The Minor in Astronomy, offered jointly by the Department of Earth, Atmospheric, and Planetary Sciences (http://catalog.mit.edu/schools/science/earth-atmospheric-planetary-sciences) and the Department of Physics (http://catalog.mit.edu/schools/science/physics), covers the observational and theoretical foundations of astronomy. The minor requires seven subjects as follows:

### Astronomy, Mathematics, and Physics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Subject Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.03</td>
<td>Physics III</td>
<td>12</td>
</tr>
<tr>
<td>8.282[J]</td>
<td>Introduction to Astronomy</td>
<td>9</td>
</tr>
<tr>
<td>18.03</td>
<td>Differential Equations (^1)</td>
<td>12</td>
</tr>
</tbody>
</table>

### Astrophysics

<table>
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<tr>
<th>Course Code</th>
<th>Subject Name</th>
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<tbody>
<tr>
<td>8.284</td>
<td>Modern Astrophysics</td>
<td>12</td>
</tr>
<tr>
<td>or 8.286</td>
<td>The Early Universe</td>
<td></td>
</tr>
</tbody>
</table>

### Planetary Astronomy

**Select one of the following:** 12

- 12.400 Our Space Odyssey
- 12.420 Essentials of Planetary Science

### Instrumentation and Observations

**Select one of the following:** 12-18

- 12.410[J] Observational Techniques of Optical Astronomy
- 12.43[J] Space Systems Engineering
- 12.431[J] Space Systems Development

### Independent Project in Astronomy

**Select one of the following:** 9-12

- 8.UR Undergraduate Research
- or 12.UR Undergraduate Research
- 8.THU Undergraduate Physics Thesis
- or 12.THU Undergraduate Thesis
- 12.411 Astronomy Field Camp

### Total Units

- 78-87

\(^1\) 18.032 Differential Equations is also an acceptable alternative.

A maximum of three subjects can count toward the astronomy minor, and a major or another minor. Further information on the minor can be obtained from Professor Richard Binzel (rpb@mit.edu), 54-426, 617-253-6486.