University of South Florida
College of Engineering

Computer Engineering

128 credits, 2012/2013 Catalog

First Year

Fall Semester		Spring Semester	
3	**ENC 1101 Composition I**	***3***	***ENC 1102 Composition II***
4	***MAC 2281 Engineering Calculus I***	4	***MAC 2282 Engineering Calculus II***
3	CHS 2440 Chemistry for Engineers	3	***PHY 2048 General Physics I***
1	CHS 2440L Chemistry for Engineers Lab	1	***PHY 2048L General Physics I Lab***
R	EGN 3000 Foundations of Engineering	3	**COP 2510 Programming Concepts*
1	EGN 3000 LAB Foundations of Engineering		
3	FKL Social & Behavioral Science Elective		
15	*Total Credits*	14	*Total Credits*

Second Year

Fall Semester		Spring Semester		Summer School	
4	***MAC 2283 Engineering Calculus III***	3	MAP 2302 Differential Eq. or EGN 3433	3	CDA 3201 Logic Design
3	***PHY 2049 General Physics II***		Modeling & Analysis of Engr Systems	1	CDA 3201L Logic Lab
1	***PHY 2049L General Physics II Lab***	*3*	**CDA 3103 Computer Organization*	3	COP 4530 Data Structures
3	**COP 3514 Program Design*	3	COT 3100 Intro Discrete Structures	2	EGN 4450 Introduction to
3	FKL Social & Behavioral Science Elective	3	COP 3331 Object Oriented Design		Linear Systems
		3	FKL 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 4213 Computer System Design	List Company/employer
3	EEE 3394 Electronic Materials	1	CDA 4213L Computer Syst Design Lab	name and position
3	EGN 3373 Electrical Systems I	3	EGN 3615 Engr Economics	
3	COT 4400 Analysis of Algorithms	3	COP 4600 Operating Systems	
3	CSE Elective	3	CSE Hardware Elective	
		3	Natural Science Elective	
15	*Total Credits*	*16*	*Total Credits*	

Fourth Year

Fall Semester		Spring Semester	
3	CDA 4213 CMOS-VLSI Design	2	CIS 4910 Senior Project
1	CDA 4213L CMOS-VLSI Design Lab	3	CIS 4250 Ethical Issues & Professional Conduct (CD)
3	EGN 3443 Probability and Statistics for Engineers	3	FKL Human/Diversity & Global Elective
3	ENC 3246 Communication for Engineers (6A WI)	3	FKL Humanities Elective
7	FKL Fine Arts Elective	3	CSE Hardware Elective
3	CSE Elective		
16	*Total Credits*	14	*Total Credits*

Notes:

Courses in bold must be completed with an overall "3.00" GPA (see overleaf)

* Requires a minimum grade of a "B"

R - Required course

Entrance Requirements into the Department of Computer Science and Engineering

- **Completion of the following courses with an overall 3.00 GPA (based on best attempt in these courses)** and a minimum grade of "C" in each course (grades of "C-" are insufficient).
  - ____ **Calculus I or Engineering Calculus I** (MAC 2311 or MAC 2281)
  - ____ **Composition I & II (ENC 1101, 1102)**
  - ____ **Calculus II or Engineering Calculus II** (MAC 2312 or MAC 2282)
  - ____ **Physics I (PHY 2048, 2048L)**
  - ____ **Physics II (PHY 2049, 2049L)**

Continuation in the Major

- Requires a minimum of a "B" in COP 2510.
- Requires completion of CDA 3103 and COP 3514 with a minimum grade of "B" in each course based on best attempts (a "**B-**" is insufficient).
- *With the exception of the courses referred to in the admissions statement above, C- is the minimum acceptable grade in each math, science and engineering course. 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 math, science and engineering courses must be successfully completed in no more than three 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.*

Gordon Rule (6A) is fully met through the mathematics courses above, ENC 1101, ENC 1102, ENC 3246 and CIS4250. Gordon Rule communication requirement is met for any student entering USF with 60 or more hours.

Exit Requirements: Exit requirements must be taken at USF. The Capstone Design (CD) and Writing Intensive (WI) exit requirements are met through ENC 3246 and CIS 4250.

Course sequence: Courses in red should be taken in sequence as early as possible in preparation for your major. Foundation of Knowledge & Learning (FKL) courses may be taken in any order.