

# PHYSICS MAJOR WITH PRE-ENGINEERING CONCENTRATION

(BS PROGRAM)



EDGEWOOD COLLEGE

2016-2017 Catalog

Declaration of Major

Name:

ID:

Major Advisor Approval:

Date:

Department Chair Approval:

Date:

Intended Graduation Month: January August May Intended Graduation Year:

THIS FORM IS TO ADD/DECLARE A MAJOR. IF YOU WISH TO DROP/REMOVE A PREVIOUSLY DECLARED MAJOR, YOU MUST SUBMIT A SEPARATE MAJOR DECLARATION DROP FORM. THIS FORM IS AVAILABLE AT REGISTRAR.EDGEWOOD.EDU

This concentration is designed to prepare students for careers in engineering fields.

## Major Requirements:

## Transfer credit applied (including AP/CLEP/etc):

### Requirements for the Major:

### Course / Institution

PHYS 480	K	Physics Seminar* (1 cr.)	
PHYS 201	SU	College Physics I* (4 cr.)	
PHYS 202	S	College Physics II* (4 cr.)	
PHYS 310		Classical Mechanics* (3 cr.)	
PHYS 350	I	Scientific Computing* (3 cr.)	
PHYS 360	X	Relativity & Quantum Mechanics* (4 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 (3 of these credits must be at the 300 level or above):

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.)	
`	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.

Students should consult with their academic advisor to learn the details of how to satisfy the COR 3 requirement.