BACHELOR OF SCIENCE IN PHYSICS **Catalogue**

Student: **Date:** **2025 - 2026**

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 (D1 Diversity 1)	3	
Catamount Core (WIL1): ENGL 1001 - Written Expression	3				
CEMS 1500 - CEMS First Year Seminar [Optional]	[1]				
Total credits	*15-17*		*Total credits*	*15*	

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	
PHYS 2100 - Experimental Physics I *PHYS 1650 or PHYS 1550*	3		QD: CS 1210 - Computer Programming I **OR** PHYS 3150 - Computational Physics I *PHYS 1650 ;MATH 2248*	3	
Catamount Core (S1 Social Science)	3		Catamount Core (AH Arts & Humanities)	3	
			Catamount Core (D1/D2 Diversity 1 or Diversity 2)	3	
Total credits	*14*		*Total credits*	*15*	

Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
MATH 3230 - Ordinary Diffrntl Equation *MATH 2248; Pre/Coreq: MATH 2522 or MATH 2544*	3		PHYS 3400 - Thermal and Statistical Physics *PHYS 1650; MATH 2248*	3	
PHYS 3300 - Electricity & Magnetism *PHYS 1650 ; MATH 2248*	3		PHYS 4100 - Experimental Physics II *PHYS 2500; MATH 2248; Junior standing*	3	
PHYS 3500 - Quantum Mechanics I *PHYS 2500; PHYS 2200*	3		Additional Physics Credits at Intermediate Level or Above	3	
Catamount Core (S1 Social Science)	3		Catamount Core (AH Arts & Humanities)	3	
Free Elective	3		Free Elective	3	
Total credits	*15*		*Total credits*	*15*	

Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
PHYS 4110 Capstone Seminar + 2 credits of PHYS 4991/4993/4996/4996	3		Additional Physics Credits at Intermediate Level or Above	3	
Additional Physics Credits at Intermediate Level or Above	3		Catamount Core (SU Sustainability)	3	
Catamount Core (GC Global Citizenship)	3		Free Elective	3	
Catamount Core (OC Oral Communication **OR** WIL2 Writing & Information Literacy 2)	3		Free Elective	3	
Free Elective	3		Free Elective	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 2025-2026 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.

Note: We recommend that students, particularly those considering pursuing graduate studies in Physics, take as many as possible of the following courses within the allocation of "Additional Physics Credits at Intermediate Level or Above" and "Free Electives": PHYS 3550, PHYS 3650, PHYS 3800, PHYS 4300, PHYS 4500.

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.