ELECTRICAL ENGINEERING 2011-2012

FRESHMAN YEAR

First Semester	Credits	Second Semester	Credits
MATH 1131Q[1] – Calculus I	4	MATH 1132Q – Calculus II	4
CHEM 1127Q – Gen. Chem. I	4	PHYS 1501Q – Engineering Physics I	4
CSE 1010 – Intro. to Computing for Engr.	3	ECE 1110 – Microcontroller Appl. Engr. or CSE 1102 – Object Oriented Design or ENGR 1166 – Foundations of Engineering	3
ENGL 1010 or 1011 – Writing	4	Arts and Humanities course	3
ENGR 1000 – Orientation to Engr.	1	Elective	3
	16		17

SOPHOMORE YEAR

First Semester	Credits	Second Semester	Credits
MATH 2110Q – Multivariable Calculus	4	MATH 2410Q – Differential Equations	3
PHYS 1502Q – Engineering Physics II	4	ECE 2001W – Electric Circuits	4
CSE 2300W – Logic Design	4	STAT 3345Q – Probability Models Engineers	3
Social Sciences course	3	PHIL 1104 – Philosophy and Social Ethics	3
	15	Social Sciences course	3
			16

JUNIOR YEAR

First Semester	Credits	Second Semester	Credits
ECE 3201 – Electronic Devices & Circuits	4	ECE 3211 – Power Electronics	2
ECE 3101 – Signals and Systems	3	ECE 3111 – Systems Analysis	3
ECE 3001 – EM Fields and Waves	3	ECE 4211 – Micro/optoelectronic Devices	3
MATH 2210Q – Linear Algebra	3	ECE 4201 – Electronic Circuits & Appl.	3
Diversity and Multiculturalism course[2]	3	ECE 4111 – Communication Systems	3
	16		14

SENIOR YEAR

First Semester	Credits	Second Semester	Credits
ECE 4901 – E&CE Design I	2	ECE 4902 – E&CE Design II	3
Professional Requirement[3]	3	Professional Requirement[3]	3
Professional Requirement[3]	3	Professional Requirement[3]	3
Design Laboratory[4]	3	Design Laboratory[4]	3
Diversity and Multiculturalism course[2]	3	Elective	3
Elective	3		
	17		15

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[1] The three-semester sequence of MATH 1125Q-1126Q followed by Math 1132Q may be taken instead to satisfy this requirement. Only one credit of MATH 1125Q can be used toward the required 126 credits for the Engineering degree.

[2] The courses from content areas one (Arts and Humanities) and two (Social Sciences) must be from four different departments. One course from either content area one (Arts and Humanities) or content area two (Social Sciences) may also be used to fulfill one of the requirements from content area four (Diversity and Multiculturalism). One course from content area four must be an international course.

[3] Professional requirements are chosen from 3000 or 4000-level Math, Science, and Engineering courses. Two must be ECE courses and one must be a non-ECE course.

[4] Choose two from ECE 3225, ECE 3411, ECE 3421, ECE 4079, ECE 4113, ECE 4122, ECE 4132, ECE 4225, ECE 4242, ECE 4244, ECE 4401, and ECE 4402.