Cover Sheet: Request 11286

EGN 4949 Engineering Internship/Co-op

Info

Process	Course|New|Ugrad/Pro
Status	Pending
Submitter	van Oostrom,Hans oostrom@ufl.edu
Created	11/10/2016 1:26:00 PM
Updated	12/2/2016 9:47:57 AM
Description of request	Request to establish a formal Internship/Co-op course at the college level

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	ENG - Engineering - General 011940001	van Oostrom, Hans		11/18/2016
Added EGN4949-syllabus.docx Added EGN4949-form.docx					11/10/2016 11/10/2016
College	Approved	ENG - College of Engineering	Caple, Elizabeth		12/2/2016
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			12/2/2016
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 11286

Info

Request: EGN 4949 Engineering Internship/Co-op
Description of request: Request to establish a formal Internship/Co-op course at the college level
Submitter: van Oostrom,Hans oostrom@ufl.edu
Created: 11/10/2016 1:26:00 PM
Form version: 1

Responses

Recommended PrefixEGN
Course Level 4
Number 949
Category of Instruction Advanced
Lab Code None
Course Title Engineering Internship/Co-op
Transcript Title Eng Internship/Co-op
Degree Type Baccalaureate

Delivery Method(s) Off-Campus
Co-Listing No

Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic?No
Repeatable Credit?Yes
If repeatable, # total repeatable credit allowed12
Amount of Credit Variable
If variable, # min 1
If variable, # max3
S/U Only?Yes
Contact Type Regularly Scheduled
Weekly Contact Hours 10
Course Description Practical internship/co-op work experience under approved industrial supervision

Prerequisites EG Classification

Co-requisites None
Rationale and Placement in Curriculum This is an internship/co-op course at the college level. It may be part of college-wide certificates and minors. Many departments have their own courses and they will continue to exist.
Course Objectives • Apply searching the literature to the project
• Describe and apply taking proper safety precautions in the laboratory, if relevant, to the project
• Produce an accurate record of work performed during the Internship/Co-op
• Apply engineering knowledge to a problem in industry
• Produce a technical report
• Discuss work in a team environment, if relevant to the project
• Conduct herself/himself responsibly, safely, and ethically in a professional environment

Course Textbook(s) and/or Other Assigned Reading None
Weekly Schedule of Topics The course schedule will depend on the specific internship/training experience. The typical time per topic will vary depending on the

internship/co-op
- Overview of company/project
- Safety training
- Discussions with project teams
- Background research, review of documents, white papers, and scientific papers
- Planning, designing, and reviewing the planned work
- Executing the plans
- Documenting progress, experiments, and other technical documentation
- Further team discussions to discuss results
- Final report writing and presentation

Links and Policies Students are expected to devote an equivalent of three hours a week of course work in this class for each credit in which they are enrolled. Students can enroll in a total of 12 credit hours of this course during their undergraduate study at UF. Students should check with their department on the impact of excess surcharges and whether the credits will count toward their degree. Students should carefully discuss with their industry mentor the time expectations for completion of the requirements of the class, and these expectations should be clearly articulated in the Engineering Internship/Co-op Form. Typical total time on an internship/co-op is full-time at 40 hrs/week and is typically paid.

Grading Scheme 70%
Degree to which students meet expectations. Expectations are to be established by the Industry Mentor and student a minimum of one semester in advance of the student's enrollment in this course. The agreed-upon expectations will be reflected on the Internship/Co-op Form signed by both the student and industry mentor prior to the student's enrollment in the class. The following is a minimum set of expectations for every student enrolled in this class for credit: i.) perform a background literature search and review, ii.) develop a project plan, iii.) perform experimental work or applied experimental work, iv.) write and present a research report. All four of these minimum expectations as well as additional expectations (e.g., attendance at team meetings, company presentations, etc.) are to be clearly established and articulated to the student by the industry mentor prior to commencement of the internship/co-op.
20%
Quality of the final report and oral presentation. The industry mentor will provide clear expectations of the desired format, content, and deadlines of the final report. The industry mentors will grade the final report in collaboration with a UF Faculty member.
10%
Attendance.

Instructor(s) TBD

Herbert Wertheim College of Engineering EGN 4949 Registration Form

Student Registration Form

(to be completed by undergraduate student)

Student Full Name: _____

UFID Number: _____ Cell Phone: _____

Gatorlink Email Address: _____

Major: _____

Level/College: _____

Expected Bachelor's Graduation Date: _____

Project Title: _____

Industry Mentor: _____

Semester/Year of Enrollment: _____Credit Hours (1-3):_____

Brief Description of the Industry Project/Expectations:

Student's Signature:_____ Date:_____

Herbert Wertheim College of Engineering EGN 4949 Registration Form

Industry Mentor Registration Form

(to be completed by the industry mentor)

Mentor Name: _____

Email Address: _____

Company: _____

Office Address: _____

Office Phone: _____

What are your expectations for the student's attendance in this project (e.g., estimated hours/week in your laboratory, in seminars, group meetings, etc.)?

I approve of the project description and credit hours submitted by the student applicant. I have read the responsibilities of the project advisor (see next page) and agree to undertake these responsibilities.

