BACHELOR OF SCIENCE IN COMPUTER ENGINEERING
SUGGESTED FOUR-YEAR COURSE SEQUENCE 2012-2013

FIRST YEAR

First Semester				***Second Semester***			
CS	120	Computer Science I	4 *+	CS	121	Computer Science II	4+
ENGL	102	College Writing/Rhetoric	3	ECE	101 **(S)**	Foundations of Electrical and Computer Engineering (ECE)	2*
ISEM	101	Integrated Seminar	3				
MATH	170	Analytic Geometry & Calculus I	4 *	MATH	175	Analytic Geom & Calculus II	4*
				MATH	176	Discrete Mathematics	3*
				PHYS	211	Engineering Physics & Lab	4*
			14				17

SECOND YEAR

First Semester				***Second Semester***			
ECE	210	Circuits I	3 *	CS	150	Comp Org & Architecture	3+
ECE	211	Circuits I Lab	1 *	ECE	212	Circuits II	3*
MATH	310	Ordinary Differential Equations	3 *	ECE	213	Circuits II Lab	1*
PHYS	212	Engineering Physics II & Lab	4 *	ECE	240	Digital Logic	3*
COMM	101	Fund of Public Speaking	2	ECE	241	Digital Logic Lab	1*
HS		(H/S Elective)	3	ECE	292 **(S)**	Sophomore Seminar	0**
				MATH	330	Linear Algebra	3
				HS		(Economics Elective)	3
			16				17

THIRD YEAR

First Semester				***Second Semester***			
CS	270	System Software	3 +	CS	240	Computer Operating Systems	3+
CS	210	Programming Languages	3 +	ECE	350	Signals & Systems	3
ECE	310	Fundamentals of Electronics	3	ECE	351	Signals & Sys Lab	1
ECE	311	Fund of Electronics Lab	1	ECE	440 **(S)**	Digital Systems Engineering	3
ECE	340	Microcontrollers	3	ENGL	317	Technical Writing	3
ECE	341	Microcontrollers Lab	1	SE		(Science Elective)	4
STAT	301	Probability & Statistics	3				
			17				17

FOURTH YEAR

First Semester				***Second Semester***			
ECE	482	Comp Engr Senior Design I	3	ECE	483	Comp Engr Senior Design II	3
ECE	491 **(F)**	Senior Seminar	0	HS		(H/S Elective)	3
HS		(AMST 301 or PHIL 103)	3	TE		(Technical Elective)	3
HS/INT		(International Elective)	3	TE		(Technical Elective)	3
TE		(Technical Elective)	3	TE		(Technical Elective)	3
TE		(Technical Elective)	3				
			15				15

TOTAL CREDITS = 128 ***Specific grades required for continuation; see catalog.***

* ***A grade of C or better is required in these courses before upper division electrical and computer engineering (ECE) courses may be taken.***
****** ***A passing grade in ECE 292 is required before upper division electrical and computer engineering (ECE) courses may be taken.***
+ ***A grade of C or better is required in these courses before upper division computer science (CS) courses may be 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.

The total credits of ISEM, humanities, social science, international, American diversity, and senior experience must be at least 18 credits and must satisfy the requirement J-3-d found in the UI catalog.

Students majoring in computer engineering who accumulate grades of D's and F's in mathematics, science, or engineering courses that are used to satisfy graduation requirements, including repeats and transfer courses will be required to undergo special advising as per department bylaws Before registration is permitted in 200-level CS courses, students majoring in computer engineering must earn a grade of C or better in CS 120, 121 and 150 and Math 176. ***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 one semester are identified above with a letter in parentheses by the course number: "S" refers to spring only courses and "F" to fall only courses.