

Recommended Course Sequence – Fall 07 entrance
FRESHMAN YEAR

Fall	Credits	Spring	Credits
PHYS 211 GAP I	4	PHYS 212 GAP II	4
CHEM 121 General Chemistry I	5	CHEM 122 General Chemistry II	5
MATH 115 Calculus I	4	MATH 116 Calculus II	4
COSC 160 C++	3	UCOR 1	3
UCOR Information Literacy	1		
	17		16

SOPHOMORE YEAR

Fall	Credits	Spring	Credits
PHYS 302 Optics	3	PHYS 374 Modern Physics	4
PHYS 312 Optics Lab	1	PHYS 364 Modern Physics Lab	1
MATH 215 Calculus III	4	MATH 310 Linear Algebra	3
PHYS 332 Analog Electronics	3	MATH 314 Differential Equations	3
UCOR 2	3	UCOR 3	3
X-reg Intro to Astronomy	3	BSNES-Core Free Elective 1	3
	17		16

JUNIOR (SENIOR) YEAR

Even Fall	Credits	Odd Spring	Credits
PHYS 474 Quantum Mechanics	3	ENGL 302 Science Writing	3
MATH 308 Numerical Analysis or		UCOR 4	3
MATH 301 Probability & Statistics I	3	UCOR 5 (or PHYS 499 Senior Research +	
HIST 307 History of Science	3	SPRG 105 Career Development Seminar)	3
X-reg Stars	3	X-reg Galaxies	3
Free elective 1	3	Free elective 2	3
	15		15

SENIOR (JUNIOR) YEAR

Odd Fall	Credits	Even Spring	Credits
PHYS 461 Mechanics	4	(PHYS 499 Senior Research	2
PHYS 401 Thermal Physics	3	(SPRG 105 Career Development Seminar	1
UCOR 6	3	(or UCOR 5)	
UCOR 7	3	PHYS 472 Electromagnetism	4
UCOR 8	3	BSNES-Core free elective 2	3
		X-reg Techniques in Astronomy	3
		UCOR 9	3
	16		16

TOTAL: 128 credits
Recommended free electives for a concurrent BA in Mathematics: MATH 135 Discrete Mathematics (3), MATH 402W Abstract Algebra I (3), MATH 415W Advanced Calculus I (3), additional MATH at 300 level (3)

Acceptable Astronomy requirements: AST 0113 Intro to Astronomy, AST 1120 Stars, Stellar structure and Stellar evolution, AST 1121 Galaxies and Cosmology and AST 1263 Techniques in Astronomy, at University of Pittsburgh.

PCHE cross-registration guidelines: One course per term in addition to at least 12 credits at Duquesne.