

# ELECTRICAL ENGINEERING: Electrical

Department of Electrical and Computer Engineering



## Sample Four-Year Plan

### First Year

1st Semester	sh	2nd Semester	sh
ALL RHET:1030 Rhetoric	4	ALL General Education Course	3
F/S MATH:1550 Math I: Single Variable Calculus (P: ALEKS score $\geq 75$ or MPT Level 3 score $\geq 9$ )	4	F/S MATH:1560 Math II: Multivariable Calculus (P: MATH:1550)	4
ALL CHEM:1110 Principles of Chemistry I (P: ALEKS score $\geq 55$ or MPT Level 3 score $\geq 9$ )	4	ALL MATH:2550 Math III: Matrix Algebra (P: MATH:1550)	2
F ENGR:1100 Intro to Engineering Problem Solving	3	ALL PHYS:1611 Introductory Physics I / Lab (C: MATH:1550)	4
	15	F/S ENGR:1300 Intro to Engineering Computing (C: MATH:1550)	3
			16

### Second Year

3rd Semester	sh	4th Semester	sh
ALL General Education Course	3	ALL General Education Course	3
ALL MATH:2560 Math IV: Differential Equations (P: MATH:1560 & MATH:2550)	3	F/S MATH:3550 Engineering Math V: Vector Calculus (P: MATH:1560 & MATH:2550; C: MATH:2560)	3
F/S PHYS:1612 Introductory Physics II (P: PHYS:1611; C: MATH:1560)	4	F/S STAT:2020 Probability & Statistics For Engr & Phys Sci (P: MATH:1560)	3
F/S ENGR:2120 Electrical Circuits (P: MATH:2560)	3	F/S ECE:2400 Linear Systems I (P: ENGR:2120 & MATH:2560)	3
F/S ENGR:2730 Computers in Engineering (P: ENGR:1300)	3	F/S ECE:2410 Principles of Electronic Instrumentation (P: PHYS:1612, ENGR:2120, & MATH:2560)	4
	16		16

### Third Year

5th Semester	sh	6th Semester	sh
F ECE:3000 Professional Seminar: Electrical Engineering (Junior Status)	1	F/S ECE:3360 Embedded Systems (P: ENGR:2730 & ECE:3320; C: ECE:2410)	3
F ECE:3320 Intro to Digital Design (Sophomore Status)	3	S ECE:3500 Communication Systems (P: ECE:2400)	3
F ECE:3400 Linear Systems II (P: ECE:2400)	3	S ECE:3600 Control Systems (P: ECE:2400)	3
F ECE:3410 Electronic Circuits (P: ECE:2400 & ECE:2410)	4	S ECE:3720 Semiconductor Devices (P: PHYS:2704 & ECE:3410)	3
F ECE:3700 Electromagnetic Theory (P: MATH:3550 & PHYS:1612)	3	ALL Elective: Focus Area - ECE	3
ALL Elective: Focus Area -Technical	3	ALL Elective: Focus Area	3
	17		18

### Fourth Year

7th Semester	sh	8th Semester	sh
ALL General Education Course	3	ALL General Education Course	3
F/S ECE:4880 Principles of ECE Design (P: Senior Status; ECE:2410, & ENGR:2730)	3	F/S ECE:4890 ECE Design (P: ECE:4880 and 3 of: ECE:3330, ECE:3350, ECE:3360, ECE:3400, ECE:3410, ECE:3500, ECE:3600, CS:3330)	3
ALL Elective: Focus Area - 5000 level ECE	3	ALL Elective: Focus Area - 5000 level ECE	3
ALL Elective: Focus Area -Technical	3	ALL Elective: Focus Area, Minor, Certificate, etc.	3
ALL Elective: Focus Area - Breadth	3	ALL Elective: Focus Area - Depth	3
	15		15