BACHELOR OF SCIENCE IN PHYSICS - Honors College **Catalogue**

Student: **Date:** **2024 - 2025**

netID: **Advisor:**

Year 1

Semester 1	Cr	Status	Semester 2	Cr	Status
MA: MATH 1234 - Calculus I*	4		MA: MATH 1248 - Calculus II* *MATH 1234*	4	
N2, QD: PHYS 1600 - Fundamentals of Physics I *Coreq: MATH 1234* **OR** N2, QD: PHYS 1500 - Physics for Engineers I *MATH 1234*	4		N2, QD: PHYS 1650 - Fundamentals of Physics II *PHYS 1500 or PHYS 1600; Coreq: MATH 1248*	4	
PHYS 1510 - Physics Problem Solving I [Optional]	[1]		N2, QD: CHEM 1450 - General Chemistry 2 *CHEM 1400*	4	
N2, QD: CHEM 1400 - General Chemistry 1	4		Catamount Core	3	
Catamount Core (WIL1): HCOL 1000 - FY Writing Seminar	3		HCOL 1500 - FY Research Presentation Seminar	3	
CEMS 1500 - CEMS First Year Seminar [Optional]	[1]				
Total credits	*15-17*		*Total credits*	*18*	

Year 2

Semester 1	Cr	Status	Semester 2	Cr	Status
MA: MATH 2248 - Calculus III *MATH 1248*	4		MA: MATH 2522 - Applied Linear Algebra *MATH 1248* **OR** MA: MATH 2544 - Linear Algebra *MATH 1248; Pre/Coreq: MATH 2248*	3	
N2, QD: PHYS 2500 - Waves and Quanta *PHYS 1650 ; Coreq: MATH 2248*	4		PHYS 2200 - Classical Mechanics *PHYS 1650; MATH 2248*	3	
HCOL 2000 - Sophomore Seminar	3		QD: CS 1210 - Computer Programming I **OR** PHYS 3150 - Computational Physics I *PHYS 1650 ;MATH 2248*	3	
Free Elective	3		HCOL 2000 - Sophomore Seminar	3	
			Catamount Core	3	
Total credits	*14*		*Total credits*	*15*	

Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
PHYS 3300 - Electricity & Magnetism *PHYS 1650 ; MATH 2248*	3		Concentration Course	3	
MATH 3230 - Ordinary Diffrntl Equation *MATH 2248; Pre/Coreq: MATH 2522 or MATH 2544*	3		Concentration Course	3	
Concentration Course	3		Concentration Course	3	
Catamount Core	3		Catamount Core	3	
Free Elective	3		Free Elective	3	
CEMS 2010 - HCOL Research Experience	1		CEMS 2020 - Research Thesis Proposal	1	
Total credits	*16*		*Total credits*	*16*	

Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
PHYS 3500 - Quantum Mechanics I *PHYS 2500; PHYS 2200*	3		PHYS 4500 - Applictns of Quantum Mechanics *PHYS 3500*	3	
Concentration Course	3		Concentration Course	3	
Catamount Core	3		Concentration Course	3	
Catamount Core	3		Catamount Core	3	
Honors Thesis	3		Honors Thesis	3	
Total credits	*15*		*Total credits*	*15*	

Minimum Total Credits Required for Degree: 120

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 2024-2025 found at http://catalogue.uvm.edu/

Prerequisite courses are listed below the course name in italics. Prerequisites listed are only for courses, as relevant to your specific degree program, and may have other registration restrictions. Please refer to the catalogue.

* Grade of C- or higher required

Concentration Course: Please refer to degree audit for concentration options

If students opt out of both optional courses in their first semester, they will need to take a 1 credit course in the future to meet the minimum credit amount required for their degree.

Catamount Core: Students may take courses that fulfill more than one Catamount Core requirement, but they must still take at least 40 unique credits of courses that have been approved to fulfill Catamount Core requirements.

Students are encouraged to overlap Catamount Core requirements with their PLHC required courses (HCOL 1500 and both HCOL 2000 courses)