PHYSICS B.S.

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

All courses in core and all courses in one of the listed options.

CORE:		
Suggested:		
CEMS 1500	CEMS First Year Seminar	1
Choose 1 of the following sequences:		8
PHYS 1600 & PHYS 1650	Fundamentals of Physics I and Fundamentals of Physics II	
PHYS 1500 & PHYS 1550 & PHYS 1560	Physics for Engineers I and Physics for Engineers II and Physics Problem Solving II	
PHYS 2500	Waves and Quanta	4
PHYS 2200	Classical Mechanics	3
PHYS 3300	Electricity & Magnetism	3
PHYS 3500	Quantum Mechanics I	3
PHYS 4500	Applictns of Quantum Mechanics	3
MATH 1234	Calculus I	4
MATH 1248	Calculus II	4
MATH 2248	Calculus III	4
MATH 3230	Ordinary Diffrntl Equation	3
MATH 2544	Linear Algebra	3
or MATH 2522	Applied Linear Algebra	
CHEM 1400	General Chemistry 1	4
One additional course in chemistry (CHEM 1450 recommended)		4
CS 1210	Computer Programming I	3
or PHYS 3150	Computational Physics I	
OPTIONS		
Pure Physics:		21
PHYS 2100	Experimental Physics I	
PHYS 4100	Experimental Physics II	
PHYS 3400	Thermal & Statistical Physics	

Intermediate Level or Above. 6 additional credits from the following:		
PHYS 2000 to 2989		
PHYS 3000 to 3989		
PHYS 4000 to 4989		
6 additional credits from the following:		
PHYS 2000 to 2989		
PHYS 3000 to 3989		
PHYS 4000 to 4989		
Internship: PHYS 3991, ASTR 3991		
Special Topics: PHYS 2990, PHYS 3990, PHYS 4990, ASTR 2990		
Independent Study: PHYS 2993, PHYS 3993, ASTR 2993, ASTR 3993		
Teaching Assistant: PHYS 3994, PHYS 4994, ASTR 3994, ASTR 4994		
Undergraduate Research: PHYS 2995, PHYS 3995, ASTR 2995, ASTR 3995		
Honors: PHYS 4996		
Electrical Engineering (Circuits and Devices):		22
EE 2125	Circuits I	
EE 2135	Circuits II	
EE 2185	Circuits Design Project	
EE 3110	Electronics I	
EE 3115	Electronics Laboratory	
EE 3415	Electronics Design Project	
The EE concentration should include 3 credits of approved physics or electrical engineering electives.		
3 additional credits from the following:		
PHYS 2000 to 2989		
PHYS 3000 to 3989		
PHYS 4000 to 4989		
EE 2000 to 2989		
EE 3000 to 3989		
EE 4000 to 4989		
Internship: PHYS 3991, EE 3991		
Special Topics: PHYS 2990, PHYS 3990, PHYS 4990, ASTR 2990		
Independent Study: PHYS 2993, PHYS 3993, EE 2993, EE 3993, EE 4993		

Teaching Assistant: PHYS 3994, PHYS 4994, EE 2994, EE 3994, EE 4994	
Undergraduate Research: PHYS 2995, PHYS 3995, EE 2995, EE 3995	
Honors: PHYS 4996	