PHYSICS MAJOR: PRE-ENGINEERING CONCENTRATION (BS PROGRAM)

Declaration of Major | 2014-2015 Catalog

EDGEWOOD COLLEGE

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 the Pre-Engineering Dual Degree program or for graduate school in engineering fields. Students may choose the dual degree option under the existing collaborative programs with the Colleges of Engineering at UW-Madison and Marquette University. Under this option, in addition to receiving a Bachelor's degree in Engineering from one of these institutions, a student will receive a B.S. in Physics from Edgewood College subject to the completion of the degree requirements stipulated by the College.

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

Requirements for the Major: Core Courses (18 credits)

				Course/Institution:
☐	CHEM 480	K	Chemistry Seminar	
☐	PHYS 201	SU	College Physics I	
☐	PHYS 202	S	College Physics II	
☐	PHYS 310		Mechanics	
☐	PHYS 350	I	Scientific Computing	
☐	PHYS 360		Modern Physics	

The following mathematics courses (12 credits):

☐	MATH 231	M	Calculus I	
☐	MATH 232	M	Calculus II	
☐	MATH 233	M	Calculus III	

One year of Chemistry, to include (8 credits):

☐	CHEM 120	S	General Chemistry I	
☐	CHEM 121	S	General Chemistry II	

An additional 12 credits to be chosen from the following list (3 of these credits must be at the 300 level or above):

☐	CHEM 400	3	Ethics and Responsibility in Scientific Research	
☐	NATS 250	PV	History & Philosophy of Science	
☐	PHYS 220	V	Biomechanics	
☐	PHYS 250	V	Astronomy	
☐	PHYS 300		Mathematical Methods in Physics	
☐	PHYS 320		Electromagnetism	
☐	PHYS 361		Thermodynamics	

PLEASE NOTE THAT THIS CHECKLIST CONTAINS MAJOR REQUIREMENTS ONLY. ALL GENERAL EDUCATION REQUIREMENTS (TAGS) MUST ALSO BE COMPLETE TO EARN A B.S OR B.A DEGREE. PLEASE SEE P. 25 IN THE 2014-2015 UNDERGRADUATE CATALOG FOR THESE REQUIREMENTS. STUDENTS ARE FULLY RESPONSIBLE FOR KNOWING THEIR REQUIREMENTS FOR GRADUATION.

☐	PHYS 479	Independent Study
☐	PHYS 489	Undergraduate Research

Policies:

Additional coursework may be completed through the collaborative program with UW-Madison.

Under the agreements with the Colleges of Engineering at the UW-Madison and Marquette University, students who complete the Edgewood College pre-engineering concentration with a minimum GPA of 3.0; have a 3.0 GPA in mathematics, chemistry, physics and computer science courses; have the General Education courses equivalent to the liberal arts electives required by the specific degree-granting department of the student's choice in the College of Engineering; and have a positive recommendation from the Edgewood College physical sciences or mathematics faculty, will be guaranteed entrance into the College of Engineering.

Course credits earned by students upon completion of their engineering program at UW-Madison or Marquette University may be transferred to Edgewood College to complete the B.S. in Physics.