Astrophysics and Astronomy, MS

The astrophysics and astronomy MS program prepares you for discovering new planets, exploring cosmology, and building space-flight hardware and instruments for telescopes and satellites. You work with world-class faculty on NASA- and NSF-funded space missions, seeking answers to questions about how our universe began and how it continues to evolve.

Program Description

Degree Awarded: MS Astrophysics and Astronomy
This MS program provides fundamental graduate training in astrophysics and astronomy. Students take graduate-level courses in stars and interstellar media, galaxies, and cosmology; obtain quantitative skills through analysis and modelling, and may have observation opportunities through regional and international telescope observatories.

At a Glance

- **College/School:** [The College of Liberal Arts and Sciences](#)
- **Location:** [Tempe campus](#)

Degree Requirements

30 credit hours and a thesis

**Required Core (1 credit hour)**
SES 502 Exploring SESE Research (1)

**Electives or Research (3 credit hours)**
**Other Requirements (20 credit hours)**

AST 521 Stars and Interstellar Medium I (3)
AST 522 Stars and Interstellar Medium II (3)
AST 523 Stars and Interstellar Medium III (3)
AST 531 Galaxies and Cosmology I (3)
AST 532 Galaxies and Cosmology II (3)
AST 533 Galaxies and Cosmology III (3)
AST 591 Seminar: Astrophysics (1)
SES 501 SESE Colloquium (1)

**Culminating Experience (6 credit hours)**

SES 599 Thesis (6)

**Additional Curricular Information**

For other requirement courses, substitutions may be made per department approval.

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**Admission Requirements**

Applicants must fulfill the requirements of both the Graduate College and The College of Liberal Arts and Sciences.

Applicants are eligible to apply to the program if they have earned a bachelor's degree, in any field, from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admissions application and application fee
2. official transcripts
3. statement of purpose
4. three letters of recommendation
5. proof of English proficiency

**Additional Application Information**

An applicant whose native language is not English must provide proof of English proficiency regardless of current residency.

Students should see the program website for application deadlines.
Application Deadlines

Fall
Spring

Career Opportunities

Professionals with expertise in astrophysics and astronomy are in high demand across all sectors and industries, including remote sensing, data science, building instruments, and scientific research. Coding and numerical modeling skills translate across many domains, even beyond astrophysics. Skills in the measurement and analysis of data related to the physics, chemistry, and structure of the universe and exoplanetary systems are valuable to businesses and institutions relying on data-driven strategies to explore beyond the Earth and solar system.

This degree prepares candidates for further graduate study or for careers in related fields such as scientific staff positions at government laboratories, teaching at the community college level and technical positions in industry. Career examples include:

- research astronomer
- telescope operator
- data scientist

Contact Information

School of Earth and Space Exploration | ISTB4 795
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Admission Deadlines