

Computer Engineering Curriculum

FIRST TERM

Credit	Class
4	MATH 0221 Calculus I
3	CHEM 0150 (prev. Chem 0111) General Chem Eng 1
4	PHYS 0150 Phys for Eng 1
3	ENGR 0017 Intro to Eng Analysis
3	ENGCMP 0005 Comp. 1 (or 650 or better on reading/writing portion of SAT)
0	ENGR 0081 Freshman Seminar 1
17	TOTAL

SECOND TERM

Credit	Class	Pre/Co Req
4	MATH 0231 Calculus II	MATH 0221 (C or better)
3	CHEM 0151 with Lab (prev. Chem 0115) Gen. Chem Eng 2	CHEM 0150
4	PHYS 0152 Phys for Eng 2	PHYS 0150, MATH 0231
3	ENGR 0018 Intro Eng Computing	ENGR 0017, MATH 0221
3	WOK (S&C, GH&C, A&CE)	
0	ENGR 0082 Fresh. Seminar 2	
17	TOTAL	

THIRD TERM

Credit	Class	Pre/Co Req
4	MATH 241 Calculus III	MATH 0231 (C or better)
3	EE 0132 Digital Logic	PHYS 0152, MATH 0231, EE 0500
1	EE 0500 D & Circuits Lab	MATH 0231, EE 0031, EE 0132
3	EE 0031 Linear Circuits 1	PHYS 0152, MATH 0231, EE 0500 and EE 0132, or JME-BSE plan
3	EE 0445 Programming	MATH 0221, ENGR 0018
3	Communication Skills Elective	
0	COE 1885 Dept Seminar	
17	TOTAL	

FOURTH TERM

Credit	Class	Pre/Co Req
3	MATH 1271 Differential Equations	MATH 0241
3	EE 0142 Computer Organization	EE 0132, EE 0501
2	EE 0501 Digital & Electronics Lab	EE 0031, EE 0132, EE 0142, EE 0257
3	EE 0257 A/design of Electronic circ	EE 0031, EE 0500, EE 0501
4	ENGR 0020 Prob & Stats	MATH 0231 (C or better)
3	CS 0417 Intermediate. Prog. In JAVA	EE 0445
0	COE 1885 Dept Seminar	
18	TOTAL	

FIFTH TERM

Credit	Class	Pre/Co Req
3	WOK (S&C, GH&C, A&CE)	
3	MATH 1181 Linear Algebra	MATH 0231
3	COE Technical Elective	
3	EE 1552 Signals & Systems Analysis	EE 0031, MATH 0231
3	CS 0455 Algo & Info. Structures	CS 0417, CS 0045
1	CS 0045 Algo & Info. Structures Lab	CS 0417, CS 0455
0	COE 1885 Dept Seminar	
16	TOTAL	

SIXTH TERM

Credit	Class	Pre/Co Req
3	WOK (S&C, GH&C, A&CE)	
3	CS 0457 Adv. Programming Concepts	CS 0455, CS 0045, CS 0047
1	CS 0047 Adv. Programming Concepts Lab	CS 0455, CS 0045, CS 0457
3	EE 1563 Signal Processing Th & Practice	EE 1552
3	CS 0458 Data Structures & Files	CS 0455, CS 0045, CS 0048
1	CS 0048 Data Structures & Files Lab	CS 0455, CS 0045, CS 0458
4	EE 1541 Computer Architecture & Lab	EE 0445, EE 0142, EE 0257
0	COE 1885 Dept Seminar	
18	TOTAL	

SEVENTH TERM

Credit	Class	Pre/Co Req
3	CS 1735 Software Design Methodology	CS 0048, CS 0458
4	COE Advance Elective	
2	COE 1195 Engr Practice & Prof Dev.	Senior Status, Department permission EE 1541
3	COE 1750 Intro to Systems Software	EE 0445, EE 1541
3	WOK (S&C, GH&C, A&CE)	
0	COE 1885 Dept Seminar	
16	TOTAL	

EIGHTH TERM

Credit	Class	Pre/Co Req
3	WOK (S&C, GH&C, A&CE)	
4	COE 1151 Computer Networks & Lab	EE 1552, EE 1541
4	COE 1504 Advanced Digital Systems & Lab	EE 1541
2	COE 1199 Senior Design: Elective	COE 1195
0	COE 1885 Dept Seminar	
12	TOTAL	

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COE TECHNICAL ELECTIVES

Credit	Course	Pre/Co Req	Typical Term
2	EE 1201 Elec Measurements Lab	EE 0031, EE 0500	Fall
3	EE 1247 Semi Device Theory/App	EE 0257	Fall
4	EE 1771 Electric Machines & Lab	EE 0031, <i>EE 1071</i>	Spring
3	CS 1783 Artificial Intelligence	CS 0048, CS 0458	Fall
3	CS 1791 Compiler Design	CS 0048, CS 0458	Spring
3	CS 1792 Comp Operating Systems	CS 0048, CS 0458	Fall

COE ADVANCE ELECTIVES

Credit	Course	Pre/Co Req	Typical Term
4	EE 1673/EE 1073 Control Systems & Lab	MATH 0241, EE 1552 <i>MATH 1271, EE 1073</i>	Fall
4	EE 1772 Communication Systems & Lab	EE 1552	Fall
4	EE 1259 Electromagnetics & Lab	EE 0031, EE 0500, <i>EE 1059</i>	Fall
4	EE 1769 Power Systems I & Lab	EE 1771, EE 1071	Fall

Notes:

- 1) *Italic bold lettering means co-requisites*
- 2) *Students needs a minimum of 128 credits to graduate.*
- 3) Students who do not need to take ENGCOMP 0005 (SAT-V greater than 650) will need to take another 3 credits to meet this requirement.