

College of Engineering and Computer Science

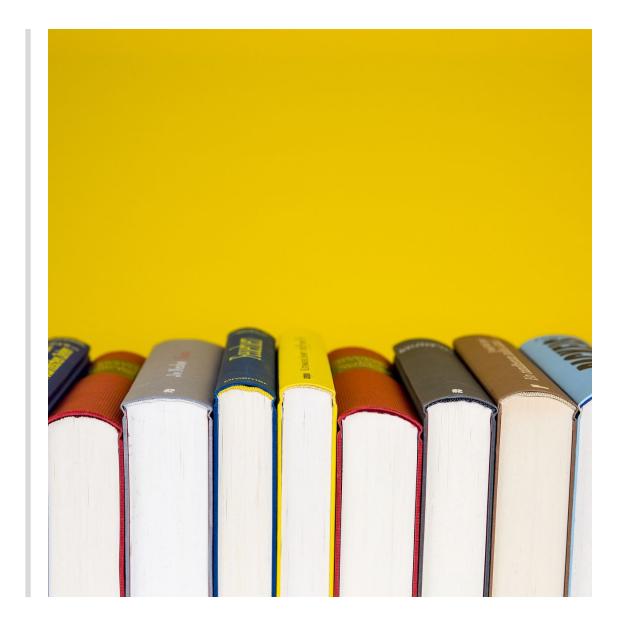


CECS College Information

- advising.cecs.ucf.edu
- <u>eacaf@ucf.edu-</u> General Email Account
- ENG 1 107
- 407-823-2455

Degree Programs or Departments

- Degree Programs
 - Aerospace Engineering
 - Civil Engineering
 - Computer Engineering
 - Construction Engineering
 - Electrical Engineering
 - Environmental Engineering
 - Industrial Engineering
 - Material Science and Engineering
 - Mechanical Engineering
 - Computer Science
 - Information Technology



Overview of CECS Policies

Engineering Major Access

All engineering majors are "restricted access". Students must complete the following courses to move from "engineering pending" into the "engineering major"

- MAC 2311C: Calculus with Analytical Geometry 1
- MAC 2312: Calculus with Analytical Geometry 2
- PHY 2048C or PHY 2048 and PHY 2048L: Physics for Engineers and Scientists 1
- CHS 1440, CHM 2045C, or appropriate Chemistry equivalent
- UCF GPA of 2.0 or higher
- Some engineering courses may be taken when in "pending" status however the majority of engineering courses require a student to be in the "engineering major"
- For more information on major status and declaration visit: <u>Pending Status</u>.

Foundation Exam Requirements

The Foundation Exam was created in 1998 to address a difficulty that professors of some 4000-level Computer Science courses were facing: that their students weren't prepared for their courses.

Computer Science students are required to pass the Foundation Exam to become a Computer Science major.

- Students must complete COP 3502C- Computer Science I with a "C" (2.0) or better to be eligible to take the Foundation Exam.
- Students have one calendar year from the completion of COP 3502C to pass the Foundation Exam.
 - Attempts not taken during that calendar year, will count as a failed attempt.
 - If you have transfer credit equivalent to COP 3502C, you will need to contact the Computer Science department.

If the student does not pass the Foundation Exam within the <u>one calendar year</u>, they will be required to change their major from Computer Science.

Lack of Progress Policy

The Lack of Progress Policy is designed to encourage successful completion of a degree at UCF.

ALL courses taken at UCF regardless of declared major or completed degree count towards the Lack of Progress Policy.

The policy has 2 components:

- Low grades/withdrawals
- Repeat course attempts

Low Grade Component

Students with (10) C-,D, F, W, WL, NC, U grades at UCF \rightarrow no longer eligible for majors within CECS

Repeat Course Component

3 unsuccessful attempts of the same UCF course → no longer eligible for majors within CECS

CECS Updates- Civil, Construction, Environmental Engineering

Civil Engineering

Course Additions

- CGN 3090 (2) Engineering Reports & Liability
 - This course is a pre-requisite for all "Design" courses within the Civil, Construction, Environmental Engineering department
 - Students in a catalog year prior to 2024 are not required to take CGN 3090, however they will be encouraged to take it (it will apply toward technical elective credits for CECE Majors)

Course Revisions

- CEG 4011C Credit hour reduction from 4 to 3
- CES 4100C Credit hour reduction from 4 to 3

Requisite Changes

- CEG 4203- remove CEG 4012, add CEG 4011C & CGN 3405
- CEG 4801C- add CGN 3090
- CES 4743C- add CGN 3090
- CWR 4812- add CGN 3090
- TTE 4601C- add CGN 3090
- CWR 3201- remove EGN 3321
- CWR 4120- remove CWR 4202, add CWR 3201

