

DOUBLE MAJOR REQUIREMENTS⁺
BACHELOR OF SCIENCE IN COMPUTER ENGINEERING (Software) & ELECTRICAL ENGINEERING
FOR STUDENTS ENTERING CATALOG YEAR 2001 OR LATER
COLLEGE OF ENGINEERING, UNIVERSITY OF FLORIDA

GENERAL EDUCATION^{***}

Composition (ENC 2210).....3	Humanities*6-9
Social and Behavioral Sciences*6-9	International Studies and Diversity**6

- * Both categories combined must total 15 hrs with no fewer than six and no more than nine hrs 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 listed with the departmental requirements below.

DEPARTMENTAL REQUIREMENTS

Mathematics (21/24)

MAC 2311 Analytic Geometry & Calculus 1 (SAT II=540)	4
MAC 2312 Analytic Geometry & Calculus 2	4
MAC 2313 Analytic Geometry & Calculus 3	4
<u>MAP 2302 Elementary Differential Equations (Cal 2)</u>	<u>3</u>
MAS 3114 Computational Linear Algebra (Cal 2 & a prg. lang.)	3
<u>OR MAS 4105 Linear Algebra 1 (Cal 3).....</u>	<u>4</u>
STA 4321 Mathematical Statistics (Cal 3).....	3

Physics (8)

PHY 2048 Physics w/Cal 1 (HS Physics, Cal 1; <u>Cal 2, PHY2048L</u>)	3
PHY 2048L Lab for PHY 2048 (<u>PHY 2048</u>)	1
PHY 2049 Physics w/Cal 2 (PHY 2048; <u>Cal 3, PHY 2049L</u>)	3
PHY 2049L Lab for PHY 3049 (<u>PHY 2049</u>)	1

Chemistry/Biology (7)

CHM 2045 General Chemistry (SAT II=480; <u>CHM 2045L</u>)	3
<u>CHM 2045L Lab for CHM 2045 (CHM 2045)</u>	<u>1</u>
CHM 2046 Chemistry & Qualitative Analysis (CHM 2045)	
<u>OR PHY 2464, or any 3000-level PHY, or any non-CHM 2000-</u>	
<u>level course with a Gen. Ed. Designation of (P) or (B)</u>	<u>3</u>

Required CEN & EE Major Courses (18)

CIS 3020 Intro to CIS (Cal 1)	3
<u>OR CIS 3023 Program CIS Majors 2 (CIS 3023)</u>	<u>3</u>
EGN 4034 Professional Issues in Engineering (4EC)	1
EEL 3701C Digital Logic & Computer Systems (CIS 3020).....	4
EEL 3135 Discrete-Time Signals & Sys.(Cal 3, CIS 3020, <u>MAP 2302</u>)	3
EEL 3111C Circuits 1 (PHY 2049, <u>Cal 3</u>)	4
EEL 4914 Computer Systems Design-Senior Project (4EC)	3

Required CEN Major Courses (31)

COT 3100 Applic. Discrete Struct (Cal 1, <u>CIS 3020/CIS 3023</u>)	3
COP 3530 Data & Algorithm Structures(<u>CIS 3020, COT 3100, Cal 2</u>)	4
CDA 3101 Intro to Computer Organization (Cal 1, <u>CIS 3020</u>)	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 3530, <u>CDA 3101, COP 4600</u>)	4
COT 4501 Numerical Analysis (<u>CIS 3020, MAS 3114</u>)	3
EEL 4712C Digital Design (EEL 3701C)	4
EEL 4744C Microprocessor Applications (EEL 3701C)	4

Required EE Major Courses (17)

EEL 3304C Electronics Circuits 1 (EEL 3111)	4
EEL 3396 Solid-State Electronic Devices (EEL 3111)	3
EEL 3112 Circuits 2 (EEL 3111)	3
EEL 3472 Electromagnetic Fields (EEL 3111)	3
EGM 4313 Intermediate Eng Analysis (MAP 2302)	4

EE-College Breadth* (6)

See EE Advisor for approved list of courses6

CEN-Engineering Core* (0)

Can be satisfied with specific EE College Breadth courses3

***Compare EE and CEN approved list for duplicate courses**

CEN Technical Electives (12)**

CAP 4410 Digital Image Processing (COP 3530, Cal 2)	3
CAP 4621 Artificial Intelligence & Heuristics (COP 3530)	3
CAP 4680 Knowledge-Based Sys. Theory & Prac. (CAP 4621)	3
CAP 4730 Comp. Structures in Computer Graphics (COP 3530) ...	3
CAP 4800 Systems Simulation (COP 3530)	3
CDA 4102 Computer Architecture (CDA 3101, COP 3530)	3
CEN 4012 Software System Development (CEN 3031)	3
CGS 3065 Legal & Social Issues in Computing	3
CIS 4301 Info System Design and Devel.(CIS3020/3023, COT3100)	3
CIS 4905 Independent Study	1-4
CIS 4912C IPPD (CDA 3101, COP 3530, consent of instr.)	3
CIS 4930 Special Topics (advisor approval)	3
CIS 4940 Internship (advisor approval)	1
CIS 4949 Co-op (advisor approval)	1
COP 4020 Programming Language Concepts (COP 3530)	3
COP 4331 Object-oriented Programming (COP 3530)	3
COP 4343 UNIX System Administration (COP4600)	3
COP 4620 Translators & Translator Writing Sys. (COP 3530)	3

****At most 3 credits of programming courses may count towards CISE technical elective credit. See CISE Advisor for approval.**

EE Specializations* (7-8) - Choose 2 of these 4 areas**

EEL 3211 Electric Energy	
& EEL 4201L Electric Energy Lab	4
EEL 4306C Electronic Circuits 2	
<u>OR EEL 4310C Digital Integrated Circuits</u>	<u>3</u>
EEL 4514 Communication Systems	
& EEL 4514L Communication Lab	4
EEL 4657 Linear Control Systems	
& EEL 4657L Linear Controls Lab	4

EE Technical Electives* (13-14)**

See EE Advisor for approved list of courses.

*****EE Specializations and Tech. Electives must total 21 credits.
 Example: 7 Specialization credits + 14 Tech Electives = 21**

NOTES:

- CISE Dept. requires ENC 2210 and CIS 3020/CIS 3023 to be completed with a C or better. Please see EE Dept. for additional course requirements.
- Courses in parenthesis are prerequisites.
- Underlined courses are corequisites.
- An Exit Interview is required during your last semester. Please see an academic advisor in both departments.

⁺Minimum Total Hours.....159