**BA Degree in Physics - Astronomy (675107)**

Minimum Number of Units in Major = 52

### 1st Semester Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Recommended Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Information Competence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written English Proficiency</td>
<td>ENG 114</td>
<td>3</td>
</tr>
<tr>
<td>GE 1 Oral Communication</td>
<td>COMM 150</td>
<td>3</td>
</tr>
<tr>
<td>GE 1 Quantitative Reasoning also satisfies Major Lower Division Prerequisite</td>
<td>MATH 226</td>
<td>4</td>
</tr>
<tr>
<td>GE 2 Physical and Biological Sciences, Category A</td>
<td>PHYS 220 &amp; PHYS 222</td>
<td>4</td>
</tr>
<tr>
<td>GE 2 Behavioral and Social Sciences</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

*Note: Review the Bulletin for GE II requirements in the following areas: LLD-Lifelong Development; AERM-American Ethnic and Racial Minorities; L/F-Laboratory or Fieldwork.*

**Totals:** 16

### 2nd Semester Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Recommended Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE 1 Critical Thinking</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE 2 Physical and Biological Sciences, Category B</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE 2 Humanities and Creative Arts</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Major Lower Division Prerequisite</td>
<td>MATH 227</td>
<td>4</td>
</tr>
<tr>
<td>Major Lower Division Prerequisite</td>
<td>PHYS 220 &amp; PHYS 222</td>
<td>4</td>
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</tbody>
</table>

**Totals:** 17

### 3rd Semester Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Recommended Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE 1 Written Communication also satisfies University Written English Proficiency</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE 2 Behavioral and Social Sciences</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Major Lower Division Prerequisite</td>
<td>MATH 228</td>
<td>4</td>
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<tr>
<td>Major Lower Division Prerequisite</td>
<td>PHYS 230 &amp; PHYS 232</td>
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<tr>
<td>Major Upper Division</td>
<td>ASTR 321</td>
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</table>

**Totals:** 16

### 4th Semester Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Recommended Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Government and California</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE 2 Physical and Biological Sciences, Category C</td>
<td></td>
<td>3</td>
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<tr>
<td>GE 2 Humanities and Creative Arts</td>
<td></td>
<td>3</td>
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<tr>
<td>Major Lower Division Prerequisite</td>
<td>PHYS 240 &amp; PHYS 242</td>
<td>4</td>
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<tr>
<td>Major Upper Division</td>
<td>CSC 210</td>
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**Totals:** 16

### 5th Semester Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Recommended Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>University UD Written English Proficiency or University Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE 3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Major Upper Division</td>
<td>PHYS 320</td>
<td>3</td>
</tr>
<tr>
<td>Major Upper Division</td>
<td>PHYS 321</td>
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<td>Major Upper Division Elective</td>
<td>PHYS 480</td>
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**Totals:** 14

### 6th Semester Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Recommended Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>US History</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE 3</td>
<td></td>
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</tr>
<tr>
<td>Major Upper Division</td>
<td>ASTR 320</td>
<td>3</td>
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<tr>
<td>Major Upper Division Elective</td>
<td>PHYS 325</td>
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<td>University Elective</td>
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**Totals:** 15

### 7th Semester Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Recommended Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE 3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Major Upper Division</td>
<td>PHYS 385 &amp; MATH 374</td>
<td>3</td>
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<tr>
<td>Major Upper Division</td>
<td>ASTR 410</td>
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</table>

**Totals:** 15

### 8th Semester Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Recommended Courses</th>
<th>Units</th>
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<tbody>
<tr>
<td>GE 2 Behavioral and Social Sciences</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE 2 Humanities and Creative Arts</td>
<td></td>
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<tr>
<td>Major Upper Division</td>
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<td>Major Upper Division Elective</td>
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<tr>
<td>University Elective</td>
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</tbody>
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**Totals:** 12 to 14

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Note: A minimum of 40 upper division units must be completed for degree.

Department Website: [http://www.physics.sfsu.edu/](http://www.physics.sfsu.edu/)