

Applied Physics

Degree Type

Bachelor of Science - Major

Major Requirements

Primarily for students interested in careers in engineering or technology.

Required courses:

Course Code	Title	Credits
PHYS-101	Foundations of Engineering 1	2
PHYS-102	Foundations of Engineering 2	3
PHYS-221	General Physics I	4
PHYS-222	General Physics II	4
PHYS-301	Mathematical Methods in Physics I	2
PHYS-304	Statics	3
PHYS-305	Electronics	4
CHEM-161	General Chemistry I	4
CSCI-101	Programming I	4
MATH-131	Calculus I	3
MATH-132	Calculus II	3
MATH-231	Calculus III	3
MATH-232	Calculus IV	3

Senior Capstone

In addition, complete the Senior Capstone requirement by choosing one of the following options:

If selected, **PHYS-497** Senior Capstone Project I and **PHYS-498** Senior Capstone Project II must be taken together to complete the Senior Capstone requirement.

Chose one of the following:

Course Code	Title	Credits
	PHYS-497 Senior Capstone Project I and PHYS-498 Senior Capstone Project II	3
PHYS-491	Research	3
PHYS-495	Senior Thesis	1
PHYS-499	Honors Project	3

Electives

Course Code	Title	Credits
	Two additional PHYS courses numbered 300 or above	6
	Total Credits	49-51

Supporting Coursework for Applied Physics Majors

Strongly Recommended Supporting Coursework for Graduate School in Engineering

CSCI-102 Programming II
MATH-331 Differential Equations
MATH-350 Numerical Analysis

Strongly Recommended Supporting Coursework for Graduate School for Teaching Licensure in Mathematics

MATH-200 Introduction to Number Theory
MATH-210 Introduction to Linear Algebra

MATH-140 Introduction to Statistics or MATH-341 Theoretical Statistics I

MATH-300 Set Theory and Symbolic Logic
MATH-320 Modern Geometry
MATH-360 History of Mathematics

Recommended Minors for Graduate School in Engineering

Computer Science
Mathematics
Environmental Science (for Environmental Engineering/Civil Engineering)