Computer Science B.S.C.S.

120 credits, 2023/2024 Catalog

First Year

Fall Semester		Spring Semester	
4	***MAC 2281 or MAC 2311 Calculus I***	**4**	***MAC 2282 or MAC 2312 Calculus II***
3	ENC 1101 Composition I	**3**	***PHY 2048 General Physics I***
R	EGN 3000 Foundations of Engineering	**1**	***PHY 2048L General Physics I Lab***
3	EGN 3000L Foundations of Eng. Lab (TGEC)	3	ENC 1102 Composition II
3	Gen. Ed. Natural Science Elective	3	*COP 2510 Programming Concepts
13	*Total Credits*	14	*Total Credits*

Apply for Progression to Upper Division end of Spring semester

Second Year

Fall Semester		Spring Semester		Summer	
3	COT 3100 Intro Discrete Structures	3	COP 4530 Data Structures	3	** St. Gen. Ed. Core Social Science Elective
3	PHY 2049 General Physics II	3	CDA 3201 Logic Design	3	Gen. Ed. Natural Science Elective
1	PHY 2049L General Physics II Lab	1	CDA 3201L Logic Design Lab		
3	*COP 3514 Program Design	3	St. Gen. Ed. Core Humanities Elective	3	EGN 3443 Probability & Statistics for Eng (TGEI)
3	*CDA 3103 Computer Organization	4	**General Elective		
13	*Total Credits*	*14*	*Total Credits*	*9*	*Total Credits*

Third Year

Fall Semester		Spring Semester		Summer	
3	CDA 4205 Computer Architecture	3	COT 4400 Analysis of Algorithms		Recommended
1	CDA 4205L Computer Architecture Lab	3	CSE Elective		**Internship/Co-op**
3	CSE Elective	3	CSE Software Elective		Company/employer
3	CSE Software Elective	3	ENC 3246 Comm. for Engineers		name and position
2	EGN 4450 Linear Systems	3	** General Elective		(see advisor for credit
3	Gen. Ed. Human & Cultural Diversity Elective				Options – CIS 4940)
15	*Total Credits*	*15*	*Total Credits*		

Fourth Year

Fall Semester		Spring Semester	
3	COP 4600 Operating Systems	3	CIS 4250 Ethical Issues & Professional Conduct (TGEE)
3	CNT 4419 Secure Coding		
3	CSE Theory Elective	3	CEN 4020 Software Engineering (TGEH)
3	CSE Elective	3	CSE Elective
3	** General Elective	3	** General Elective
!	Apply for Graduation		
15	*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.   6/23/2023

Computer Science 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 2023 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=19&poid=8763

- 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 BSCS 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
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)