

<b>Department:</b>	Physics
<b>Degree:</b>	Bachelor of Science
<b>Major:</b>	PHYSICS

[Physics, B.S. \(Catalogue\)](#)

Year 1							
Fall				Spring			
Prefix	Course #	Course Name (catalogue)	Credits	Prefix	Course #	Course Name (catalogue)	Credits
PHYS	51	Fundamentals of Physics I	4	PHYS	152	Fundamentals of Physics II	4
MATH	21	Calculus I	4	MATH	22	Calculus II	4
CHEM	31	General Chemistry 1	4	CHEM	032*	General Chemistry 2	4
		TAP Seminar	3			Distribution	3
			15				15
Year 2							
Fall				Spring			
Prefix	Course #	Course Name (catalogue)	Credits	Prefix	Course #	Course Name (catalogue)	Credits
PHYS	128	Waves and Quanta	4	PHYS	211	Classical Mechanics	3
MATH	121	Calculus III	4	MATH	230	Ordinary Differential Equation	3
PHYS	199	Experimental Physics I	3			Distribution/Sustainability	3-4
		Distribution	3-4			Distribution	3
						D1 Diversity	3
			14-15				15-16
Year 3							
Fall				Spring			
Prefix	Course #	Course Name (catalogue)	Credits	Prefix	Course #	Course Name (catalogue)	Credits
PHYS	213	Electricity & Magnetism	3	PHYS	202	Experimental Physics II	3
PHYS	256**	Computational Physics	3	PHYS	265	Thermal and Statistical Physics	3
MATH	124 or 272	Linear Algebra or Applied Analysis	3	PHYS	2XX***	Approved Physics Elective	3
		Distribution	3			Distribution	3
		D2 Diversity (Non-European Cultures course)	3			Elective	3
			15				15
Year 4							
Fall				Spring			
Prefix	Course #	Course Name (catalogue)	Credits	Prefix	Course #	Course Name (catalogue)	Credits
PHYS	273	Quantum Mechanics I	3	PHYS	274 or 214	Applctns of Quantum Mech. or Electromagnetism	3
PHYS	2XX***	Approved Physics Elective	3	PHYS	2XX***	Approved Physics Elective	3
PHYS	2XX***	Approved Physics Elective	3			Additional lab course is strongly recommended****	4
		Elective	3			Elective	3
		Elective	3			Elective	3
			15				16

**NOTES:**

\*One additional course in chemistry (CHEM 032 recommended)

\*\*CS 021 may substitute for PHYS 256 Computational Physics.

\*\*\*Some approved physics electives can be taken at the 100-level or at other departments. Consult with the physics department for details.

\*\*\*\*An additional laboratory science course is strongly recommended.

Students must complete all courses in CORE and all courses in one of OPTION.

Options: Pure Physics, Mechanical Engineering, Civil and Environmental Engineering, Electrical Engineering (Signals & Systems or Circuits and Devices), or Astrophysics. Please check the undergraduate catalogue for requiremer the Options.

**Distribution Requirements: B.S. degrees in the College of Arts and Sciences will be required to complete the following:**

*Natural Sciences: two courses with labs from specific departments, as defined by the major.*

*Mathematical Sciences: Two courses as defined by the major requirements.*

*Social Sciences: Two 3-credit courses in social science disciplines.*

● *In addition, B.S. degree students are required to complete course in TWO of the following THREE categories:*

*Fine Arts disciplines and Literature disciplines (two courses- one course in each area).*

*Foreign Language: two courses in the same foreign language. Humanities: two 3-credit courses in a humanities discipline.*

**General Requirements:**

*One Diversity Category 1 course – minimum 3 credits*

*One Diversity Category 2 course from list of D2 Non-European Cultures courses – minimum 3 credits*

*One Sustainability Category course - minimum 3 credits*

*One Writing and Information Literacy course– minimum 3 credits One Quantitative Reasoning course-minimum 3 credits*

>>A TAP course will satisfy UVM's Writing and Information Literacy requirement and might also count toward a distribution.

>>>Sustainability courses and Diversity courses might also count toward a distribution.