

DEGREE REQUIREMENTS
BACHELOR OF SCIENCE IN COMPUTER ENGINEERING – CPE
FOR STUDENTS ENTERING CATALOG YEAR 2025-Present
HERBERT WERTHEIM COLLEGE OF ENGINEERING, UNIVERSITY OF FLORIDA

GENERAL EDUCATION REQUIREMENTS BEYOND MAJOR REQUIREMENTS (12 hours total) **+

Composition (GE-C)3 Humanities (Quest 1)(GE-H) 6
 Social & Behavioral Sciences (Quest 2) (GE-S)6 International (GE-N, GE-D)*3

*Courses selected could also fulfill the General Education requirements in Social & Behavioral Science (GE-S) or Humanities (GE-H).
 **The Mathematics, Physical Sciences, & Biological Sciences requirements (18 hours) are fulfilled by departmental requirements listed below.
 +Students may have to complete additional General Education courses to meet State Core requirements. See advisor for course requirements.

DEPARTMENTAL REQUIREMENTS

(Prerequisites listed in parentheses); Co-requisites underlined)

Critical Tracking: Mathematics (15 hours)

MAC 2311* (4) **Analytical Geometry & Calculus 1 (ALEKS/MAC 1147/Test credit)**
MAC 2312* (4) **Analytical Geometry & Calculus 2 (MAC 2311)**
MAC 2313* (4) **Analytical Geometry & Calculus 3 (MAC 2312)**
MAP 2302* (3) **Differential Equations (MAC 2311)**

Critical Tracking: Physics (6 hours)

PHY 2048* (3) **Physics 1 w/ Calculus (HS Physics or PHY 2020, MAC 2311; MAC 2312)**
PHY 2049* (3) **Physics 2 w/ Calculus (PHY 2048 & MAC 2312; MAC 2313)**

Enrichment Electives (minimum of 7 hours)

For approved list of courses see:

<https://cpe.eng.ufl.edu/enrichment-electives/>

College Writing Requirement (3 hours)

ENC 2256* (3) **Writing in the Disciplines**

Gen Ed Physical and Biological Sciences (6 hours)

PHY 2048L* (1) **Physics 1 Lab (PHY2048)**
PHY 2049L* (1) **Physics 2 Lab (PHY2049)**

(4) For approved list of courses see:

https://catalog.ufl.edu/UGRD/colleges-schools/UGENG/CPE_BSCO/#modelsemesterplantext

Computer Engineering Core Courses (50 hours)

COP 3502C* (4) **Programming Fundamentals 1 (Java) (MAC 2311)**
COP 3503C* (4) **Programming Fundamentals 2 (C++) (COP 3502, MAC2311) or COP 3504C (4) (AP CS 5)¹**
COT 3100* (3) **App. of Discrete Structures (MAC 2311, COP 3502, COP 3503C)**
CDA 3101* (3) **Intro to Comp. Organization (COP 3503, MAC 2311, COT 3100)**
COP 3530* (3) **Data Structures & Algorithms (COP 3503, COT 3100, MAC 2312)**
CEN 3031* (3) **Intro to Software Engineering (COP 3530)**
COP 4600* (3) **Operating Systems (COP 3530, CDA 3101; CEN 3907C)**
EEL 3111C (4) **Circuits 1 (PHY 2049, MAC 2312)**
EEL 3135 (4) **Signals & Systems (MAC 2313, COP 3503C)**
EEL 3701C* (4) **Digital Logic & Computer Systems (Prog. Experience)**
EEL 4744C* (4) **Microprocessor Applications (COP 3503C/3504C, EEL 3701C)**
EEL 4712C (4) **Digital Design (EEL 3701C)**
EGS 4034 (1) **Engineering Ethics and Professionalism (Jr. status)**
STA 3032 (3) **Engineering Statistics (MAC 2311)**
MAS 3114 (3) **Comp. Linear Alg. (MAC 2312 & programming language EP) or MAS 4105 (MAC 2313, MAS 3300 or MHF3202)**

Design I & II Sequences (6 Credits)

CEN 4907C* & **CEN 4908C*** (CpE Design) (**CEN 3031, EEL 4744C; COP 4600**) or
EGN 4951* & **EGN 4952*** (IPPD) (**CEN 3031, EEL 4744C, COP 4600**)

± Minimum Total Hours 126

Rev 10/25– This document is intended to be used only as a counseling guide. Graduation requirements are more completely specified in the UF Undergraduate Catalog. Students are asked to meet with their academic advisor for verification of all degree and graduation requirements.

*These courses require a grade of C or higher to count toward graduation.

¹ COP3504C may be taken in lieu of COP3502C/COP3504C. Students must complete an additional 4 credits to meet graduation requirements.

Tech Electives (18 hours)

Technical elective coursework is in addition to core coursework and enrichment electives. At least 12 technical elective credits must be from the CISE and/or ECE department(s). At least 3 must be an approved Experiential Learning Course (Experiential Learning Technical Elective).

Qualifying technical electives include, unless otherwise excluded:

- 4000-level or higher CpE program, CISE, Mathematics, and Statistics courses
- 3000-level CAP prefix CISE, ECE, and Physics courses
- Other courses approved by program coordinator

The following courses do not qualify as technical electives (i.e., are excluded):

- Required curriculum courses
- EEL 3000, EEL 3003, EEL 3834, EEL 3872, EEL 4837

-Students may take no more than one technical elective that teaches a specific programming language; courses teaching Python and C++ do not qualify.

-No more than 3 hours of co-op / Practical Work will qualify

-No more than 6 hours of Practical Work and/or Independent Study credits will qualify

-No more than 9 hours of Research, Independent Study, Practical Work and /or credits outside of CpE/CISE/ECE qualify.

Other Notes and Restrictions

-MAD 4203 and MAD 3107 will not qualify for any portion of the required credits for the CpE program (including technical, enrichment, and general electives)"

-Only one of COT 4501 and MAD 4401 may qualify for CpE requirements

-Only one of COT 4420 and MAD 4505 may qualify for CpE requirements

CpE students will have credit for two programming courses (Java and C++). One additional programming language course (not Java or C++) can count as a technical elective. EEL 3834 is not considered a tech elective.

Notes:

- ✓ Communication between students and Advisors is conducted through the CpE Advising Corner Canvas page.
- ✓ Students must complete all Critical Tracking courses (in bold) with a grade of C or better within two attempts (W's do count as attempts) while maintaining a 2.5 tracking GPA.
- ✓ Must maintain UF, upper-division, and major GPA of at least a 2.0.
- ✓ Any course that is a pre-requisite to another course in the curriculum must be completed with a grade of C or better.
- ✓ Both University and Departmental Exit Interviews are required during the final semester.
- ✓ **Students who do not meet these requirements will be placed on academic probation and will be required to prepare a probation contract with a CpE advisor.**