ELECTRICAL ENGINEERING: COMPUTER

Department of Electrical and Computer Engineering

Sample Four-Year Plan

First \	/ear
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1st Se	1st Semester	
ALL	RHET:1030 Rhetoric	4
F/S	MATH:1550 Math I: Single Variable Calculus	4
	(P: ALEKS score \geq 75 or MPT Level 3 score \geq 9)	
ALL	CHEM:1110 Principles of Chemistry I	4
	(P: ALEKS score \geq 55 or MPT Level 3 score \geq 9)	
F	ENGR:1100 Intro to Engineering Problem Solving	3
F	ENGR:1000 Engineering Success for First-Year Students	1
	(First semester standing)	
		16

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	2nd Semester ALL General Education Course F/S MATH 1560 Math II: Multivariable Calculus		sh
	ALL	General Education Course	3
	F/S	MATH 1560 Math II: Multivariable Calculus	4
		(P: MATH:1550)	
	ALL	MATH:2550 Math III: Matrix Algebra	2
		(P: MATH:1550)	
	ALL	PHYS:1611 Introductory Physics I / Lab	4
		(C: MATH:1550)	
	F/S	ENGR:1300 Intro to Engineering Computing	3
		(C: MATH:1550)	
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	Second Year				
3rd S	Semester	sh	4th Semester		sh
ALL	General Education Course	3	F/S	MATH:3550 Engineering Math V: Vector Calculus (P: MATH:1560 & MATH:2550; C: MATH:2560)	3
ALL	MATH:2560 Math IV: Differential Equations (P: MATH:1560 & MATH:2550)	3	ALL	CS:2110 Discrete Structures	3
F/S	PHYS:1612 Introductory Physics II (P: PHYS:1611; C: MATH:1560)	4	F/S	CS:2230 Computer Science II, Data Structures (P: ENGR:2730 minimum C- or CS:1210 minimum C-)	4
F/S	ENGR:2120 Electrical Circuits (C: 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			17

	Third Year				
5th S	5th Semester		6th S	6th Semester	
F/S	STAT:2020 Probabilty & Statistics For Engr & Phys Sci (P: MATH:1560)	3	ALL	General Education Course	3
ALL	CS:3330 Algorithms (P: CS:2230 ≥ C-, CS:2210 ≥ C-, & MATH:1550)	3	S	ECE:3350 Computer Architecture and Organization (P: ECE:3320 & ENGR:2730)	3
F	ECE:3320 Intro to Digital Design (Sophomore Status)	3	F/S	ECE:3360 Embedded Systems (P: ENGR:2730 & ECE:3320; C: ECE:2410)	3
F/S	ECE:3300 Intro to Software Design (P: ENGR:2730)	3	ALL	Elective: Focus Area - ECE	3
F	ECE:3700 Electomagnetic Theory (P:MATH:3550 & PHYS:1612)	3	ALL	Elective: Focus Area, Minor, Certificate, etc. (minimum 2 sh)	2
F	ECE:3000 Professional Seminar: Electrical Engineering (Junior Status)	1	ALL	Elective: Focus Area -Technical	3
		16			17

	Fourth Year				
7th S	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, Minor, Certificate, etc.	3
ALL	Elective: Focus Area - