ASTROPHYSICS, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Astrophysics

The Department of Astronomy also offers a BSLAS in Computer Science & Astronomy [catalog.illinois.edu/undergraduate/eng_las/computer-science-astronomy-bs/]

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Astrophysics

Departmental distinction: A student majoring in astrophysics may earn distinction or high distinction by attaining a minimum grade point average of 3.4 or 3.75, respectively, in required major courses (defined in the table below) taken at UIUC. For highest distinction, in addition to meeting the minimum requirements for high distinction, a senior thesis (ASTR 490) must be completed with strong endorsement by the research supervisor. Questions about eligibility for distinction status should be directed to an astronomy advisor before the senior year.

General education: Students must complete the Campus General Education requirements including the campus general education language requirement.

Minimum required major and supporting coursework: Normally equates to 65 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.

Minimum hours required for graduation: 120 hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Core Requirements</td>
<td></td>
</tr>
<tr>
<td>ASTR 210</td>
<td>Introduction to Astrophysics</td>
<td>17</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>University Physics: Mechanics</td>
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<tr>
<td>PHYS 212</td>
<td>University Physics: Elec &amp; Mag</td>
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<tr>
<td>PHYS 213</td>
<td>Univ Physics: Thermal Physics</td>
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<tr>
<td>PHYS 214</td>
<td>Univ Physics: Quantum Physics</td>
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<tr>
<td>PHYS 225</td>
<td>Relativity &amp; Math Applications</td>
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<tr>
<td></td>
<td>Advanced Astronomy</td>
<td>15</td>
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<tr>
<td>ASTR 310</td>
<td>Computing in Astronomy (CS 100 is recommended as a prerequisite but not required)</td>
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<tr>
<td></td>
<td>Select three of the following four courses:</td>
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<tr>
<td>ASTR 404</td>
<td>Stellar Astrophysics</td>
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<tr>
<td>ASTR 405</td>
<td>Planetary Systems</td>
<td></td>
</tr>
<tr>
<td>ASTR 406</td>
<td>Galaxies and the Universe</td>
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<tr>
<td>ASTR 414</td>
<td>Astronomical Techniques</td>
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<tr>
<td>At least 3 additional hours of approved 300- or 400-level ASTR courses.</td>
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<tr>
<td>Excluded courses: ASTR 330, ASTR 350, and ASTR 390.</td>
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<td></td>
<td>Advanced Physics</td>
<td>12</td>
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<tr>
<td>PHYS 325</td>
<td>Classical Mechanics I</td>
<td></td>
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<tr>
<td>PHYS 435</td>
<td>Electromagnetic Fields I</td>
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<tr>
<td>At least 6 additional hours of approved 300- or 400-level PHYS courses</td>
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<tr>
<td></td>
<td>Supporting Technical Courses</td>
<td>18</td>
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<tr>
<td>MATH 220</td>
<td>Calculus (Students with previous calculus experience should consider MATH 221) or MATH 221</td>
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</tr>
<tr>
<td>MATH 231</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 241</td>
<td>Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 285</td>
<td>Intro Differential Equations</td>
<td></td>
</tr>
<tr>
<td>or MATH 286</td>
<td></td>
<td></td>
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<tr>
<td>MATH 415</td>
<td>Applied Linear Algebra</td>
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Recommended courses include: PHYS 326, PHYS 401, PHYS 402, PHYS 404, PHYS 427, PHYS 436, PHYS 470, and PHYS 486.

Excluded courses: PHYS 398, PHYS 419, PHYS 420, PHYS 495 and PHYS 497.

Advanced Laboratory Techniques 3

At least one course taken for the Advanced Requirements must be from the following courses:

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<tr>
<td>ASTR 414</td>
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<tr>
<td>PHYS 401</td>
<td>Classical Physics Lab</td>
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<tr>
<td>PHYS 402</td>
<td>Light</td>
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<tr>
<td>PHYS 404</td>
<td>Electronic Circuits</td>
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Supporting Technical Courses 18

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Department website: https://astro.illinois.edu/
Department faculty: Astronomy Faculty (https://astro.illinois.edu/directory/faculty/)
Advising: Astronomy advising (https://astro.illinois.edu/academics/undergraduate-program/)
Overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/)
College website: https://las.illinois.edu/