

PHYSICS MAJOR

(BS PROGRAM)

PRE-ENGINEERING CONCENTRATION

2017-2018 Catalog

Information Sheet



EDGEWOOD COLLEGE

This Information Sheet is for advising purposes only. Do not submit this form as a Major/Minor Declaration Form; a separate form is required to declare your major/minor.

This concentration is designed for students who are interested in engineering. Students wishing to pursue graduate work in physics or engineering should consult their advisor for recommended course work.

Major Requirements:

Requirements for the Major:

PHYS 201	SU	College Physics I* (4 cr.)
PHYS 202	S	College Physics II* (4 cr.)
PHYS 310		Principles of Mechanics* (3 cr.)
PHYS 350	I	Scientific Computing* (3 cr.)
PHYS 360	X	Relativity & Quantum Mechanics* (4 cr.)
PHYS 480	K	Physics Seminar* (1 cr.)
CHEM 400	3	Ethics & Responsibility in Scientific Research (1 cr.)

The following Mathematics courses:

MATH 231	M	Calculus I* (4 cr.)
MATH 232	M	Calculus II* (4 cr.)
MATH 233	M	Calculus III* (4 cr.)

One year of Chemistry to include:

CHEM 120	S	General Chemistry I* (4 cr.)
CHEM 121	S	General Chemistry II* (4 cr.)

An additional 12 credits to be chosen from the following:

NATS 250	PV	History & Philosophy of Science* (3 cr.)
PHYS 110	1V	Society's Grand Challenges * (3 cr.)
PHYS 220	V	Introduction to Human Biomechanics* (3 cr.)
PHYS 250	V	Survey of Astronomy* (4 cr.)
PHYS 300		Mathematical Methods in Physics* (3 cr.)
PHYS 320		Electromagnetism* (3 cr.)
PHYS 361		Thermodynamics & Kinetics* (3 cr.)
PHYS 479		Independent Study*
PHYS 489		Undergraduate Research*

**course has prerequisites*

Policies:

A student must maintain a cumulative grade point average of at least 2.0 in all courses taken to fulfill the major and concentration requirements. Any course in which a student receives a grade below "CD" will not be accepted toward the major. Transfer students must take a minimum of 12 physics credits at Edgewood College. All transfer courses must be approved by the department.