# PHYSICS B.A.

All students must meet the Degree and University Requirements.

All students must meet the Catamount Core Curriculum Requirements.

All students must meet the College Requirements.

### **MAJOR REQUIREMENTS**

30 credits in major courses, plus 3 credits in ancillary courses, including:

Requirement Description		Credits
Choose 1 of the following options:		8
Option A:		
PHYS 1600 & PHYS 1650	Fundamentals of Physics I and Fundamentals of Physics II	
Option B:		
PHYS 1500 & PHYS 1550 & PHYS 1560	Physics for Engineers I and Physics for Engineers II and Physics Problem Solving II	
PHYS 2200	Classical Mechanics	3
PHYS 2500	Waves and Quanta	4
Choose 1 of the following:		3
PHYS 2100	Experimental Physics I	
PHYS 4100	Experimental Physics II	
Choose 1 of the follo	owing:	3
PHYS 3300	Electricity & Magnetism	
PHYS 3500	Quantum Mechanics I	
Intermediate Level o	or Above. 6-9 additional credits from the following:	6-9
PHYS 2000 to 29	989, or 3000 to 3989, or 4000 to 4989	
ASTR 2000 to 29	989, or ASTR 3000 to 3989, or ASTR 4000 to 4989	
Up to 3 additional credits from the following, in any combination:		0-3
Capstone Semina	ar: PHYS 4110	
Internship: PHY	S 3991, PHYS 4991, ASTR 3991	
Independent Stu- ASTR 2993, AST	dy: PHYS 2993, PHYS 3993, PHYS 4993, 'R 3993	
Teaching Assista ASTR 4994	nt: PHYS 3994, PHYS 4994, ASTR 3994,	
Undergraduate R ASTR 2995, AST	lesearch: PHYS 2995, PHYS 3995, PHYS 4995, TR 3995	
Honors: PHYS 4	996	

Advanced Mathematical Electives. 1 course/3 credits from the following:		3
MATH 2522	Applied Linear Algebra	
MATH 2544	Linear Algebra	
With the approval of the Physics Department, Special Topics courses (x990) in PHYS and ASTR may be counted toward the major.		
An additional labora	atory science is strongly recommended.	

### RESTRICTIONS

Students completing the B.A. in Physics may not also receive the B.S. in Physics.

# PRE/CO-REQUISITES

Calculus through MATH 2248: Calculus III.

#### OTHER INFORMATION

In the College of Arts and Sciences (CAS), only one course may overlap between a major and a minor or between two CAS majors.

Courses for the major and/or its pre/co-requisites that are cross-listed in the catalog or schedule of courses under another course prefix may be taken under that other prefix and still count for these requirements.

With the approval of the chair/director, courses that applied to the major in previous years but have since been deactivated may be applied to this year's major requirements if they are reactivated.

For a Bachelor of Arts degree, no more than 45 credits in courses with the same departmental prefix may be used toward completion of the 120 credits required for graduation.

At least half of the credits used to complete major requirements must be taken at the University of Vermont.

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