

# Astronomy, BA

## Academic Plans

### Four-Year Graduation Plan

The following checkpoints list the minimum requirements students must complete by certain semesters in order to stay on the university's Four-Year Graduation Plan. Courses in the major are those required to complete the major; they may be offered by departments other than the major department.

**Before the third semester begins:** math through MATH:1850 Calculus I and MATH:1860 Calculus II; and PHYS:1701 Physics I and PHYS:1702 Physics II.

**Before the fourth semester begins:** ASTR:1771 Fundamental Astronomy I: The Solar System and Exoplanets.

**Before the fifth semester begins:** ASTR:1772 Fundamental Astronomy II: Evolution of Stars, Galaxies, and the Universe, PHYS:2703 Physics III, PHYS:2704 Physics IV, and at least one more course in the major.

**Before the seventh semester begins:** three more courses in the major and at least 90 s.h. earned toward the degree.

**Before the eighth semester begins:** three more courses in the major.

**Before or during the eighth semester:** ASTR:4850 Observational Techniques in Astronomy.

**During the eighth semester:** enrollment in all remaining coursework in the major, all remaining GE CLAS Core courses, and a sufficient number of semester hours to graduate.

### Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

## Astronomy, BA

Course	Title	Hours
<b>Academic Career</b>		
<b>Any Semester</b>		
Research: students are strongly encouraged to be active participants in research within the department.		
Students can pursue a double major in astronomy and physics and earn more than 56 s.h. from the department toward these degrees but must also complete at least 56 s.h. outside of the Department of Physics & Astronomy.		
GE CLAS Core: Sustainability <sup>a</sup>		
<b>Hours</b>		<b>0</b>
<b>First Year</b>		
<b>Fall</b>		
ASTR:1771	Fundamental Astronomy I: The Solar System and Exoplanets	4
PHYS:1701	Physics I	4
MATH:1850	Calculus I <sup>b</sup>	4
ENGL:1200 or RHET:1030	The Interpretation of Literature or Rhetoric: Writing and Communication	3 - 4

CSI:1600	Success at Iowa	1
<b>Hours</b>		<b>16-17</b>

<b>Spring</b>		
ASTR:1772	Fundamental Astronomy II: Evolution of Stars, Galaxies, and the Universe	4
PHYS:1702	Physics II	4
MATH:1860	Calculus II	4
RHET:1030 or ENGL:1200	Rhetoric: Writing and Communication or The Interpretation of Literature	3 - 4
<b>Hours</b>		<b>15-16</b>

<b>Second Year</b>		
<b>Fall</b>		
PHYS:2703	Physics III	4
MATH:2700	Introduction to Linear Algebra <sup>c</sup>	4
GE CLAS Core: Understanding Cultural Perspectives <sup>d</sup>		3
GE CLAS Core: World Languages First Level Proficiency or elective course <sup>e</sup>		4 - 5
<b>Hours</b>		<b>15-16</b>

<b>Spring</b>		
PHYS:2704	Physics IV	3 - 4
MATH:2850	Calculus III <sup>c</sup>	4
GE CLAS Core: International and Global Issues <sup>d</sup>		3
GE CLAS Core: World Languages Second Level Proficiency or elective course <sup>e</sup>		4 - 5
<b>Hours</b>		<b>14-16</b>

<b>Third Year</b>		
<b>Fall</b>		
PHYS:3756	Intermediate Laboratory	3
PHYS:3811	Electricity and Magnetism I	3
GE CLAS Core: World Languages Third Level Proficiency or elective course <sup>e</sup>		4 - 5
Elective course <sup>f</sup>		1 - 3
Elective course <sup>f</sup>		3
<b>Hours</b>		<b>14-17</b>

<b>Spring</b>		
PHYS:3710	Intermediate Mechanics	3
GE CLAS Core: Literary, Visual, and Performing Arts <sup>d</sup>		3
GE CLAS Core: World Languages Fourth Level Proficiency or elective course <sup>e</sup>		4 - 5
Elective course <sup>f</sup>		3
Elective course <sup>f</sup>		3
<b>Hours</b>		<b>16-17</b>

<b>Fourth Year</b>		
<b>Fall</b>		
PHYS:3730	Statistical Physics	3
GE CLAS Core: Historical Perspectives <sup>d</sup>		3
GE CLAS Core: Social Sciences <sup>d</sup>		3
Elective course <sup>f</sup>		3
Elective course <sup>f</sup>		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
ASTR:4850	Observational Techniques in Astronomy <sup>g</sup>	3

GE CLAS Core: Values and Society <sup>d</sup>	3
Elective course <sup>f</sup>	3
Elective course <sup>f</sup>	3
Elective course <sup>f</sup>	3
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall) <sup>h</sup>	
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>120-129</b>

- a Sustainability must be completed by choosing a course that has been approved for Sustainability AND for one of these General Education areas: Natural Sciences; Quantitative or Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Society.
- b Enrollment in math courses requires completion of a placement exam.
- c While this course is not a major requirement, it is strongly recommended and a prerequisite for many physics and astronomy courses in the department.
- d GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.
- e Students who have completed four levels of a single language or two levels of two different languages in high school or college have satisfied the GE CLAS Core World Languages requirement. Students who have completed three levels of a single language may complete a fourth-level course in the same language or may choose an approved World Language and Cultural Exploration course. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course. Contact your academic advisor or CLAS Undergraduate Programs Office with questions concerning the World Languages requirement.
- f Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.
- g Typically this course is offered every other year. Check MyUI for course availability since offerings are subject to change.
- h Please see Academic Calendar, on Office of the Registrar website, for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Degree Services.