Minor in Astrophysics

About This Program

The Minor in Astrophysics provides Science (Non#Physics) and Engineering Majors with a calculus-based, foundation in astrophysical concepts, including the structure and evolution of stars, galaxies, and the universe.

Competencies

1. Program graduates will be able to demonstrate knowledge of key concepts such as stellar evolution, galactic dynamics, and cosmology, grounded in the fundamental principles of physics.
2. Graduates will be able to use physics-based models and quantitative methods to analyze and interpret a wide range of astrophysical systems.
3. Graduates will be able to demonstrate a knowledge of how observational techniques and data from multi-wavelength tools are used in the development of astrophysical models.

Curriculum

Foundations		
PHYS 1443	GENERAL TECHNICAL PHYSICS I	4
PHYS 1444	GENERAL TECHNICAL PHYSICS II	4
PHYS 2315	INTRODUCTORY ASTROPHYSICS	3
PHYS 3315	ASTROPHYSICS AND COSMOLOGY	3
Electives		
Select 4 hours from the following:		4
PHYS 3313	INTRODUCTION TO MODERN PHYSICS	
PHYS 3316	ASTROBIOLOGY I	
PHYS 3445	OPTICS	
PHYS 3446	NUCLEAR AND PARTICLE PHYSICS	
Special problems course approved by advisor (PHYS 4181, PHYS 4281 - with Astronomy research faculty)		
Special topics course approved by advisor (PHYS 4191, PHYS 4291, PHYS 4391 - when a suitable topic is offered)		
Total Hours		**18**

Transfer students must complete a minimum of 9 hours at UTA, 6 of which must be 3000/4000-level. A 2.0 GPA is required for coursework in the minor

Advising Resources

Location:

Science Hall 328 C

Email:

kaycee.nikses@uta.edu

Phone:

817-272-9686

Web:

Schedule an Appointment (https://www.uta.edu/academics/schools-colleges/science/departments/physics/advising/)