**DEPARTMENTAL REQUIREMENTS (104 credits)**

Critical Tracking courses are in bold.

### Mathematics (18)
- MAC 2311 Analytic Geometry & Calculus 1 .................. 4
- MAC 2312 Analytic Geometry & Calculus 2 .................. 4
- MAC 2313 Analytic Geometry & Calculus 3 .................. 4
- MAS 3114 Comp. Linear Algebra (Cal 2) ..................... 3
- STA 3023 Engineering Statistics (Cal 1) ................. 1

### Physics (8)
- PHY 2048 Physics w/Cal 1 (HS Physics, Cal 1; Cal 2, PHY 2048L) 3
- PHY 2048L Lab for PHY 2048 (PHY 2048) .................. 1
- PHY 2049 Physics w/Cal 2 (PHY 2048; Cal 3, PHY 2049L) 3
- PHY 2049L Lab for PHY 2049 (PHY 2049) .................. 1

### Communications (6)
- ENC 3246 Professional Communications for Engineers ..... 3
- Additional Writing/Public Speaking course (approved list). 3

### Interdisciplinary Electives (14) (choose one option)

**Option A:** 14 credits applicable toward formal minor and not counting for other requirements; completion of minor not required if it exceeds 14 credits.

* If completed minor contributes less than 14 credits, remaining credits can be fulfilled with additional 3000-level coursework in the area of the minor, 3000-level CISE courses, or 3000-level Engineering courses.

**Option B:** 14 credits in a concentration outside of CISE at 3000-level or higher (advisor approval required).

**Option C:** 14 credits arranged with a department of interest which does not offer a formal minor.

### General Elective (1)

Any course credit not applied to another requirement will meet this requirement.

### Computer Science Major Courses (38)
- COP 3504C Prog. Fundamentals 1 (MAC 2311) ................ 4
- COP 3508C Prog. Fundamentals 2 (MAC 2311, COP 3502C) ................ 4
- COP 3504C App. of Discrete Struct. (MAC 2311, COP 3503C) ............. 3
- COP 3519 Data Struct. & Alg. (COP 3503, COT 3100, Calc 2) .............. 3
- CDA 3192 Intro to Comp. Org. (MAC 2311, COP 3503C, COT 3100) .... 3
- CEN 3861 Intro to Software Engineering (COP 3530) ................ 3
- CIS 4301 Info & DB Sys Des & Dev 1(COP 3503C, COT 3100) .......... 3
- COP 4600 Operating Systems (COP 3530, CDA 3101) .................. 3
- COP 4020 Programming Language Concepts (COP 3530) ............... 3
- COP 4533 Algorithm Abstraction & Design (COP 3503C) ............... 3
- CNT 4007 Comp. Network Fund. (COP 4600) ......................... 3
- CIS 4914 Sr. Project (4EG) OR EGN 4952 IPPD 2 (4EG, CIS 4912C) .......... 3

### Ethics (1)
- EGS 4034 Professional Ethics (4EG) ......................... 1
- OR CGS 3065 Legal & Social Issues in Computing (F) ......... 3

### Technical Electives (18)

At least 14 credits must be from those courses and/or categories listed below. List is not exhaustive, nor are courses always offered.

- Any 4000-level CISE course (see current course sched.)... 1-3
- EEL 3701C Digital Logic ......................................... 4
- EEL 4744C Microprocessor Applications ......................... 4
- EGN 4951 IPPD 1 ................................................. 1-3
- CIS 4930 Special Topics ............................................. 3
- CIS 4912 Engineering Undergraduate Research .......... 1-3
- CIS 4940 Internship (advisor approval) ....................... 1
- CIS 4949 Co-op (advisor approval) ............................ 1
- CIS 4985 Independent Study ......................................... 3
- EIN 3354 Engineering Economy ...................................... 3

Technical Electives also may be:

1) Any 4000-level or higher ECE or PHY course not taken to fulfill some other requirement, excluding EEL 4834 and most CGS courses.
2) MAP 2302 or any 4000-level math or statistics course with the prefix STA, MAA, MAD, MAP, MAS or MIF not fulfilling another requirement.
3) Students may take up to two (2) 3000-level CAP courses
4) Students may take up to one (1) of EGN/S 4038, 4641, or 4643.

### NOTES:
- Students must complete all Critical Tracking courses with a C or better within two attempts (W counts as an attempt) within 5 semesters, while maintaining a 2.5 tracking GPA. Must maintain UF and CISE GPA of 2.0.
- Students who do not meet requirements above will be placed on academic probation and will be required to sign a probation contract with a CISE advisor. Students are normally given two terms to raise their GPAs or remove their deficit points; however, students who do not satisfy the conditions of the first term of probation may be dismissed from the department.
- ENC 3246 must be completed with a C or better. A grade of C- or lower will not fulfill degree requirements.
- A minimum grade of C is required in all prerequisites to required courses: COP 3502C, COP 3503C, COT 3101, COP 3530, COP 4600, COT 3100 and MAS 3114.
- Courses in parenthesis are prerequisites; underlined courses are co-requisites.
- An Exit Interview is required during final semester. Please see an academic advisor for details.
- CGS 3065 will count for both the Ethics requirement and 3 credits of Technical Electives.
- COP 3504C may replace COP3502C and COP3503C if students have prior programming experience. If a student opts for COP 3504C, an additional 4 credit hours of electives is required.

**Minimum Total Hours** ......................................................................................... 120

Rev Summer 2021 - This document is intended to be used only as a counseling guide. Graduation requirements are more completely specified in the UF Undergraduate Catalog.