ELECTRICAL ENGINEERING: COMPUTER

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**	4		F/S	**MATH 1560 Math II: Multivariable Calculus**	4
	(P: ALEKS score ≥ 75 or MPT Level 3 score ≥ 9)				*(P: MATH:1550)*	
ALL	**CHEM:1110 Principles of Chemistry I**	4		ALL	**MATH:2550 Math III: Matrix Algebra**	2
	(P: ALEKS score ≥ 55 or MPT Level 3 score ≥ 9)				*(P: MATH:1550)*	
F	**ENGR:1100 Intro to Engineering Problem Solving**	3		ALL	**PHYS:1611 Introductory Physics I / Lab**	4
					(C: MATH:1550)	
				F/S	**ENGR:1300 Intro to Engineering Computing**	3
					(C: MATH:1550)	
		15				**16**

Second Year

3rd Semester		sh		4th Semester		sh
ALL	**General Education Course**	3		F/S	**MATH:3550 Engineering Math V: Vector Calculus**	3
					(P: MATH:1560 & MATH:2550; C: MATH:2560)	
ALL	**MATH:2560 Math IV: Differential Equations**	3		ALL	**CS:2210 Discrete Structures**	3
	(P: MATH:1560 & MATH:2550)					
F/S	**PHYS:1612 Introductory Physics II**	4		F/S	**CS:2230 Computer Science II, Data Structures**	4
	(P: PHYS:1611; C: MATH:1560)				*(P: ENGR:2730 minimum C- or CS:1210 minimum C-)*	
F/S	**ENGR:2120 Electrical Circuits**	3		F/S	**ECE:2400 Linear Systems I**	3
	(C: MATH:2560)				*(P: ENGR:2120 & MATH:2560)*	
F/S	**ENGR:2730 Computers in Engineering**	3		F/S	**ECE:2410 Principles of Electronic Instrumentation**	4
	(P: ENGR:1300)				*(P: PHYS:1612, ENGR:2120, & MATH:2560)*	
		16				**17**

Third Year

5th Semester		sh		6th Semester		sh
F/S	**STAT:2020 Probabilty & Statistics For Engr & Phys Sci**	3		ALL	**General Education Course**	3
	(P: MATH:1560)					
ALL	**CS:3330 Algorithms**	3		S	**ECE:3350 Computer Architecture and Organization**	3
	(P: CS:2230 ≥ C-, CS:2210 ≥ C-, & MATH:1550)				*(P: ECE:3320 & ENGR:2730)*	
F	**ECE:3320 Intro to Digital Design**	3		F/S	**ECE:3360 Embedded Systems**	3
	(Sophomore Status)				*(P: ENGR:2730 & ECE:3320; C: ECE:2410)*	
F/S	**ECE:3330 Intro to Software Design**	3		ALL	**Elective:** Focus Area - ECE	3
	(P: ENGR:2730)					
F	**ECE:3700 Electomagnetic Theory**	3		ALL	**Elective:** Focus Area	3
	(P:MATH:3550 & PHYS:1612)					
F	**ECE:3000 Professional Seminar:** Electrical Engineering	1		ALL	**Elective:** Focus Area -Technical	3
	(Junior Status)					
		16				**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**	3		F/S	**ECE:4890 ECE Design**	3
	(P: Senior Status; ECE:2410, & ENGR:2730)				*(P: ECE:4880 and 3 of: ECE:3330, ECE:3350, ECE:3360, ECE:3400,*	
					ECE:3410, ECE:3500, ECE:3600, CS:3330)	
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	3
ALL	**Elective:** Focus Area - Breadth	3		ALL	**Elective:** Focus Area - Depth	3
		15				**15**