Astrophysics, Minor

LAASTPHMIN

The minor in astrophysics is ideal for students who want to explore the Earth's solar system, galaxy and universe. Students and faculty in astrophysics will investigate astronomical happenings, discover the meaning behind the cosmological principle, design experiments to address scientific programs and develop new instruments for further space exploration.

Description

The astrophysics minor is designed for students interested in developing a background in the theoretical modeling and observational techniques of galactic and stellar astronomy, extragalactic astronomy and cosmology. Students completing the minor will be able to think critically about scientific problems, reducing complex problems to their most important attributes, and to design experiments, observations and theoretical models that address those attributes. Students pursuing an astrophysics minor are expected to have a strong background in physics and mathematics.

At a Glance

- **College/School:** College of Liberal Arts and Sciences
- **Location:** Tempe campus

2018 - 2019 Major Map
Major Map (Archives)

Program Requirements
The minor in astrophysics consists of a minimum of 20 credit hours. At least 12 credit hours must be upper division. Students complete 12 credit hours of required course work and select one of three eight-credit hour options to complete the minor. All courses must be completed with a grade of "C" (2.00 on a 4.00 scale) or higher.

**Required Courses -- 12 credit hours**

AST 321: Introduction to Planetary and Stellar Astrophysics (SQ) (3)
AST 322: Introduction to Galactic and Extragalactic Astrophysics (SQ) (3)
AST 421: Astrophysics I (3)
AST 422: Astrophysics II (3)

**Electives Options -- 8 credit hours**

Choose one of the following options for the additional eight credit hours. (8)

**Option 1**

SES 121: Earth, Solar System and Universe (SQ) (3)
SES 122: History of the Earth and Solar System (3)
SES 123: Earth, Solar System and Universe Laboratory (SQ) (1)
SES 124: History of the Earth and Solar System Laboratory (1)

**Option 2**

AST 111: Introduction to Solar Systems Astronomy (SQ) (3)
AST 112: Introduction to Stars, Galaxies, and Cosmology (SQ) (3)
AST 113: Astronomy Laboratory I (SQ) (1)
AST 114: Astronomy Laboratory II (SQ) (1)

**Option 3**

AST OR MAT OR PHY OR SES Upper Division Elective (8)

In order to satisfy SQ natural science requirements, both a lecture and its corresponding laboratory section must be completed.

Depending on a student's undergraduate program of study, prerequisite courses may be needed in order to complete the requirements of this minor.

**Enrollment Requirements**

**GPA Requirement:** None
**Majors Ineligible to Add This Minor:** BS in earth and space exploration (astrophysics)

**Other Enrollment Requirements:** None

Students interested in adding a minor in astrophysics should contact an advisor in the School of Earth and Space Exploration to get information about the minor. Students will then work with the advisor in their major to have the minor officially added to their program.

Current ASU undergraduate students may pursue a minor and have it recognized on their ASU transcript at graduation. Students interested in pursuing a minor should consult their academic advisor to declare the minor and to ensure that an appropriate set of courses is taken. Minor requirements appear on the degree audit once the minor is added. Certain major and minor combinations may be deemed inappropriate by the college or department of either the major program or the minor. Courses taken for the minor may not count toward both the major and the minor. Students should contact their academic advisor for more information.

**Contact Information**

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