requirements, then students may need to take additional courses in order to meet the minimum number of semester credit hours required for this degree. For a complete listing of courses that satisfy the Core Curriculum requirements, see pages 5–9 of this catalog.

<table>
<thead>
<tr>
<th>Core Curriculum Component Area</th>
<th>Courses that Satisfy Core Curriculum and Degree Requirements</th>
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<tr>
<td>Communications</td>
<td><strong>English Rhetoric/Composition</strong> (6 semester credit hours)  &lt;br&gt;All students must take the following six hours to meet this core requirement:  &lt;br&gt;<strong>WRC 1013 Freshman Composition I</strong>  &lt;br&gt;<strong>WRC 1023 Freshman Composition II</strong></td>
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<tr>
<td>Mathematics</td>
<td><strong>Mathematics</strong> (3 semester credit hours)  &lt;br&gt;<strong>MAT 1214 Calculus I</strong></td>
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<td>Natural Sciences</td>
<td><strong>Science</strong> (6 semester credit hours)  &lt;br&gt;Any 6 semester credit hours from the list below will satisfy this core requirement:  &lt;br&gt;<strong>CHE 1103 General Chemistry I</strong>  &lt;br&gt;<strong>CHE 1113 General Chemistry II</strong>  &lt;br&gt;<strong>PHY 1943, 1951 Physics for Scientists I and Laboratory</strong>  &lt;br&gt;<strong>PHY 1963, 1971 Physics for Scientists II and Laboratory</strong></td>
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<tr>
<td>Humanities &amp; Visual and Performing Arts</td>
<td><strong>Literature</strong> (3 semester credit hours)  &lt;br&gt;Any three hours listed under this section in the list of core courses will satisfy this core requirement.  &lt;br&gt;<strong>The Arts</strong> (3 semester credit hours)  &lt;br&gt;Any three hours listed under this section in the list of core courses will satisfy this core requirement.</td>
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<tr>
<td>Social and Behavioral Sciences</td>
<td><strong>United States History and Diversity</strong> (6 semester credit hours)  &lt;br&gt;Any six hours listed under this section in the list of core courses will satisfy this core requirement.  &lt;br&gt;<strong>Political Science</strong> (6 semester credit hours)  &lt;br&gt;<strong>POL 1013 Introduction to American Politics</strong>, plus three additional hours listed under this section in the list of core courses will satisfy this core requirement.  &lt;br&gt;<strong>Social and Behavioral Science</strong> (3 semester credit hours)  &lt;br&gt;Any three hours listed under this section in the list of core courses will satisfy this core requirement.</td>
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</tbody>
</table>
Core Curriculum Component Area | Courses that Satisfy Core Curriculum and Degree Requirements
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| Economics (3 semester credit hours) | Any three hours listed under this section in the list of core courses will satisfy this core requirement.
| World Society and Issues | (3 semester credit hours) Any three hours listed under this section in the list of core courses will satisfy this core requirement.

Degree Requirements

A. 33 semester credit hours of physics and astronomy courses:

1. 30 semester credit hours of required courses completed with a grade of “C” or better:

   PHY 1943, 1951 Physics for Scientists I and Laboratory
   PHY 1963, 1971 Physics for Scientists II and Laboratory
   PHY 1983, 1991 Physics for Scientists III and Laboratory
   PHY 3103 Modern Physics
   PHY 3203 Classical Mechanics I
   PHY 3293 Thermal Physics
   PHY 3343 Advanced Physics Laboratory
   PHY 3423 Electricity and Magnetism
   PHY 3823 Mathematical Physics I

2. 3 additional semester credit hours selected from the following:

   AST 3003 Introduction to Astrophysics
   PHY 3143 Introduction to Computational Physics
   PHY 3313 Materials Physics
   PHY 3443 Modern Optics
   PHY 4013 Relativity: Special and General
   PHY 4033 Cosmology
   PHY 4133 Numerical Methods for Physicists
   PHY 4263 Quantum Mechanics I
   PHY 4843 Condensed Matter Theory

B. 54 semester credit hours required in the College of Sciences:

1. 23 semester credit hours of required courses (excluding physics):

   CHE 1103 General Chemistry I
   CHE 1113 General Chemistry II
   CHE 1132 General Chemistry II Laboratory
   CS 1073 Introductory Computer Programming for Scientific Applications
   MAT 1214 Calculus I
   MAT 1224 Calculus II
   MAT 2214 Calculus III

2. 31 additional approved semester credit hours from the College of Sciences including 18 upper-division hours