

## **ELECTRICAL ENGINEERING 2005-2006**

### **FRESHMAN YEAR**

<b>First Semester</b>	<b>Credits</b>	<b>Second Semester</b>	<b>Credits</b>
MATH 115Q <sup>1</sup> - Calculus I	4	MATH 116Q-Calculus II	4
CHEM 127Q-Gen. Chem. I	4	PHYS 151Q-Engineering Phys. I	4
CSE 123C-Intro. to Computing	2	ECE 110 - Microcontroller Appl. In Engr. or CSE 133-Object Oriented Design or ENGR 166 – Foundations of Engr.	3
ENGL 110 or ENGL 111-Acad. Writing	4	Arts and Humanities course	3
ENGR 100-Orientation to Engr.	<u>1</u>	ECE 101-Computer Tools	<u>1</u>
	15		15

### **SOPHOMORE YEAR**

<b>First Semester</b>	<b>Credits</b>	<b>Second Semester</b>	<b>Credits</b>
MATH 210Q-Multivariable Calculus	4	MATH 211Q-Differential Equations	3
PHYS 152Q-Engineering Phys II	4	ECE 210W- Electric Circuits	4
CSE 210W - Logic Design	4	STAT 224Q – Probability Models for Engr.	3
Social Sciences course	<u>3</u>	PHIL 104 Phil. and Social Ethics	3
	15	Social Sciences course	<u>3</u>
			16

### **JUNIOR YEAR**

<b>First Semester</b>	<b>Credits</b>	<b>Second Semester</b>	<b>Credits</b>
ECE 212- Electronic Devices and Circuits	4	ECE 214- Power Electronics	2
ECE 202-Signals and Systems	3	ECE 232- Systems Analysis	3
ECE 205 – Electromag. Fields and Waves	3	ECE 245-Micro/optoelectronic Devices	3
MATH 227Q-Linear Algebra	3	ECE 240- Electronic Circuits And Appl.	3
Diversity and Multiculturalism course <sup>2</sup>	<u>3</u>	Diversity and Multiculturalism course <sup>2</sup>	3
	16	Elective	<u>3</u>
			17

### **SENIOR YEAR**

<b>First Semester</b>	<b>Credits</b>	<b>Second Semester</b>	<b>Credits</b>
ECE 290-Comp. & Elec. Engr. Design I	2	ECE 291-Comp and Elec. Engr. Design II	3
ECE 241 – Communication Systems	3	Professional Requirement <sup>3</sup>	3
Professional Requirement <sup>3</sup>	3	Professional Requirement <sup>3</sup>	3
Professional Requirement <sup>3</sup>	3	Design Laboratory <sup>4</sup>	3
Design Laboratory <sup>4</sup>	3	Elective	<u>3</u>
Elective	<u>3</u>		15
	17		

<sup>1</sup>The three-semester sequence of MATH 112Q-113Q followed by Math 116Q may be taken instead to satisfy this requirement. MATH 112Q can not be used toward the required 126 credits for the Engineering degree

<sup>2</sup>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.

<sup>3</sup>Professional requirements are chosen from 200-level Math, Science, and Engineering courses. Two must be ECE courses and one must be a non-ECE course.

<sup>4</sup>Choose two from ECE 229, ECE 249, ECE 265, ECE 266, ECE 267, ECE 268, and ECE 292.