

**BACHELOR OF SCIENCE IN COMPUTER ENGINEERING
SUGGESTED FIVE-YEAR COURSE SEQUENCE 2009-2010**

FIRST YEAR

<i>First Semester</i>				<i>Second Semester</i>			
ENGL	101	Intro to College Writing	3	COMM	101	Public Speaking	2
MATH	143 & 144	Pre-Calc Algebra/Analytic Geometry and Analytic Trig	4 +	ECE	101 (S)	Foundations of Electrical and Computer Engineering (ECE)	2
CS	120	Computer Science I	4	MATH	170	Analytic Geometry/Calculus I	4
CORE	103-118	Core Discovery	4	ENGL	102	College Writing and Rhetoric	3
			8	CORE	153-168	Core Discovery	3
							14

SECOND YEAR

<i>First Semester</i>				<i>Second Semester</i>			
CS	150	Computer Org/Architecture	3	CS	121	Computer Science II	4
MATH	175	Analytic Geometry & Calculus II	4	ECE	210	Circuits I	3
MATH	176	Discrete Mathematics	3	ECE	211	Circuits I Lab	1
PHYS	211	Engineering Physics I & Lab	4	ECE	292 (S)	Sophomore Seminar	0
			14	MATH	310	Differential Equations	3
				PHYS	212	Engineering Physics II & Lab	4
							15

THIRD YEAR

<i>First Semester</i>				<i>Second Semester</i>			
ECE	212	Circuits II	3	ECE	310	Fund of Electronics	3
ECE	213	Circuits II Lab	1	ECE	311	Fund of Electronics Lab	1
ECE	240	Digital Logic	3	CS	210	Programming Languages	3
ECE	241	Digital Logic Lab	1	SE		(Science Elective)	4
MATH	330	Linear Algebra	3	HS/INT		(Economics Elective)	3
STAT	301	Probability & Statistics	3				14
			14				

FOURTH YEAR

<i>First Semester</i>				<i>Second Semester</i>			
CS	270	System Software	3	ECE	350	Signals & Systems	3
ECE	340	Microcontrollers	3	ECE	351	Signals & Sys Lab	1
ECE	341	Microcontrollers Lab	1	ECE	440 (S)	Digital Systems Engr	3
ENGL	317	Technical Writing	3	CS	240	Computer Operating Systems	3
HS		(AMST 301 or PHIL 103)	3	HS/INT		(International Elective)	3
			13				13

FIFTH YEAR

<i>First Semester</i>				<i>Second Semester</i>			
ECE	482	Comp Engr Senior Design I	3	ECE	483	Comp Engr Senior Design II	3
ECE	491 (F)	Senior Seminar	0	TE		(Technical Elective)	3
HS		(Cluster Elective)	3	TE		(Technical Elective)	3
TE		(Technical Elective)	3	TE		(Technical Elective)	3
TE		(Technical Elective)	3				12
			12				

TOTAL CREDITS = 129

Specific grades required for continuation; see catalog.

- + - Math 143 & 144 may be required prior to taking 170 depending on standardized test or math placement test scores. However, Math 143 & 144 are not part of the electrical engineering curriculum. The entire math sequence may be moved up one semester if Math 143 or 144 is not taken.
- HS - Humanities/Social Science Electives: must include AMST 301 or PHIL 103 and ECON 201, 202, or 272.
- INT- One approved international course: the list is found in the UI catalog.
- TE --Technical Elective: fifteen credits of upper division ECE or CS courses
- SE -- Science Elective: one of the following CHEM 111, GEOL 111, MMBB 154 and 155, or PHYS 213.
- CORE -- Students are encouraged to complete a two-semester Core Discovery sequence. (E.g. CORE 113 and 163).

Students majoring in Computer Engineering may accumulate no more than 14 credits of D's and F's in mathematics, science, or engineering courses that are used to satisfy graduation requirements, including repeats and transfer courses. **See catalog for complete degree requirements and additional information.**

Cooperative educational experiences are available through the Cooperative Education Office to give the student industrial experience in their chosen field. Academic credit may be earned but may not be used as part of the program of study.

Courses offered only during a semester are identified above with a letter in parentheses by the course number: "S" refers to spring & "F" to fall.