

ENGINEERING SCIENCE, DESIGN AND EXPERIMENTATION UNITS

COURSE	TITLE	ENGR. SCI.	ENGR. DSGN.	EXPR.	TOTAL
Fundamentals					
ENGR 40	Introductory Electronics	3	2	2	5
ENGR 70X (106X)	(C Programming Methodology)	4	1	-	5
<i>And one of the following:</i>					
ENGR 14	Applied Mechanics: Statics and Deformables	2	1	-	3
ENGR 15*	Mechanics	2	1	-	3
ENGR 20	Introduction to Chemical Engineering	2	1	-	3
ENGR 30	Engineering Thermodynamics	3	-	-	3
ENGR 50	Introductory Science of Materials	4	-	-	4
ENGR 60	Engineering Economy	3	-	-	3
ENGR 62	Introduction to Optimization	4	-	-	4
Core Courses					
EE 100	The Electrical Engineering Profession	-	-	-	1
EE 101	Introduction to Circuits	3	-	-	3
EE 102	Introduction to Signals and Systems	3	-	-	3
EE 103	Introduction to Signal Processing	2.5	0.5	-	3
EE 111	Electronics I	4	-	-	4
EE 112	Electronics II	3	1	-	4
EE 113	Electronic Circuits	1	2	-	3
EE 121	Digital Design Lab	1	3	4	4
EE 122	Analog Lab	1	2	3	3
ENGR102E	Technical/Professional Writing for Electrical Engineers	-	-	-	-
EE 141	Engineering Electromagnetics	4	-	-	4
Specialty Courses					
<i>Computer Hardware</i>					
CS 107	Programming Paradigms	2	3	-	5
EE 182	Computer Organization and Design	2	2	-	4
EE 183	Advanced Logic Design Lab	-	3	3	3
EE 271	Introduction to VLSI systems	1.5	1.5	-	3
EE 275	Logic Design	2	1	-	3
EE 281	Embedded System Design Laboratory	-	3	3	3
<i>Computer Software</i>					
CS 107	Programming Paradigms	2	3	-	5
CS 108	Object-oriented Systems Design	2	2	-	4
CS 194	Software Project	-	3	-	3
EE 284	Introduction to Computer Networks	3	-	-	3
<i>Controls</i>					
ENGR 105	Feedback Control Design	1	2	-	3
ENGR 205	Introduction to Control Design Techniques	1	2	-	3
ENGR 206	Control System Design and Simulation	-	4	3	4
ENGR 209	Nonlinear Control	-	3	-	3
<i>Electronics</i>					
EE 133	Analog Communications Design Lab	-	3	2	3
EE 212	Integrated Circuit Fabrication Processes	2	1	-	3
EE 214	Analog Integrated Circuit Design	-	3	-	3
EE 216	Principles and Models of Semiconductor Devices	3	-	-	3
<i>Fields and Waves</i>					
EE 142	Electromagnetic Waves	2.5	0.5	-	3
EE 144	Wireless Electromagnetic Design Lab	1.5	1.5	1.5	3
EE 241	Waves I	3	-	-	3
EE 246	Microwave Engineering	1.5	1.5	-	3
EE 247	Introduction to Optical Fiber Communications	2	1	-	3
EE 252	Antennas for Telecommunication and Remote Sensing	2	1	-	3
<i>Signal Processing</i>					
EE 104	Signal Processing and Communication	3	-	-	3
EE 133	Analog Communications Design Lab	-	3	2	3
EE 168	Introduction to Digital Image Processing	3	-	-	3
EE 261	Fourier Transform and its Applications	3	-	-	3
EE 263	Introduction to Linear Dynamical Systems	2.5	0.5	-	3
EE 264	Digital Filtering	1.5	1.5	-	3
EE 265	Signal Processing Laboratory	2	1	3	3
EE 278	Introduction to Statistical Signal Processing	3	-	-	3
EE 279	Introduction to Communication Systems	3	-	-	3
Other Courses					
EE 202	Medical Electronics	2.5	0.5	-	3
CS 193D	C++ and Object Oriented Programming	1.5	1.5	-	3
CS 193J	Programming in Java	1.5	1.5	-	3
CS 193K	Advanced Java Applications	1	1	-	2
CS 193D	C++ and Object Oriented Programming	1.5	1.5	-	3
CS 193W	Microsoft Windows Programming	1.5	1.5	-	3
EE 282	Computer Architecture and Organization	3	-	-	3

* The use of "or" means that only one of the two courses may be used to fulfill a fundamental.