

DEGREE REQUIREMENTS⁺
 BACHELOR OF SCIENCE IN COMPUTER SCIENCE (CSE)
 FOR STUDENTS ENTERING CATALOG YEAR 2005 OR LATER
 COLLEGE OF ENGINEERING, UNIVERSITY OF FLORIDA

GENERAL EDUCATION (18)**

Composition (ENC 3254).....3	Humanities*6-9
Social and Behavioral Sciences*6-9	International and Diversity Studies**6

- * Both categories combined must total 15 hrs with no fewer than six hours taken in either category.
- ** These courses may be selected from courses that simultaneously fulfill the general education area requirement in social and behavioral science (S) and humanities (H).
- *** The mathematics, physical and biological science requirements are covered by the departmental requirements below.

DEPARTMENTAL REQUIREMENTS

Mathematics (24/25)

__ MAC 2311 Analytic Geometry & Calculus 14
__ MAC 2312 Analytic Geometry & Calculus 24
__ MAC 2313 Analytic Geometry & Calculus 34
__ MAP 2302 Elementary Differential Equations (Cal 2)3
__ MAS 3114 Comp. Linear Algebra (Cal 2 & prog. lang.exp.) .3
<u>OR MAS 4105 Linear Algebra 1 (Cal 3)4</u>
__ STA 3032 Engineering Statistics (Cal 1)3
__ COT 4501 Numerical Analysis (CIS 3020/23, MAS3114)3

Physics (8)

__ PHY 2048 Physics w/Cal 1 (HS Physics, Cal 1; Cal 2, PHY2048L)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

Chemistry (4)

__ CHM 2045 General Chemistry (CHM 1025; or passing grade on chem. readiness exam; CHM 2045L)3
__ CHM 2045L Lab for CHM 2045 (CHM 2045)1

Communications (6)

__ ENC 3254 Professional Communications for Engineers3
__ Writing or Public Speaking courses (advisor approval)3

Interdisciplinary Electives (15) (choose one option)

- Option A***: All credits must be applicable toward an official UF minor; completion of the minor is not required if the minor exceeds 15 credit hours, however, it is highly recommended.
- Option B**: All courses must be at the 3000-level or above and in the same area (advisor approval required).

* If the chosen minor requires less than 15 credits, the remaining credits can be fulfilled with additional upper-division coursework in the area of the minor or with CS technical electives

Computer Science Major Courses (33)

__ CIS 3020 Adv Prgm Fund for CIS Majors (Cal 1, prgm exp.)3
<u>OR CIS 3023 Programming for CIS Majors II (CIS 3022)3</u>
__ COT 3100 App. of Discrete Structures (Cal 1, CIS 3020 or CIS 3023) ..3
__ COP 3530 Data Struct & Algorithms (CIS 3020/23, COT 3100, Cal 2)4
__ CDA 3101 Intro to Comp Organization (Cal 1, CIS 3020/23)3
__ CEN 3031 Intro to Software Engineering (COP 3530)3
__ COP 4600 Operating Systems (COP 3530, CDA 3101)3
__ CEN 4500C Comp. Network Fund. (COP 4600)4
__ CIS 4914 Sr. Project or CIS 4913C-IPPD 2 (4EG)3
__ CIS 4301 Info & DB Sys Design & Dev 1(3020/3023, 3100) ..3
__ EEL 3701C Digital Logic & Computer Systems (CIS 3020/23)4

Ethics (1)

__ EGN 4034 Professional Ethics (4EG+)1
__ CGS 3065 Legal & Social Issues in Computing3

Technical Electives (15)**

__ CAP 4410 Digital Image Processing (COP 3530)3
__ CAP 4621 Artificial Intelligence & Heuristics (COP 3530)3
__ CAP 4680 Knowledge-Based Syst.: Theory & Pract. (CAP 4621)3
__ CAP 4730 Comp. Structures in Computer Graphics (COP 3530)3
__ CAP 4800 Systems Simulation (COP 3530)3
__ CAP 4403 Aesthetic Computing (COP 3530)3
__ CDA 4102 Computer Architecture (CDA 3101, COP 3530)3
__ CEN 4012 Software System Development (CEN 3031)3
__ CEN 4072 Software Testing & Verification (CEN 3031)3
__ CIS 4905 Independent Study1-4
__ CIS 4912C IPPD 1 (CDA 3101, COP 3530, consent of instr.) ..3
__ COP 4020 Programming Language Concepts (COP 3530)3
__ COP 4331 Object-oriented Programming (COP 3530)3
__ COP 4343 UNIX System Administration (COP 4600)3
__ COP 4620 Translators & Translator Writing Sys. (COP 3530) ...3
__ COP 4720 Info & DB System Design & Dev. 2 (CIS4301, COP 3530) ...3
__ CGS 3065 Legal & Social Issues in Computing3
__ EIN 4354 Engineering Economy (Jr. Standing)3

The following courses require advisor approval in order to fulfill technical elective requirements:

__ CIS 4930 Special Topics (advisor approval).....3
__ CIS 4940 Internship (advisor approval)1
__ CIS 4949 Co-op (advisor approval)1

****CIS 3022, CGS 3460, and CGS 3464 are considered programming language courses. At most, 3 credits of a programming language course may count towards technical elective credit. See an advisor for approval**

NOTES:

- CIS 3020 is not equivalent to CIS 3023. Any student who takes CIS 3022 must then take CIS 3023. If a student takes CIS 3022/3023 sequence, then they do not have to take CIS 3020.
- ENC 3254, CIS 3020, and CIS 3023 must be completed with a C or better.
- Courses in parenthesis are prerequisites.
- Underlined courses are co-requisites.
- An Exit Interview is required during your last semester. Please see one of the department academic advisors.
- Students must complete all tracking courses with a C or better within two attempts (W counts as an attempt), while maintaining a 2.5 tracking GPA.
- Students pursuing a math minor may substitute MAD4401 for COT4501.
- Students who take CGS3065 as a technical elective simultaneously satisfy the ethics requirement.