

BACHELOR OF SCIENCE IN PHYSICS

Catalogue

Major: Physics

2022-2023

Student: _____

Date: _____

netID: _____

Advisor: _____

Year 1

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		FWIL (ENGS 001 Recommended)	3	
CHEM 031 - General Chemistry	4		D1 / Humanities & Social Science Course	3	
Free Elective	3		CHEM 032 - General Chemistry 2	4	
PHYS 030 (opt)	1				
<i>Total credits</i>	<i>15-17</i>		<i>Total credits</i>	<i>18</i>	

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	
Concentration Course ¹	3		Concentration Course ¹	3	
Humanities & Social Science Course ²	3		Humanities & Social Science Course ²	3	
Sustainability	3		D1/D2	3	
<i>Total credits</i>	<i>17</i>		<i>Total credits</i>	<i>15</i>	

Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
PHYS 213 - Electricity and Magnetism	3		Concentration Course ¹	3	
PHYS 256 or CS 021- Comp. Physics/Programming I	3		Concentration Course ¹	3	
Humanities & Social Science Course ²	3		Concentration Course ¹	3	
QR: MATH 230 - Ordinary Differential Equations	3		Humanities & Social Science Course ²	3	
Concentration Course ¹	3		Humanities & Social Science Course ²	3	
<i>Total credits</i>	<i>15</i>		<i>Total credits</i>	<i>15</i>	

Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
PHYS 273 - Quantum Mechanics I	3		PHYS 274- Quantum Mechanics	3	
Concentration Course ¹ /Free Elective	3		Humanities & Social Science Course ²	3	
Concentration Course ¹ /Free Elective	3		Concentration Course ¹ /Free Elective	3	
Concentration Course ¹ /Free Elective	3		Humanities & Social Science Course ²	3	
<i>Total credits</i>	<i>12</i>		<i>Total credits</i>	<i>12</i>	

Minimum Total Credits Required for Degree: 120

*1. See the different concentration options in the catalogue. These include Pure Physics, Mechanical Engineering, Civil and Environmental Engineering, Electrical Engineering (Signals and Systems or Circuits 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: Humanities & 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 courses.

This document is an advising tool and should be used in combination with a student's degree audit, as well as the published Catalogue for 2022-2023 found at <http://catalogue.uvm.edu/>