

Astrophysics, Minor

LAASTPHMIN

Learn about Earth's solar system, our galaxy and the universe. Join astrophysics students and faculty who are building space-flight hardware, making astronomical observations, discovering new planets, exploring cosmology and engineering new instruments for telescopes and satellites.

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 are able to think critically about scientific problems by reducing complex problems to their most important attributes and are able 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:** [The College of Liberal Arts and Sciences](#)
- **Location:** [Tempe](#)

Program requirements

[2024 - 2025 Minor Map](#)

[Minor Map \(Archives\)](#)

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 coursework 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: Stellar and Planetary Astrophysics](#) (3)

[AST 322: Introduction to Galactic and Extragalactic Astrophysics](#) (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 \(SCIT OR SQ\)](#) (3)

[SES 123: Earth, Solar System and Universe Laboratory \(SCIT OR SQ\)](#) (1)

[SES 126: Exploration of the Universe](#) (3)

[SES 128: Exploration of the Universe Lab](#) (1)

Option 2

[AST 111: Introduction to Solar Systems Astronomy \(SCIT OR SQ\)](#) (4)

[AST 112: Introduction to Stars, Galaxies, and Cosmology \(SCIT OR SQ\)](#) (4)

Option 3

[AST](#) OR [MAT](#) OR [PHY](#) OR [SES Upper Division Elective](#) (8)

In order to satisfy Scientific Thinking in Natural Sciences (SCIT) General Studies requirements, both a lecture and its corresponding laboratory section must be completed.

Prerequisite courses may be needed in order to complete the requirements of this minor.

Enrollment requirements

GPA Requirement: None

Incompatible Majors: BS in earth and space exploration (astrophysics); other BS in earth and space exploration concentrations are compatible with the astrophysics minor as long as option 2 or option 3 of the minor is pursued.

Other Enrollment Requirements: None

Current ASU undergraduate students may pursue a minor and have it recognized on their ASU transcript at graduation. 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 or the minor program. Courses taken for the minor may not count toward both the major and minor.

Career opportunities

Minor programs allow students to develop additional competencies that complement the marketable knowledge and skills they acquire in their majors.

The astrophysics minor supplements other technical degrees with advanced problem-solving techniques and skills used in modern astrophysics research, which are applicable to a wide variety of engineering and science careers.

Contact information

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