

ASTRONOMY AND SPACE SCIENCES (PHD)

Graduate School

Program Website (<https://astro.cornell.edu/graduate/>)

CIP: 40.0201 | HEGIS: 1911.00 | NYSED: 13463

Graduate Field

Astronomy and Space Sciences (<https://catalog.cornell.edu/graduate-school/astronomy-space-sciences/>)

Program Description

The goal of the graduate program in Astronomy is to provide the foundation of a future career whether it be in the specific field of Astronomy and Space Sciences or in some other quantitative, scientific discipline. The first two years of your education is directed towards training in the broad inclusive knowledge of the field of Astronomy and Space Sciences through classwork, seminars, colloquia and consultation with faculty. You will gain experience communicating your ideas verbally and in written form. The background you acquire will provide a strong basis to begin conducting research in a more specialized area of interest. It is expected that the third year of the program will bring the full-fledged research experience where you will acquire expert knowledge in several areas and learn how to grapple with problems bringing all your resources to bear to solve them. Through the remainder of the graduate program, you will hone your professional scientific skills and carry out original, publishable research.

Concentrations

- Astrobiology
- Astronomy
- Astrophysics
- Astrostatistics
- Cosmology
- Data science
- Exoplanets
- Instrumentation
- Planetary sciences
- Space sciences [general]
- Theoretical astrophysics

Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 60

Program Requirements

- Minimum Semesters for Degree: 5

Graduate School Milestones

- Responsible Conduct of Research Training: Required
- Open Researcher and Contributor ID (ORCID): Required
- Student Progress Reviews (SPR) begin: Second Year

- Examination for admission to candidacy (A Exam): Any time before the seventh semester begins
- Defense of Dissertation (B Exam): Fifth year

Field Specific Milestones

- Qualifying Examination (Q Exam): Summer of first year
- Field Progress Review: First year

Course Requirements

- The Field of Astronomy and Space Sciences suggests but does not require eight courses for PhD students.

University Graduation Requirements Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (<https://registrar.cornell.edu/service-resources/college-registrar-directory/>) for more information.

Non-academic Requirements

Conduct Matters. Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

Financial Obligations. Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

Learning Outcomes

- Conduct original, publishable research in the field.
- Demonstrate in-depth knowledge across at least two sub-disciplines.
- Demonstrate state-of-the art knowledge of one area.
- Write effectively for professional audiences.
- Speak effectively to professional and lay audiences.