

ASTROPHYSICS/PHYSICS MAJOR

Sample Course Selections

Freshman Year

FALL	SPRING
PHYS 1110 (4) General Physics I	PHYS 1120 (4) General Physics II
APPM 1350 (4) Calculus I for Engineers	PHYS 1140 (1) Experimental Physics I (lab)
ASTR 1030 (4) Accelerated Introductory Astronomy I	APPM 1360 (4) Calculus II for Engineers
Core (3)	ASTR 1040 (4) Accelerated Introductory Astronomy II
	Core (3)
Total: 15	Total: 16

Sophomore Year

PHYS 2170 (3) Foundations of Modern Physics	PHYS 2210 (3) Classical Mechanics and Math Methods I
PHYS 2150 (1) Experimental Physics (lab)	ASTR 2600 (3) Introduction to Scientific Data Analysis and Computing
APPM 2350 (4) Calculus III for Engineers	APPM 2360 (4) Introduction to Differential Equations with Linear Algebra
Core (3)	Core (3)
Elective (3)	Core (3)
Total: 14	Total: 16

Junior Year

ASTR 3730 (3) Astrophysics I	ASTR 3830 (3) Astrophysics II
PHYS 3210 (3) Classical Mechanics and Math Methods II	PHYS 3220 (3) Quantum Mechanics and Atomic Physics I
PHYS 3310 (3) Principles of Electricity and Magnetism I	PHYS 3320 (3) Principles of Electricity and Magnetism II
Core (3)	ASTR 3800 (3) Data Analysis & Computing
Elective (3)	Core (3)
Total: 15	Total: 15

Senior Year

ASTR 3510 (4) Observations & Instrumentation I	ASTR 3740 (3) Cosmology and Relativity
	ASTR 3710 (3) Formation & Dynamic of Planet Sys
PHYS 4230 (3) Thermodynamics and Statistical Mechanics+	PHYS 4410 (3) Quantum Mechanics and Atomic Physics II +
Core (3)	Core (3)
Elective (3)	Elective (3)
Elective (3)	Elective (2)
Total: 16	Total: 14

+ Recommended, not required

TOTAL:

Lower Division: 11 Credit Hours in ASTR, 16 Credit Hours in PHYS

Upper Division: 15 Credit Hours in ASTR, 12 Credit Hours in PHYS

Required Coursework in other Departments: 16 Credit Hours

Arts & Sciences Core Courses: 27 Credit Hours; A & S Core curriculum satisfied

University Total: 120 Credit Hours; General graduation requirements satisfied

ASTRONOMY MAJOR

Sample Course Selections

Freshman Year

FALL	SPRING
ASTR 1030 (4) Accelerated Introductory Astronomy I	ASTR 1040 (4) Accelerated Introductory Astronomy II
APPM 1350 (4) Calculus I for Engineers	APPM 1360 (4) Calculus II for Engineers
Core (3)	Core (3)
Elective (4)	Elective (4)
Total: 15	Total: 15

Sophomore Year

ASTR 2000 (3) Ancient Astronomies of the World	ASTR 2040 (3) Extraterrestrial Life
APPM 2350(4) Calculus III for Engineers+	ASTR 2600(3)Computational Techniques
PHYS 1110 (4) General Physics I	PHYS 1120 (4) General Physics 2
PHYS 1140 (!)Experimental Physics I (Lab)	Core (3)
Core (3)	
Total: 15	Total: 13

Junior Year

ASTR 3730 (3) Astrophysics I: Stellar and Interstellar	ASTR 3830 (3) Astrophysics II: Galactic and Extragalactic
EBIO 1210 (3)* General Biology I	EBIO 1220 (3)* General Biology II
EBIO 1230 (1)* General Biology I Lab	EBIO 1240 (1)* General Biology II Lab
PHYS 2130 (3) General Physics III	ASTR 3800 (3) Data Analysis & Computing
Core (3)	Core (3)
Core (3)	Elective (3)
Total: 16	Total: 16

Senior Year

ASTR 3720 (3) Planets and Their Atmospheres	ASTR 3750 (3) Planets, Moons, and Rings
ASTR 3510 (4) Observations & Instrumentation I	Core (3)
Core (3)	Elective (3)
Elective (3)	Elective (3)
Elective (3)	Elective (3)
Total: 16	Total: 15

*Or any other science sequence, e.g. geology, chemistry, atmospheric sciences. ..

+ Required for Physics 2130; recommended for major.

TOTAL:

Lower Division: 17 Credit Hours in ASTR, 12 Credit Hours in PHYS

Upper Division: 18 Credit Hours in ASTR

Required coursework in other Depts.: 20 Credit Hours

Elective Credits: 26 Credit Hours

Arts & Sciences Core Courses: 27 Hours; A & S Core curriculum satisfied,

University Total: 120 Credit Hours; General graduation requirements satisfied