Florida Institute of Technology

ADDING A NEW COURSE TO THE CURRICULUM

This course is available for student registration only after the approval process has been completed.

SUBJECT: EGN  
COURSE NO.: 3050  
CREDIT HOURS: 1-3  
TERM TO BE ADDED TO THE FILE: Spring 2012

*Justify level if 1000-level+ and no co- or prerequisites.

CLASS HOURS: 1-3/week  
LECTURE HOURS: 1-3/week  
LAB HOURS:  
CONTACT HOURS (CEU ONLY):

SCHEDULE TYPE: Special Projects/Topics (S)

DEPARTMENT: College of Engineering
(e.g., Computer Sciences)

SCHEDULE TYPE: Lecture, Lab or Special Topics/Project

☐ COLLEGE OF AERONAUTICS – 23  
☐ COLLEGE OF PSYCHOLOGY AND LIBERAL ARTS – 25  
☐ NATHAN M. BISK COLLEGE OF BUSINESS – 24  
☐ COLLEGE OF SCIENCE – 26  
☐ COLLEGE OF ENGINEERING – 1  
☐ EXTENDED STUDIES DIVISION / NATHAN M. BISK COLLEGE OF BUSINESS – 90

COMPUTER TITLE: Restricted to 25 characters, including spaces  
Undergraduate Research

CATALOG TITLE: Undergraduate Research in Engineering and Applied Sciences

CATALOG DESCRIPTION OF COURSE: Restricted to 350 characters, including spaces

Includes students conducting research under faculty supervision in programs offered by the College of Engineering. Requires students to complete a project proposal and present results in a final report. (Requirements: GPA of 3.4 or higher and college faculty and associate dean approval.)

This description has been approved by the catalog office  
Catalog Director  
Date  

In addition, please attach a course syllabus and/or more detailed description.

RESTRICTIONS:  
☐ Prerequisite:  
Course Number  
☐ Corequisite:  
Course Number  
☐ and ☐ or  
GRADES TO BE ISSUED:  
☐ A, B, C, D, F  
☐ A, B, C, D, F, CEU/Audit  
☐ CEU  
☐ S, U  
☐ P, F  
☐ Other

ADDITIONAL RESTRICTION:  
(e.g., Major, Class Level, Department Head Approval)

If this course replaces a course currently offered in BANNER, please indicate old course information and the date/term the course may be removed from the system.

SUBJECT: Alpha Prefix (e.g., CSE)  
COURSE NO. (e.g., 1301)  
TERM TO INACTIVATE

APPROVALS: Upon completion of appropriate department approvals, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for approval below and forward to Catalog Director.

Chair, Graduate Council  
Date  

Dean or Associate Dean  
Date

Chair, Undergraduate Curriculum Committee  
Date

CATALOG DIRECTOR

These changes/additions have been made for the University Catalog/policy management system and entered into the BANNER term named above.

Catalog Director  
Date

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RGR-122-1011  

NOV 4 2011
EGN 3050 Undergraduate Research

2012-13 Catalog Data: EGN 3050 Undergraduate Research. (1-3 credits). Includes students conducting research under faculty supervision in programs offered by the College of Engineering. Requires a project proposal and results presented as a final report.

Required: Elective

Prerequisites by Topic: GPA equal to or above 3.4 and college faculty and Associate Dean approval.

Textbook (T) and References (R): (T) None; (R)

Course Learning Outcomes: The student will be able to:
1. Examine and interpret an engineering problem.
2. Prepare a proposal to conduct research.
3. Develop alternatives and complete tasks.
4. Identify and analyze requisite components of a research project.
5. Prepare appropriate figures and graphs using modern engineering tools.
6. Organize and function as a member of a team.
7. Organize and deliver effective verbal, written and graphical technical communications.
8. Describe and evaluate ethical, and safety issues encountered or foreseen.
9. Demonstrate knowledge of contemporary issues contained or caused by selected research.
10. Demonstrate an understanding of life-long process as it relates to the engineering profession.

Topics Covered:
Topics will vary as a function of the project. Students may work in the laboratory and/or field while others may do computer simulations or analysis of data.

Class Schedule:
Minimum of one meeting per week with faculty or research team.

Contribution of Course to Meeting the Professional Component:
Engineering Science: 1-3 credits  Design Content: none

Relationship of Course to Program Outcomes: See next page.

Prepared By: Edward H. Kalajian, PhD, P.E., Professor of Civil Engineering, 11/3/2011