Faculty Mentor Signature:_____ Date:_____

Responsibilities of the Undergraduate Student:

1. Seek out a company and industry mentor advisor and work with her/him in completing the application form prior to enrolling in EGN 4949.
2. Understand the industry mentor's expectations of your work (specific tasks, deliverables, timeline, etc.) on the project.
3. 3. Work actively on your project and participating in other related activities for about 3 hours each week for every credit hour enrolled in the course in addition to additional paid time
4. Keep clear accurate records of your work.
5. Understand how to conduct your work in a responsible and ethical manner. Follow the UF Honor Code at all times.
6. Follow all safety protocols and ask questions about safety protocols before performing any procedure about which you are unsure.
7. Ask for assistance when you need it.
8. Keep your industry mentor informed of your results.
9. If required, learn to work on a team while also pursuing independent work on your project.
10. Write and submit a report following the guidelines and expectations of your faculty advisor and/or mentor.
11. Present your findings in an oral presentation.
12. Strive to go beyond the minimum expectations of preparing a literature review and project plan, performing the work, and writing a final report. Seek out opportunities for oral presentations at a conference, writing and submitting a journal paper of your work, etc.

Responsibilities of the Industry Mentor:

1. Determine the appropriate number of credit hours to be assigned to the project. Approve and sign the application form to enable the student to register for 1-3 credit hours.
2. Clearly define your expectations of the student's participation on the project (specific tasks, deliverables, timeline, etc.).
3. Provide support and supervision of the student (either directly or by referring her/him to someone else).
4. Meet regularly with the student to review her/his progress and to provide guidance in moving forward in her/his project.
5. Arrange for all safety training that is appropriate for the student to ensure her/his safety in your laboratory.
6. Help the student understand the broader context in which her/his project fits and understand the basis for methods and procedures used.
7. Encouraged to provide a mid-semester evaluation of the student's performance, accompanied by recommendations for improving performance for the remainder of the semester.
8. Provide feedback and establish deadlines on the student's Literature review, Project plan and Final report
9. Assign the student's final grade by UF's deadline.
10. Encourage the student to go beyond the minimum expectations of preparing a literature review and project plan, performing the work, and writing a final report.

Engineering Internship/Co-op
EGN 4949

Instructor:
TBA
Office Hours: TBA

Course Description
Practical internship/co-op work experience under approved industrial supervision

Credits
1-3 Credit Hours: Students are expected to devote an equivalent of three hours a week of course work in this class for each credit in which they are enrolled. Students can enroll in a total of 12 credit hours of this course during their undergraduate study at UF. Students should check with their department on the impact of excess surcharges and whether the credits will count toward their degree. Students should carefully discuss with their industry mentor the time expectations for completion of the requirements of the class, and these expectations should be clearly articulated in the Engineering Internship/Co-op Form. Typical total time on an internship/co-op is full-time at 40 hrs/week and is typically paid.

Course Pre-Requisites / Co-Requisites
EG Classification

Course Objectives
After completion of this course, the student will have learned

- Apply searching the literature to the project
- Describe and apply taking proper safety precautions in the laboratory, if relevant, to the project
- Produce an accurate record of work performed during the Internship/Co-op
- Apply engineering knowledge to a problem in industry
- Produce a technical report
- Discuss work in a team environment, if relevant to the project
- Conduct herself/himself responsibly, safely, and ethically in a professional environment

Materials and Supply Fees
None

Professional Component (ABET):
Contributions to the professional component of ABET will vary depending on the type of internship/co-op

Relation to Program Outcomes (ABET):

Outcome	**Coverage***
a. Apply knowledge	High
b. Conduct experiments	Varies
c. Design	Medium
d. Function on teams	High
e. Solve problems	High
f. Professional and ethical responsibility	High
g. Communicate	High
h. Global, societal, and environmental impact	Varies
i. Lifelong learning	
j. Contemporary issues	Varies
k. Techniques, skills, and tools for degree program	

*Coverage is given as high, medium, or low. An empty box indicates that this outcome is not part of the course.

Required Textbooks and Software
None
Recommended Materials
None

Course Schedule
The course schedule will depend on the specific internship/training experience. The typical time per topic will vary depending on the internship/co-op

- Overview of company/project
- Safety training
- Discussions with project teams
- Background research, review of documents, white papers, and scientific papers
- Planning, designing, and reviewing the planned work
- Executing the plans
- Documenting progress, experiments, and other technical documentation
- Further team discussions to discuss results
- Final report writing and presentation

Attendance Policy, Class Expectations, and Make-Up Policy
Participation is a crucial part of an Internship/Co-cop experience. Excused absences are consistent with university policies in the undergraduate catalog (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx) and require appropriate documentation.

Evaluation of Grades
70%
Degree to which students meet expectations. Expectations are to be established by the Industry Mentor and student a minimum of one semester in advance of the student's enrollment in this course. The agreed-upon expectations will be reflected on the Internship/Co-op Form signed by both the student and industry mentor prior to the student's enrollment in the class. The following is a minimum set of expectations for every student enrolled in this class for credit: i.) perform a background literature search and review, ii.) develop a project plan, iii.) perform experimental work or applied experimental work, iv.) write and present a research report. All four of these minimum expectations as well as additional expectations (e.g., attendance at team meetings, company presentations, etc.) are to be clearly established and articulated to the student by the industry mentor prior to commencement of the internship/co-op.
20%
Quality of the final report and oral presentation. The industry mentor will provide clear expectations of the desired format, content, and deadlines of the final report. The industry mentors will grade the final report in collaboration with a UF Faculty member.
10%
Attendance.

Grading Policy

Percent	Grade
70 - 100	S
0-69.9	U

More information on UF grading policy may be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Students Requiring Accommodations
Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, https://www.dso.ufl.edu/drc) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation
Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu/evals. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

University Honesty Policy
UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Campus Resources:

Health and Wellness

U Matter, We Care:
If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)
Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Academic Resources

E-learning technical suppor*t*, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.

Writing Studio, 302 Tigert Hall*,* 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.

Student Complaints Campus*:* https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.

On-Line Students Complaints*:* http://www.distance.ufl.edu/student-complaint-process.