## **BACHELOR OF SCIENCE IN PHYSICS**

Catalogue

Major: MATHEMATICS				202	22-2023
Student:			Date:		
netID:			Advisor:		
Year 1					
Competer 1	,	Status	Competer 2	۲-	Status

Semester 1	Cr	Status	Semester 2	Cr	Status
CEMS 050 - CEMS First Year Seminar (opt)	1		QR: MATH 022 - Calculus II	4	
PHYS 031 or PHYS 051	4		PHYS 125 and PHYS 022, or PHYS 152	4	
QR: MATH 021 - Calculus I	4		HCOL 086 / General Education	3	
CHEM 031 - General Chemistry	4		D1 / Humanities & Social Science Course	3	
HCOL 085 (FWIL)	3		CHEM 032 - General Chemistry 2	4	
PHYS 030 (opt)	1				
Total credits	15-17		Total credits	18	

## Year 2

Semester 1	Cr	Status	Semester 2	Cr	Status
QR: MATH 121 - Calculus III	4		QR: MATH 122 or 124 - (Applied) Linear Algebra	3	
PHYS 128 - Waves and Quanta	4		PHYS 211 - Classical Mechanics	3	
Humanities & Social Science Course <sup>1</sup>	3		Humanities & Social Science Course <sup>1</sup>	3	
HCOL 185 / Sustainability	3		*Concentration Course	3	
*Concentration Course	3		HCOL 186 / D1/D2	3	
Total credits	17		Total credits	15	

## Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
PHYS 213 - Electrivcity and Magnetism	3		*Concentration Course	3	
PHYS 256 or CS 021- Comp. Physics/Progamming I	3		*Concentration Course	3	
Humanities & Social Science Course <sup>1</sup>	3		*Concentration Course	3	
QR: MATH 230 - Ordinary Differential Equations	3		Humanities & Social Science Course <sup>1</sup>	3	
*Concentration Course	3		Humanities & Social Science Course <sup>1</sup>	3	
CEMS 101 - HCOL Research Experience	1		CEMS 102 - HCOL Research Experience	1	
Total credits	16		Total credits	16	

## Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
PHYS 273 - Quantum Mechanics I	3		PHYS 274- Quantum Mechanics	3	
*Concentration Course	3		Humanities & Social Science Course <sup>1</sup>	3	
*Concentration Course/Free Elective	3		*Concentration Course/Free Elective	3	
*Concentration Course/Free Elective	3		Humanities & Social Science Course <sup>1</sup>	3	
Senior Seminar 1	3		Senior Seminar 2	3	
Total credits	15		Total credits	15	

Minimum Total Credits Required for Degree: 120

<sup>\*1.</sup> See the differenent concentration options in the catalogue. These include pure physics, mechanical engineering, civil and environmental engineering, electrical engineering (signals and systems or circuts and devices), or astrophysics.

2. Humanities & Social Sciences: Twenty-four credits of courses selected from Categories I, II, and III listed in the Catalogue (I: Language & Literature, II: Humanties & Fine Arts, III: Social Sciences). See Catalogue for full list of courses. Students are encouraged to use these courses to fulfill the University Requirements - Diversity (D1/D2), Sustainability (SU), and Foundational Writing & Information Literacy (FWIL). Note the Quantitative (QR) reasoning is fulfilled by core