

ASTRONOMY, PHD

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (<https://guide.wisc.edu/graduate/#requirements>) and policies (<https://guide.wisc.edu/graduate/#policies>), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW–Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement Detail

Minimum Credit Requirement	51 credits
Minimum Residence Credit Requirement	32 credits
Minimum Graduate Coursework Requirement	26 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).
Other Grade Requirements	A GPA of at least 3.0 is required in the core (required) courses and a student may have no more than 3 credits of a C or below. A grade of S must be received in

ASTRON 990 Research and Thesis before the preliminary examination can be taken.

Assessments and Examinations Students take one oral preliminary examination and one written preliminary examination after completing their second academic year. Students who pass are eligible to continue toward their PhD. If students do not wish to retake a failed exam, they may complete the requirements for a terminal master's.

Doctoral candidates must submit a written dissertation proposal and make an oral presentation to the faculty by the end of their third academic year.

A written dissertation must be submitted and successfully defended before a faculty committee.

Language Requirements No language requirements.

Graduate School Breadth Requirement All doctoral students are required to complete a doctoral minor or graduate/professional certificate. Refer to the Graduate School: Breadth Requirement in Doctoral Training policy: <https://policy.wisc.edu/library/UW-1200> (<https://policy.wisc.edu/library/UW-1200/>).

They may either meet the minor requirement set by an external department (typically physics), or they may choose a distributed minor. In the latter case, 9 credits must be taken from two or more relevant departments outside of astronomy. The coursework will normally be courses numbered 400 and above although special exceptions may be made in the case where courses numbered 300 are needed to satisfy prerequisites. At least two courses must be completed in courses with the Graduate Coursework (Grad 50%) Attribute, and one should be completed in physics. Courses for the distributed minor or for minors outside of physics should be approved by the student's mentoring committee (or the graduate advisor if the mentoring committee has not yet been formed).

REQUIRED COURSES

Code	Title	Credits
Core		
ASTRON 500	Techniques of Modern Observational Astrophysics	3
ASTRON 700	Basic Astrophysics I	2
ASTRON 702	Basic Astrophysics II	2
ASTRON 715	Stellar Interiors and Evolution	2
ASTRON 720	The Interstellar Medium I: Basic Processes	2
ASTRON 730	Galaxies	2
ASTRON 735	Observational Cosmology	2
ASTRON/PHYSICS 910	Seminar in Astrophysics ¹	0-1
ASTRON 990	Research and Thesis ²	1-12
Breadth		9

See PhD policy above on Breadth Requirement for details.

Total Credits

51

¹ Barring course conflicts, students are expected to take this course every semester during their first two years for 1 credit each semester. Once students reach dissertator status, they no longer register for this course.

² Beyond the other required courses listed, students typically take ASTRON 990 Research and Thesis credits to reach the total minimum credit requirement.