Computer Engineering B.S.C.P.

120 credits, 2022/2023 Catalog

First Year

Fall Semester		Spring Semester	
4	***MAC 2281 or MAC 2311 Calculus I***	***4***	***MAC 2282 or MAC 2312 Calculus II***
3	CHS 2440 or CHM 2045 Chemistry I	***3***	***PHY 2048 General Physics I***
1	CHS 2440L or CHM 2045L Chemistry I Lab	***1***	***PHY 2048L General Physics I Lab***
3	ENC 1101 Composition I	3	ENC 1102 Composition II
R	EGN 3000 Foundations of Engineering	3	**COP 2510 Programming Concepts*
3	EGN 3000L Foundations of Engineering Lab (TGEC)		
14	*Total Credits*	14	*Total Credits*

Second Year

Fall Semester		Spring Semester		Summer	
4	*MAC 2283 or MAC 2313 Calculus III*	3	MAP 2302 Differential Eq or EGN 3433 Modeling & Analysis of Eng Systems	3	Gen. Ed. Natural Science Elective
3	*PHY 2049 General Physics II*	3	COT 3100 Intro Discrete Structures	3	** St. Gen. Ed. Core Social Science Elective
1	*PHY 2049L General Physics II Lab*	3	CDA 3201 Logic Design	3	EGN 3443 Probability & Statistics for Eng. (TGEI)
3	**COP 3514 Program Design*	3	CDA 3201L Logic Lab		
3	**CDA 3103 Computer Organization*	3	COP 4530 Data Structures		
!	**Apply for Progression to Upper Division**	3	St. Gen. Ed. Core Humanities Elective		
14	*Total Credits*	*16*	*Total Credits*	*9*	*Total Credits*

Third Year

Fall Semester		Spring Semester		Summer
3	CDA 4205 Computer Architecture	3	CDA 4203 Computer System Design	Recommended
1	CDA 4205L Computer Architecture Lab	1	CDA 4203L Computer Syst Design Lab	**Internship/Co-op**
3	EEE 3394 Electronic Materials	3	COT 4400 Analysis of Algorithms	Company/employer name and position
3	EGN 3373 Electrical Systems I	3	CSE Hardware Elective	(see advisor for credit options – CIS 4940)
3	EGN 3615 Engineering Economics (TGED)	3	General Elective	
2	EGN 4450 Intro to Linear Systems			
15	*Total Credits*	*13*	*Total Credits*	

Fourth Year

Fall Semester		Spring Semester	
3	CDA 4213 CMOS-VLSI Design	3	CIS 4910 Comp. Sci. & Eng. Project (TGEH)
1	CDA 4213L CMOS-VLSI Design Lab	3	CIS 4250 Ethical Issues & Professional Conduct (TGEE)
3	COP 4600 Operating Systems	3	CSE Hardware Elective
3	ENC 3246 Communication for Engineers	3	CSE Elective
3	CSE Elective		
!	Apply for Graduation		
13	*Total Credits*	*12*	*Total Credits*

Notes: Courses in bold must be completed with a competitive GPA, see overleaf for details.

R - Required course * - Requires a minimum grade of a "B", "B-" is insufficient.

** Students must meet the Civic Literacy requirement with credit for AMH 2020, POS 2041 **and** passing the Civic Literacy test.

TGEC = Gen Ed Creative Thinking, TGEI = Gen Ed Information & Data Literacy, TGED = Gen Ed Human & Cultural Diversity

TGEE = Gen Ed Ethical Reasoning & Civic Engagement, TGEH = Gen Ed High Impact Practice Capstone

This semester plan is provided as a guide; the catalog is the definitive source of requirements. 8/3/2022

Computer Engineering Requirements for Progression to Upper Division

1. Completion of the following courses with a minimum grade of C and a cumulative **3.50 GPA*** (based on best attempt) for the following courses:

   _____ **Calculus I or Engineering Calculus I (MAC 2311 or MAC 2281)**
   _____ **Calculus II or Engineering Calculus II (MAC 2312 or MAC 2282)**
   _____ **Physics I with lab (PHY 2048 and 2048L)**

   * Minimum GPA for entry into the department for fall 2022 is 3.50. This GPA is subject to change in future years; check the department website.
2. Completion of COP 2510 Programming Concepts with a minimum grade of B ("B-" is insufficient)
3. A minimum Overall GPA of 2.00
4. A minimum USF GPA of 2.00

Continuation and Graduation Requirements

Reference Catalog: https://catalog.usf.edu/preview_program.php?catoid=17&poid=7237

- Requires completion of CDA 3103 and COP 3514 with a minimum grade of "B" (a "B-" is insufficient) in each course based on best attempt**.**
- Unless otherwise stated, the minimum acceptable grade in all BSCP required math, science, and engineering courses is a C or higher (C- is insufficient). The minimum acceptable grade in specialization courses is a C-, except as stated in the program admission (progression to the upper division) and continuation requirements.
- Students must have and maintain a minimum **2.0 Semester GPA**, 2.0 Math and Science GPA, 2.0 Engineering GPA, 2.0 Specialization GPA, 2.0 USF GPA, and 2.0 Overall GPA.
- All required math, science, engineering and specialization courses must be successfully completed in no more than **two** registered attempts. Grades of W, IF, U, and R are considered attempts.

Course Equivalencies

Courses at USF	**Courses at a Florida State Institution**
MAC 2281 Engineering Calculus I or MAC 2311 Calculus I	MAC X311 **or** MAC X281
MAC 2282 Engineering Calculus II or MAC 2312 Calculus II	MAC X312 **or** MAC X282
MAC 2283 Engineering Calculus III or MAC 2313 Calculus III	MAC X313 **or** MAC X283
MAP 2302 Differential Equations or EGN 3433 Modeling Analysis of Eng Systems	MAP X302 **or** MAP X305
CHM 2045/CHM 2045L General Chemistry I with Lab Or CHS 2440/2440L General Chemistry for Engineers with lab	CHM X045/X045L or CHM X045C or CHM X041/X045L or CHS X440/X440L
PHY 2048/2048L General Physics I with PHY 2048L	PHY X048/X048L or PHY X048C or PHY X043/X048L
PHY 2049/2049L General Physics II or PHY 2061 Enriched Physics II with PHY 2049L	PHY X049/X049L or PHY X049C or PHY X044/X049L
COP 2510 Programming Concepts	COP XXXX (Intro Prog C, C++, Java, or equivalent)