

BA IN ASTRONOMY

The B.A. degree in astronomy a minimum of 40 hours of required astronomy and physics courses in the Department of Physics and Astronomy, 15 hours of mathematics, and at least 9 additional hours in the natural sciences and mathematics, chosen with the Advisor's approval are required.

Recommended Introductory Course: PHYS 1910 Frontiers Of Physics and Astronomy (strongly recommended)

The following courses are required:

ASTR 2010 Solar System Astronomy
 ASTR 2020 Stars, Galaxies, And The Universe
 ASTR 3880 Foundations of Astronomy
 ASTR 4810 Astrophysics I
 ASTR 4820 Astrophysics II
 ASTR 4880 Astrophysical Measurements
 Basic Physics Sequence: either (PHYS 2130 & PHYS 2140) or (PHYS 2070 & PHYS 2080 & PHYS 2100)
 PHYS 3310 Modern Physics I
 PHYS 4920 Senior Capstone Project
 PHYS 4950 Undergraduate Professional Development Seminar
 Select 6 additional hours of advanced physics courses numbered 3000 or higher

The following related courses in Mathematics are also required:
 Calculus I and II: either (MATH 1830 & MATH 1840) or (MATH 1850 & MATH 1860)
 MATH 2850 Elementary Multivariable Calculus
 MATH 3610 Statistical Methods I

Other courses in related science areas: At least 9 additional hours hours of approved electives, of which at least two courses must be major-level chosen from at least two of the departments: in biology, chemistry, or environmental sciences, approved by the student's academic advisor.

This program is intended to provide the combination of fundamental physics, together with general and advanced astronomy, required for a career in astronomy or a related area. It also has the flexibility required by students who wish to pursue interdisciplinary studies or prepare for careers in teaching or other professions requiring a fundamental understanding of the physical sciences.

Below is a sample plan of study. Consult your degree audit for your program requirements

First Term	Hours
NSM 1000 Natural Sciences & Mathematics	2
PHYS 1910 Frontiers Of Physics And Astronomy (Or electives to reach 120 hours)	3
ASTR 2010 Solar System Astronomy	3
Elementary Foreign Language I	4
Select one of the following:	4
MATH 1830 Calculus I For Mathematicians, Scientists And Educators	

MATH 1850 Single Variable Calculus I	
Hours	16
Second Term	
ASTR 2020 Stars, Galaxies, And The Universe	3
PHYS 2130 Physics For Science And Engineering Majors I ¹	5
Select one of the following:	4
MATH 1840 Calculus II For Mathematicians, Scientists And Educators	
MATH 1860 Single Variable Calculus II	
Elementary Foreign Language II	4
Hours	16
Third Term	
ENGL 1110 College Composition I	3
MATH 2850 Elementary Multivariable Calculus	4
MATH 3610 Statistical Methods I	3
PHYS 2140 Physics For Science And Engineering Majors II ¹	5
Hours	15
Fourth Term	
Select one of the following:	3-4
BIOL 2150 to BIOL 4xxx	
CHEM 1230 to CHEM 4xxx	
EEES 2010 to EEES 4xxx	
Select one of the following:	3
ENGL 1130 College Composition II: Academic Disciplines And Discourse	
ENGL 2950 Science And Technical Report Writing	
ENGL 2960 Professional and Business Writing	
Arts and Humanities Core	3
Social Sciences Core	3
Elective	3
Hours	15-16
Fifth Term	
PHYS 3310 Modern Physics I (WAC)	3
3000-4000 level Phys	3
Social Sciences Core	3
Arts/Humanities Core (History)	3
Arts/Humanities Core	3
Hours	15
Sixth Term	
ASTR 3880 Foundations of Astronomy	4
3000-4000 level PHYS	3
Select one of the following:	3-4
BIOL 2150 to BIOL 4xxx	
CHEM 1230 to CHEM 4xxx	
EEES 2010 to EEES 4xxx	
Social Sciences Core	3
Writing Across the Curriculum (WAC)	3
Hours	16-17

Seventh Term

PHYS 4950	Undergraduate Professional Development Seminar	1
ASTR 4810	Astrophysics I	3
ASTR 4880	Astrophysical Measurements	3
ENGL 2710-2800	Arts/Humanities Core (English Lit)	3
Diversity of US		3
Hours		13

Eighth Term

PHYS 4920	Senior Capstone Project	1
ASTR 4820	Astrophysics II	3
Arts/Humanities Core (Fine Arts)		3
Non-US Diversity		3
Elective		4
Hours		14
Total Hours		120-122

¹ PHYS 2070, PHYS 2080 & PHYS 2100 may be substituted for PHYS 2130 and PHYS 2140 with advisors permission.