

Department:	Physics
Degree:	Bachelor of Science
Major:	PHYSICS

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

Year 1							
Fall				Spring			
Prefix	Course #	Course Name (catalogue)	Credits	Prefix	Course #	Course Name (catalogue)	Credits
PHYS	051	Fundamentals of Physics I	4	PHYS	152	Fundamentals of Physics II	4
MATH	021	Calculus I	4	MATH	022	Calculus II	4
CHEM	031	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
CS	021**	Computer Programming 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	201	Experimental Physics I	3	PHYS	265	Thermal and Statistical Physics	3
MATH	124 or	Linear Algebra or	3	PHYS	2XX***	Approved Physics Elective	3
MATH	272	Applied Analysis	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	Applctns of Quantum Mech. or	3
PHYS	2XX***	Approved Physics Elective	3	PHYS	214	Electromagnetism	3
PHYS	2XX***	Approved Physics Elective	3	PHYS	2XX***	Approved Physics Elective	3
		Elective	3			Additional lab course is strongly recommended****	4
		Elective	3			Elective	3
						Elective	3
			15				16

NOTES:

*One additional course in chemistry (CHEM 032 recommended)

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

***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 requirements of 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.

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