Computer Engineering

128 credits, 2018/2019 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***	***ENC 1102 Composition 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***
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	COP 4530 Data Struct.
3	***PHY 2049 General Physics II***			3	CDA 3201 Logic Design
1	***PHY 2049L General Physics II Lab***	*3*	**CDA 3103 Computer Organization*	1	CDA 3201L Logic Lab
3	**COP 3514 Program Design*	3	COT 3100 Intro Discrete Structures	2	EGN 4450 Linear Syst.
3	** St. Gen. Ed. Core Social Science Elective	3	COP 3331 Object Oriented Design		
		3	St. Gen. Ed. Core Humanities Elective		
14	*Total Credits*	*15*	*Total Credits*	*9*	*Total Credits*

Third Year

Fall Semester		Spring Semester		Internship/Co-op
3	CDA 4205 Computer Architecture	3	CDA 4203 Computer System Design	List
3	EEE 3394 Electronic Materials	1	CDA 4203L Computer Syst Design Lab	Company/employer
3	EGN 3373 Electrical Systems I	3	EGN 3615 Engineering Economics (TGED)	name and position
3	COT 4400 Analysis of Algorithms	3	COP 4600 Operating Systems	
3	CSE Hardware Elective	3	CSE Hardware Elective	
		3	Gen. Ed. Natural Science Elective	
15	*Total Credits*	*16*	*Total Credits*	

Fourth Year

Fall Semester		Spring Semester	
3	CDA 4213 CMOS-VLSI Design	3	CIS 4910 Senior Project (HIP)
1	CDA 4213L CMOS-VLSI Design Lab	3	CIS 4250 Ethical Issues & Professional Conduct (ERCE)
3	EGN 3443 Probability and Statistics for Eng. (TGEI)		
3	ENC 3246 Communication for Engineers	3	CSE Elective
3	CSE Elective	3	** General Elective
3	General Elective	3	** General Elective
16	*Total Credits*	15	*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"

** Students must meet the Civic Literacy requirement with credit for AMH 2020, POS 2041 or passing an exam TBD.

TGE = Tampa General Education; C = Creative Thinking, I = Information & Data Literacy, D = Human & Cultural Diversity

ERCE - Proposing as Tampa General Education Ethical Reasoning & Civic Engagement

HIP – Proposing for High Impact Practice Capstone

This semester plan is provided as a guide; the catalog is the definitive source of requirements. 7/30/2018

Entrance Requirements: Department of Computer Science & Engineering

- Admission requires a minimum grade of "B" in COP 2510 Programming Concepts (a "B-" is insufficient), ***and***
- Completion of the following courses with a minimum grade of C and an cumulative **3.1 GPA*** (based on best attempt) for the following courses:

  _____ **Calculus I or Engineering Calculus I (MAC 2311 or MAC 2281)**
  _____ **Composition I & II (ENC 1101 and ENC 1102)**
  _____ **Calculus II or Engineering Calculus II (MAC 2312 or MAC 2282)**
  _____ **Physics I (PHY 2048 and 2048L)**
  _____ **Physics II (PHY 2049 and 2049L)**

  * Minimum GPA for entry into the department for fall 2018 is 3.1. This GPA is subject to change in future years; check the department website.

Continuation in the Major

- 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 and continuation requirements.*
- *A minimum GPA of 2.00 in the following categories must be maintained at all times: Overall, USF, Math/Science, Engineering Courses and Specialization Courses.*
- *All required math, science, engineering, and major/specialization courses must be successfully completed in no more than **two** registered attempts. Grades of W, I, IF, U, R, and M are considered attempts. Registration that is canceled for non-payment is also considered an attempt.*

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