Environmental Engineering

Course Additions

- CGN 3090 (2) Engineering Reports & Liability
 - This course is a pre-requisite for all "Design" courses within the Civil, Construction, Environmental Engineering department
 - Students in a catalog year prior to 2024 are not required to take CGN 3090, however they will be encouraged to take it (it will apply toward technical elective credits for CECE Majors)
- EES 4421 (2)- Fate and Transport

Course Deletions

EGN 3321- Dynamics

Course Revisions

CEG 4011C- credit hour reduction from 4 to 3

Requisite Changes

- ENV 4122C- add CGN 3090
- ENV 4433C- add CGN 3090
- ENV 4562C-add CGN 3090

Construction Engineering

Course Additions

- CGN 3090 (2) Engineering Reports & Liability
 - This course is a pre-requisite for all "Design" courses within the Civil, Construction, Environmental Engineering department
 - Students in a catalog year prior to 2024 are not required to take CGN 3090, however they will be encouraged to take it (it will apply toward technical elective credits for CECE Majors)
- COP 2500 (3) or COP 3223 (3)- Programming
- Add 6 credit hours of "focus Area Electives"
 - Focus Area 1
 - ESI 4312 & CAI 4823
 - Focus Area 2
 - ESI 4234 & EIN 4517
 - Focus Area 3
 - FIN 3403 & MAR 3023

Course Deletions

EGN 3321- Dynamics

Course Revisions

- CEG 4011C Credit hour reduction from 4 to 3
- CES 4100C Credit hour reduction from 4 to 3
- CCE 4813- Credit hour reduction from 4 to 3

Requisite Changes

- CCE 4004- add CEG 4011C
- CCE 4810C- add CGN 3090, CCE 4034, CCE 4402
- ENV 4562C-add CGN 3090

CECS Updates- Industrial Engineering

Course Addition

• CAI 4823 (3)- Artificial Intelligence for Industrial Engineers

Course Deletions

• ESI 4628 – IE Decision Support Systems



CECS Updates- Computer, Electrical Engineering

Computer Engineering

Course Addition

- EGN 3420 (3)– Engineering (PR: EGN 3211)
 - This course is a pre-requisite for EEL 3123- this requisite will be enforced for all students in the 2024 catalog
 - Although students in a catalog year prior to 2024 are not required to take EGN 3420, the ECE Department expects to enforce this course as a prerequisite to EEL 3123 for all students beginning in fall 2025

Course Deletions

 Reduction of Technical Elective category by 3 Credit hours

Requisite Changes

- EGN 3211- remove MAC 2311 & MAC 2312
- EEL 3123- add EGN 3420
- EEL 3801- remove MAC 2312 and PHY 2049C

Electrical Engineering

Course Addition

- EGN 3420 (3) Engineering (PR: EGN 3211)
 - This course is a pre-requisite for EEL 3123- this requisite will be enforced for all students in the 2024 catalog
 - Although students in a catalog year prior to 2024 are not required to take EGN 3420, the ECE Department expects to enforce this course as a prerequisite to EEL 3123 for all students beginning in fall 2025

Course Deletions

• PHY 3101 (3)- Physics 3

Requisite Changes

- EGN 3211- remove MAC 2311 & MAC 2312
- EEL 3123- add EGN 3420
- EEL 3801- remove MAC 2312 and PHY 2049C

CECS Updates- Computer Science and Information Technology

Requisite Changes

- COT 3100C- changed MAC 2311 from a prerequisite to a Corequisite. Students can take these courses at the same time
- COP 3330- remove COP 3323 as a prerequisite. Students can take COP 3330 if they pass the Computer Science Placement Exam OR if they complete COP 2500

New Program

Semiconductor Certificate

Certificate seeks to address the immediate needs of the semiconductor manufacturing industry for qualified workforce across multiple engineering disciplines. The SEMI certificate at the College of Engineering and Computer Science is designed to create a short path for students form Electrical and Computer Engineering, Material Science and Engineering, Industrial Engineering, and Mechanical Engineering departments, who are interested in the semiconductor industry to gain entry-level knowledge about the most fundamental science and engineering concepts behind fabrication of semiconductor devices.

Program Requirements- 12 credits

Complete the following:

- EGN 3365- Structures and Properties of Materials (3)
- EEE 3350- Semiconductor Devices

Complete at least 1 of the following:

- EGN 3373- Principles of Electrical Engineering (3)
- EEL 3004C- Linear Circuits 1 (3)

Complete at least 1 of the following:

- EMA 4413- Fundamentals of Electronic Materials (3)
- EIN 4391- Fundamentals of Digital Manufacturing for Industrial Engineers (3)
- EEE 4463 MEMS Devices and Applications (3)
- EML 3811C Mechatronics (3)

