Astronomy, M.S.

Graduate study in physics and astronomy is highly individualized. Each entering graduate student is assigned a faculty advisor, who assists in preparing a plan of study and in guiding the student’s progress. All graduate students who intend to pursue a Ph.D. in physics must pass the qualifying exam; see the Ph.D. in physics in this section of the Catalog.

Requirements

The Master of Science program in astronomy requires a minimum of 30 s.h. of graduate credit. All students must maintain a g.p.a. of at least 3.00. Seminars do not count toward the minimum of 30 s.h. required for the degree.

Up to one-third of the program of study may be taken in related scientific fields (e.g., meteorology, geology, electrical engineering); selection of such courses is encouraged.

The degree is offered either with or without thesis. The M.S. may be a terminal degree or a step toward a Ph.D. in physics with subprogram and a dissertation in astronomy or astrophysics. In either case the final examination is oral, conducted by a committee of three faculty members.

Students in the thesis program earn the required 30 s.h. in courses numbered 4000 or above, with at least 15 s.h. in courses numbered 5000 or above. Thesis students must earn at least 6 s.h. in the following courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR:6785</td>
<td>The Interstellar Medium</td>
<td>3</td>
</tr>
<tr>
<td>ASTR:6790</td>
<td>Stellar Astrophysics</td>
<td>3</td>
</tr>
<tr>
<td>ASTR:7775</td>
<td>Special Topics in Astrophysics</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Thesis students may earn a maximum of 6 s.h. in PHYS:7992 Individual Critical Study and ASTR:7991 Research: Astronomy.

Students in the nonthesis program must maintain a g.p.a. of at least 3.00 in core graduate courses. They must earn 18 s.h. in the following core graduate courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR:6785</td>
<td>The Interstellar Medium</td>
<td>3</td>
</tr>
<tr>
<td>ASTR:6790</td>
<td>Stellar Astrophysics</td>
<td>3</td>
</tr>
<tr>
<td>ASTR:7775</td>
<td>Special Topics in Astrophysics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS:5710</td>
<td>Classical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS:5811</td>
<td>Classical Electrodynamics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS:5812</td>
<td>Classical Electrodynamics II</td>
<td>3</td>
</tr>
</tbody>
</table>

Nonthesis students may earn a maximum of 4 s.h. in PHYS:7992 Individual Critical Study and ASTR:7991 Research: Astronomy.

Admission

Applicants must meet the admission requirements of the Graduate College; see the Manual of Rules and Regulations of the Graduate College on the Graduate College website.

Financial Support

Students qualified for graduate study are encouraged to apply for fellowships and assistantships. Contact the Department of Physics and Astronomy chair.

Career Advancement

Graduates have opportunities for employment in universities, colleges, and research laboratories in government and industry. Astronomy graduates have mastered skills that are readily transferable to a number of fields. They might choose to work in engineering, software development, finance, or consulting.

The Pomerantz Career Center offers multiple resources to help students find internships and jobs.