# Physics and Astronomy B.A.

## Degree Requirements: 124 Credit Hours

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

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>General Requirements (Core A - E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area A2 -- Must take MATH 1112, MATH 1113, or MATH 1441</td>
</tr>
<tr>
<td></td>
<td>Area DII -- Must take MATH 1441 if not taken in Area A2 above</td>
</tr>
</tbody>
</table>

### Additional Requirements

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Area F - Courses Appropriate to Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>MATH 2242 Calculus II</td>
</tr>
<tr>
<td>18</td>
<td>ASTR 1010 Astronomy of the Solar System</td>
</tr>
<tr>
<td></td>
<td>ASTR 1020 Stellar and Galactic Astronomy</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Major Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>PHYS 3536 Modern Physics I</td>
</tr>
<tr>
<td></td>
<td>PHYS 3537 Modern Physics II</td>
</tr>
<tr>
<td></td>
<td>PHYS 4421 Advanced Physics Lab I</td>
</tr>
</tbody>
</table>

Select one of the following Teaching Internship Courses:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Major Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ASTR 3790 Teaching Internship in Astronomy</td>
</tr>
<tr>
<td></td>
<td>PHYS 3790 Teaching Internship in Physics</td>
</tr>
</tbody>
</table>

Students must complete 12 credit hours of Advisor approved upper level Astronomy or Physics courses.

### Foreign Language (2002 Level)

Completion through 2002-level Foreign Language

### Minor

Select 15 credit hours of Minor

### Electives

Select 15-24 credit hours of Electives

Students interested in seeking Teacher Certification through the Masters of Arts in Teaching program should take introductory courses from the College of Education aimed to explore careers in teaching including:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Electives</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>EDUC 2090 PPB Practicum</td>
</tr>
<tr>
<td></td>
<td>EDUC 2110 Investigating Critical and Contemporary Issues in Education</td>
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<tr>
<td></td>
<td>EDUC 2120 Exploring Socio-Cultural Perspectives on Diversity in Educational Contexts</td>
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<tr>
<td></td>
<td>EDUC 2130 Exploring Learning and Teaching</td>
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</tbody>
</table>

### Total Credit Hours

124

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1. While Calculus I (MATH 1441) is 4 credit hours, only 3 credit hours will count toward fulfilling Area A2. The remaining credit hour will be applied toward Electives.

2. Students must complete Calculus I (MATH 1441) and Calculus II (MATH 2242)

3. May be satisfied by a secondary school background showing four (4) years or more of preparation in a single language

4. Students must complete at least 39 credit hours of upper division course work overall.

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### Honors in Physics

To graduate with Honors in Physics, a student must:

- be admitted to the University Honors Program;
- complete 3-credit hours in honors PHYS 5890 or ASTR 5890 (in a minimum of two regular semesters);
- successfully complete and present an Honors Thesis or Capstone Project;
- be in good standing in the University Honors Program at the time of graduation.