Last Updated: Vankeerbergen, Bernadette Chantal

#### 01/20/2012

## **General Information**

Course Bulletin Listing/Subject Area **Physics** 

Fiscal Unit/Academic Org Physics - D0684 College/Academic Group Arts And Sciences

Level/Career Graduate, Undergraduate

Course Number/Catalog

**Course Title** Engineering Physics Design II

**Transcript Abbreviation** EngPhys Design 2

Continues training in engineering-physics design. Preliminary designs are refined and prototypes are fabricated and tested. Technical communication skills, both written and oral, are employed throughout. **Course Description** 

**Semester Credit Hours/Units** Fixed: 3

# Offering Information

**Length Of Course** 14 Week Never Flexibly Scheduled Course Does any section of this course have a distance No education component?

Letter Grade **Grading Basis** 

Repeatable No

**Course Components** Laboratory, Lecture

**Grade Roster Component** Lecture Credit Available by Exam **Admission Condition Course** No **Off Campus** Never Campus of Offering Columbus

## **Prerequisites and Exclusions**

Prerequisites/Corequisites Physics 5800: Engineering Physics Design I; senior standing in Engineering Physics.

**Exclusions** 

## **Cross-Listings**

**Cross-Listings** 

# Subject/CIP Code

Subject/CIP Code 40.0801

**Subsidy Level Baccalaureate Course** 

Intended Rank Senior

#### **Quarters to Semesters**

**Quarters to Semesters** Modified or re-envisioned course that includes substantial parts of the content and learning goals of one

or more quarter courses

List the current courses by number and title Physics 780.20 Special Topics

that are to be subsumed into proposed course

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# Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

#### **Course Details**

# Course goals or learning objectives/outcomes

- Students will learn methods needed to explain complex technical material to diverse audiences in clear and understandable ways.
- Students will learn how to make effective written and oral presentations.
- Students will learn the principles of engineering design as applied to a capstone experience.
- Students will research and design a complex system.
- Students will learn to work effectively in teams.
- Students will learn to develop management skills needed to oversee the design of complex engineering projects, with consideration to economic, environmental, sustainability, manufacturability, ethical, health and safety, social and political issues

#### **Content Topic List**

- Technical writing: reports, proposals, audience, manuals, etc
- Oral presentations: graphics, multimedia
- Teamwork: organization, brainstorming, meetings
- Design: the design process with realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability

#### **Attachments**

EngPhys5801.pdf

(Syllabus. Owner: Hughes, Richard E)

### **Comments**

Made change to course title "Engineering Physics Design II" (by Hadad, Christopher Martin on 01/20/2012 10:24 AM)

#### **Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Hughes,Richard E	01/19/2012 09:16 AM	Submitted for Approval
Approved	Hughes,Richard E	01/19/2012 01:38 PM	Unit Approval
Approved	Hadad,Christopher Martin	01/20/2012 10:24 AM	College Approval
Pending Approval	Nolen,Dawn Jenkins,Mary Ellen Bigler Meyers,Catherine Anne Vankeerbergen,Bernadet te Chantal Hogle,Danielle Nicole Hanlin,Deborah Kay		ASCCAO Approval