

B.Sc. MAJOR in ASTROPHYSICS

Program Requirements

2024-25 Calendar

Humanities	Arts/ECON	Electives	MATH/CSCI	Science Breadth	MAJOR Subject Area	
6 credit hr	12 credit hr	21 credit hr	6 credit hr	18 credit hr	ASTR (18) + PHYS (39)	
					Total 57 credit hr	
			MATH 1210	CSCI 1226	ASTR 1100	PHYS 1210
			Intro Calculus I	Or CSCI 1227	Intro to Astrophysics	Univ. Physics I
			MATH 1211	***	ASTR 2100	PHYS 1211
			Intro Calculus II		Foundations of Astrophysics	Univ. Physics II
				***	ASTR 2400	PHYS 1500 ■
					Physics of Stars	Intro. Modern Phys.
				MATH 2311	ASTR 3400 Interstellar	PHYS 2302
				Intermediate Calculus	Matter & Stellar Evolution	Mechanics I
				MATH 2301	ASTR 3500	PHYS 2303
				Applied Linear Algebra	Galaxies and Cosmology	Mechanics II
				MATH 2303	ASTR 4200 or 4600	PHYS 2410
				Differential Equations I	Observational Astronomy <u>or</u>	Electricity & Magnetism
					High-Energy Astrophysics	
						PHYS 2510 Thermodynamics
						PHYS 3200
						Math Methods in Phys. I

NOTES:

- ** Recommended: CSCI 1228 (prerequisite is CSCI 1226 with grade of C or higher) and/or CHEM 1210 & 1211
- PHYS 1500 can be taken in Year 2.

LIGHT GRAY = suggested schedule for Year1 DARK GRAY = suggested schedule for Year2 A minimum GPA of 2.2 is required in the Major Subject Area courses

PHYS 3410

PHYS 3500

PHYS ≥ 3xxx

PHYS ≥ 3xxx

PHYS ≥ 3xxx

Electromagnetism

Quantum Mechanics I

Course & Elective Options:

Sciences: Astronomy, Biology, Chemistry, Computing Science, Environmental Science, Geography (Group B only), Geology, Mathematics, Physics, Psychology (Excluding ASTR 1010, CHEM 1221, GEOL 1202, GEOL 1203, GEOL 1210, MATH 1202, and MATH 1203)

Arts: Anthropology, Arabic, Asian Studies, Atlantic Canada Studies, Chinese, Ancient Studies (Classics), Criminology, Economics, Education, English, French, German, Geography (Group A, C, D only), Health Wellness and Sport in Society, Hispanic Studies, History, Intercultural Studies, Global Development Studies (International Development Studies), Irish Studies, Japanese, Linguistics, Philosophy, Political Science, Public Humanities & Heritage, Religion, Sociology, Social Justice and Community Studies, Spanish, Gender Studies & Sexuality.

Humanities: Atlantic Canada Studies, Asian Studies, Ancient Studies (Classics), English, History, Intercultural Studies, Irish Studies, Philosophy, Public Humanities & Heritage Religion, and Modern Languages (courses in literature and/or culture)