

## **ENGINEERING PHYSICS (EE) 2005-2006**

### **FRESHMAN YEAR**

<b>First Semester</b>	<b>Credits</b>	<b>Second Semester</b>	<b>Credits</b>
MATH 115Q- Calculus I	4	MATH 116Q-Calculus II	4
CHEM 127Q-Gen. Chem. I	4	CHEM 128Q – General Chemistry II	4
PHYS 151Q – Physics for Engineers I	4	PHYS 152Q – Physics for Engineers II	4
ENGL 110 or ENGL 111-Acad. Writing	4	Arts and Humanities Course <sup>2</sup>	3
ENGR 100-Orientation to Engr.	<u>1</u>	CSE 123C – Intro. To Computing	<u>2</u>
	17		17

### **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 142Q – Mechanics I	3	ECE 210W- Electric Circuits	4
PHYS 258Z – Lab. in Electricity, Magnetism, and Mechanics	3	PHYS 230Q – Quantum Physics	3
CSE 210W - Logic Design	<u>4</u>	PHIL 104 Phil. and Social Ethics	3
	14	Social Sciences Course <sup>2</sup>	<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 232- Systems Analysis	3
ECE 202-Signals and Systems	3	PHYS 257Q – Electricity and Magnetism II	3
PHYS 255Q – Electricity & Magnetism I	3	STAT 224Q – Prob. Mod. For Engr.	3
MATH 227Q-Linear Algebra	3	Social Sciences course <sup>2</sup>	3
MATH 272Q – Diff. Eqns. Appl.	<u>3</u>	Diversity and Multiculturalism course <sup>2</sup>	<u>3</u>
	16		15

### **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	ECE 245 – Micro/Optoelectronic Devices	3
ECE 228 – Fiber Optics	3	ECE 229 – Fiber Optics laboratory	3
PHYS 261Q – Quantum Mechanics <sup>3</sup>	3	Diversity and Multiculturalism course <sup>2</sup>	3
PHYS 271Q – Stat. & Therm. Phys.	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>Quantum mechanics for Engineers offered by the ECE department can be substituted.