ENGINEERING PHYSICS (EE) 2009-2010

FRESHMAN YEAR

First Semester	Credits	Second Semester	Credits
MATH 1131Q- Calculus I (115Q)	4	MATH 1132Q-Calculus II (116Q)	4
CHEM 1127Q-Gen. Chem. I (127Q)	4	CHEM 1128Q – General Chemistry II (128Q)	4
PHYS 1501Q -Physics for Engin. I (151Q)	4	PHYS 1502Q -Physics for Engin. II (152Q)	4
ENGL 1010 or ENGL 1011-Acad. Writing (110/111)	4	Arts and Humanities Course[2]	3
ENGR 1000-Orientation to Engr. (100)	1	CSE 1010 – Intro. To Computing for Engr.	3
	17		18

SOPHOMORE YEAR

First Semester	Credits	Second Semester	Credits
MATH 2110Q-Multivariable Calc.(210Q)	4	MATH 2410Q-Differential Equations (211Q)	3
PHYS 3101Q – Mechanics I (242Q)	3	ECE 2001W- Electric Circuits (210W)	4
PHYS 2501WC – Lab. in Electricity, Magnetism, & Mechanics (258WC)	3	PHYS 2300Q – Quantum Physics (230Q)	3
CSE 2300W - Logic Design (210W)	4	PHIL 1104 Phil. and Social Ethics (104)	3
		Social Sciences Course[2]	3
	14		16

JUNIOR YEAR

First Semester	Credits	Second Semester	Credits
ECE 3201- Elect. Devices & Circuits (212)	4	ECE 3111- Systems Analysis (232)	3
ECE 3101-Signals and Systems (202)	3	PHYS 3202Q – Electricity and Magnetism II (257Q)	3
PHYS 3201Q- Elect. & Magnetism I (255Q)	3	STAT 3345Q – Prob. Mod. For Engr. (224Q)	3
MATH 2210Q-Linear Algebra (227Q)	3	Social Sciences course[2]	3
MATH 3410Q – Diff. Eqns. Appl. (272Q)	3	Diversity and Multiculturalism course[2]	3
	16		15

SENIOR YEAR

First Semester	Credits	Second Semester	Credits
ECE 4901-Comp. & Elec. Engr. Design I (290)	2	ECE 4902-Comp & Elec. Engr. Design II (291)	3
ECE 4111 – Communication Systems (241)	3	ECE 4211-Micro/Optoelectronic Device (245)	3
ECE 3223 – Optical Engineering (223)	3	ECE 3225 – Optical Engineering Lab (225)	3
PHYS 3401Q – Quantum Mech.[3] (261Q)	3	Diversity and Multiculturalism course[2]	3
PHYS 3300Q – Stat. /Therm. Phys. (271Q)	3	Elective	3
Elective	3		
	17		15

[1] The three-semester sequence of MATH 1125Q-1126Q followed by Math 1132Q (116Q) may be taken instead to satisfy this requirement. Only one credit of MATH 1125Q can be used toward the required 128 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] Quantum mechanics for Engineers offered by the ECE department can be substituted.