

ASTROPHYSICS - MINOR

Astrophysics encompasses physical law at the largest scales; from planets in the Solar System and planets around other stars to the evolution of galaxies and the stars that populate them, massive black holes in the center of galaxies, and the origin, growth, and ultimate fate of the Universe. Astrophysics unifies discoveries from many sciences including physics, chemistry, and biology using techniques in statistics, data mining, and applied mathematics.

The minor in Astrophysics helps to prepare students for entry into the competitive science, technology, engineering, and mathematics (STEM) workplace. Students develop technical skills and problem-solving experiences that expand the tools used in the modern, high-technology world. The minor is intended for anyone interested in the mathematical basis of astronomy and is especially relevant for engineering and physics students who will need a basic understanding of the physics of the Universe in their future careers. It is also suitable for students who intend to pursue careers in areas that may benefit from a technical knowledge of astronomy such as science writing, scientific journalism, or science teaching in schools.

To declare an Astrophysics minor, please follow the instructions on the Department of Physics and Astronomy website (<https://physics.tamu.edu/academics/current-undergraduates/minors/>).

Program Requirements

Code	Title	Semester Credit Hours
ASTR 314	Survey of Astronomy ¹	3
ASTR 320	Astrophysical Research Methods	3
PHYS 207 & PHYS 227	Electricity and Magnetism for Engineering and Science and Electricity and Magnetism Laboratory for the Sciences ²	4
Directed electives		6
Select two of the following:		
ASTR 401	Stars and Extrasolar Planets	
ASTR 403	Extragalactic Astronomy and Cosmology	
ASTR 420	Advanced Astrophysical Research Methods	
ASTR 491	Research ³	
Total Semester Credit Hours		16

¹ ASTR 314 is the prerequisite for ASTR 320, ASTR 401 and ASTR 403

² All Engineering majors will take ENGR 217/PHYS 217 in place of PHYS 227.

³ No more than three hours of ASTR 491 may be used for this requirement. Three credit hours of ASTR 491 must be taken in a single semester, and approval from the professor must be obtained prior to registering for ASTR 491.

Students must make a grade of C or better in all courses.