

# Bachelor of Science in Astronomy

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Astronomy tells us about the place of humankind in the universe: how Earth was created, how the Sun was formed, how galaxies form and evolve. It tells us where the universe is going and where it came from. Astronomers address these questions at a fundamental level. Their goal is to determine the basic and controlling properties of the universe and to transmit that knowledge to society. The Bachelor of Science in Astronomy is designed to give students an understanding of the universe and to prepare them to participate in the advancement of this exciting search.

Two Options are available: Astronomy and Astronomy Honors. Students who plan to follow Option II, Astronomy Honors, must be admitted to the [Dean's Scholars Honors Program](#).

## Prescribed Work Common to all Options

In the process of fulfilling degree requirements, all students must complete:

- a. Core curriculum
- b. Skill and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the [Course Schedule](#). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisors.

- c. One of the following foreign language/culture choices: (Students in Option II are exempt from this requirement)
  - a. Beginning level proficiency coursework, or the equivalent, in a foreign language
  - b. First course in a foreign language and a three-semester-hour course in the culture of the same language area
  - c. Two three-semester-hour courses in one foreign culture area chosen from an approved list available in the dean's office and the college advising centers
- d. At least 36 semester hours of upper-division coursework
- e. At least 21 hours of upper-division coursework, including at least 12 semester hours in physics and astronomy, must be completed in residence at the University

## Additional Prescribed Work for Each Option

### Option I: Astronomy

- f. Six semester hours in biology, chemistry, computer science, and/or geological sciences; Chemistry 301 or CH 301H and the courses in the Elements of Computing Certificate Program may be counted toward this requirement; any other course to be counted must meet major requirements in the department that offers it.

- g. Mathematics 408C and 408D, or the equivalent; and 427J or 427K, 427L, and any three hours of upper-division math.
- h. Physics 301, 101L, 315, 115L, 316, 116L, 336K, 352K, 353L, 355, 369, and 373.
- i. Astronomy 307, 352K, or 364P, 353, 358 or 376C, 375 or 376R, and three additional hours of upper-division astronomy.
- j. Six additional semester hours of upper-division coursework in physics and/or astronomy and/or math.
- k. Enough additional coursework to make a total of 123 semester hours

### Option II: Astronomy Honors

6. Breadth requirement: An honors mathematics course, CH 301H, and nine additional hours of coursework chosen from honors courses in the college; credit earned by examination may not be counted toward this requirement.
7. Physics 301, 101L, 315, 115L, 316, and 116L
8. Twelve semester hours of upper-division coursework in astronomy approved by the departmental honors advisor
9. Eighteen semester hours of upper-division coursework in physics approved by the departmental honors advisor
10. Three additional semester hours of upper-division coursework in astronomy or physics
11. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors advisor
12. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
13. Astronomy 379H and either a three-semester-hour upper-division research course approved by the departmental honors advisor or a second section of Astronomy 379H
14. Sixteen additional hours of coursework approved by the departmental honors advisor
15. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
16. Enough additional coursework to make a total of 120 semester hours

### Special Requirements

Students in both Options must fulfill both the University's [General Requirements](#) for graduation and the [college requirements](#). They must also earn a grade of at least C- in each mathematics and science course required for the degree, and a University grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the [General Information Catalog](#).

To graduate under Option II, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors advisor, and present their research in an approved public forum, such as the college's annual [Undergraduate Research Forum](#). More information about the Undergraduate Research Forum is available at <https://cns.utexas.edu>.