ASTRONOMY-ASTROPHYSICS

Recommended three-year degree path

Courses	Credit Hours	Total Credit Hours
Fall One		
PH201, Introduction to Analytical Physics	5	
MA106, Calculus and Analytic Geometry 1	4	
FYS101, First Year Seminar	3	
Foreign Language (1)	4	
PWB, Physical Well-Being	1	
Total	17	17
Spring One		
PH202, Introduction to Analytical Physics	5	
MA107, Calculus and Analytic Geometry 2	4	
FYS102, First Year Seminar	3	
Foreign Language (2)	3	
CS142, Introduction to Computer Science and Programming	3	
Total	18	35
Summer One		
AS102, Modern Astronomy with Lab	5	
GHS (1), Global & Historical Studies	3	
Total	8	43
Fall Two		
PH301, Modern Physics	3	
AS301, Modern Astronomical Techniques	3	
MA208, Calculus and Analytic Geometry 3	4	
PCA, Perspectives in the Creative Arts or SW, Social World or TI, Texts & Ideas	3	
Foreign Language (3)	3	
Total	16	59
Spring Two		
PH303, Electromagnetic Waves and Optics	3	
AS311, Astrophysics 1	3	
MA215, Linear Algebra	3	
PCA, Perspectives in the Creative Arts or SW, Social World or TI, Texts & Ideas	3	

PH325 Thermodynamics and Statistical Physics (optional) or other elective	4	
Total	16	75
Summer Two		
PH331, Electromagnetic Theory (might be offered as independent-study)	4	
GHS (2), Global & Historical Studies	3	
ICR Elective	3	
Total	10	85
Fall Three		
AS312, Astrophysics 2	3	
PH495, Senior Seminar	1	
PCA, Perspectives in the Creative Arts or SW, Social World or TI, Texts & Ideas	3	
MA334, Differential Equations	3	
PH421 Quantum theory (optional) or other elective	4	
Elective in Physics, Astronomy or other discipline	4	
Total	18	103
Spring Three		
AS340, Cosmology and Extragalactic Astrophysics	3	
PH321, Intermediate Classical Mechanics	4	
PH491, Undergraduate Tutorial and Research	3	
PH311 Experimental Modern Physics (optional) or other elective	3	
Elective in Physics, Astronomy or other discipline	4	
Total	17	120

Notes:

- Students must enroll in PH490 Colloquium every semester.
- Courses in red are required for the major.
- This plan assumes students will test out of only one semester of foreign language.
- This plan applies to students entering in the fall of an odd year (2021, 2023, etc.). Other students can graduate in 3.5 years. Please consult with the Department Chair.