## Computer Engineering Degree Requirements (126 hours total)

A minimum grade of C is required for each critical tracking (CT) course (*italicized and bold in table below*) and the critical-tracking GPA must be a minimum of 2.5.

Also, a minimum grade of C required in ENC 3254, COP 3502, COP 3503, EEL 3701C, and CpE Design 2 (CEN 4912, EEL 4924, or CIS/EEL 4913)

A CpE major grade point average (GPA) is calculated as the average of the grades of all the CISE and ECE courses taken by the student. CpE students must maintain a cumulative, upper-division and CpE major GPA minimum of 2.0.

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 adviser. Students are normally given two terms to remove their deficit points; however, students who do not satisfy the conditions of the first term of probation may be dismissed from the program.

## Critical Tracking

To graduate with this major, students must complete all university, college and major requirements. Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites may be used for transfer students.

### Semester 1

- 2.0 UF GPA required for semesters 1-5
- 2.5 GPA on all critical-tracking courses for semesters 1-5
- Complete 1 of 8 tracking courses with a minimum grade of C within two attempts: CHM 2045 or CHM 2095, CHM 2046 or CHM 2096 or approved biological science course, MAC 2311, MAC 2312, MAC 2313, MAP 2302, PHY 2048, PHY 2049

### Semester 2

- Complete one additional critical tracking course with a minimum grade of C within two attempts

### Semester 3

- Complete two additional critical-tracking courses with minimum grades of C within two attempts

### Semester 4

- Complete two additional critical-tracking courses with minimum grades of C within two attempts

### Semester 5

- Complete all 8 critical-tracking courses with minimum grades of C in each course within two attempts

## General Education (57 hours total)

| Physical Sciences (P); Biological Sciences (B) | 15 |
|---|---|
| **CHM 2045 General Chemistry 1 or<br>CHM 2095 Chemistry for Engineers 1 (GE-P)** | 3 |
| CHM 2045L General Chemistry 1 Laboratory (GE-P) | 1 |
| **PHY 2048 Physics with Calculus 1 (GE-P)** | 3 |
| PHY 2048L Physics with Calculus 1 Laboratory (GE-P) | 1 |
| **PHY 2049 Physics with Calculus 2 (GE-P)** | 3 |
| PHY 2049L Physics with Calculus 2 Laboratory (GE-P) | 1 |
| **Biological Science 2000 level or above (GE-B) or<br>CHM 2046 General Chemistry 2 or<br>CHM 2096 Chemistry for Engineers 2 (GE-P)** | 3 |
| **Social & Behavior (S); Humanities (H)** | **15** |
| HUM 2305 What is the Good Life (GE-H) | 3 |
| Social and Behavioral Sciences (GE-S) | 6 |
| Humanities (GE-H) | 3 |
| Social and Behavioral Sciences (GE-S) or Humanities (GE-H) | 3 |
| **Math (M)** | **15** |
| **MAC 2311 Analytic Geometry and Calculus 1 (GE-M)** | 4 |
| **MAC 2312 Analytic Geometry and Calculus 2 (GE-M)** | 4 |
| **MAC 2313 Analytic Geometry and Calculus 3 (GE-M)** | 4 |
| **MAP 2302 Elementary Differential Equations (GE-M)** | 3 |
| **General Education Others** | **12** |
| Approved engineering ethics course | 1 |
| ENC 3254 Professional Communication for Engineers (GE-C, WR-6) | 3 |
| EGN College Breadth, from approved list | 5 |
| STA 3032 Engineering Statistics | 3 |

## Required Computer Engineering Core (51 hours total)

| Programming, Linear Algebra | 9 |
|---|---|
| COP 3502 Programming Fundamentals 1 | 3 |
| COP 3503 Programming Fundamentals 2 | 3 |
| MAS 3114 Computational Linear Algebra | 3 |
| **Required CpE Core Courses from CISE** | **16** |
| CDA 3101 Introduction to Computer Organization | 3 |
| CEN 3031 Introduction to Software Engineering | 3 |
| COP 3530 Data Structures and Algorithms | 4 |
| COP 4600 Operating Systems | 3 |
| COT 3100 Applications of Discrete Structures | 3 |

| Required CpE Core Courses from ECE | 20 |
|---|---|
| EEL 3111C Circuits 1 | 4 |
| EEL 3135 Signals and Systems | 4 |
| EEL 3701C Digital Logic and Computer Systems | 4 |
| EEL 4712C Digital Design | 4 |
| EEL 3744C Microprocessor Applications | 4 |
| **Capstone Design** | **6** |
| **CpE Design 1**<br>CEN 3923 CISE Design 1 or<br>EEL 3923 ECE Design 1 or<br>EEL/CIS 4912 Integrated Product & Process Design 1 | 3 |
| **CpE Design 2**<br>CEN 4914 CISE Design 2 or<br>EEL 4924 ECE Design 2 or<br>EEL/CIS 4913 Integrated Product & Process Design 2 | 3 |

## Computer Engineering Tech Electives (18 hours total)

At least 12 hours must be courses >=3000 level in the departments of CISE or ECE
- List of exceptions is posted on the CpE website: www.cpe.eng.ufl.edu/elective-exceptions
- A CpE student will have credit for two programming courses (Java and C++). One additional programming language course (not Java or C++) can count as a tech elective.

Up to 6 hours of the following courses
- >= 4000-level courses in the Math department
- >= 3000-level courses in the Physics department
- >= 4000-level statistics courses
- >= 3000-level courses in any department in the College of Engineering
- Any advisor-approved course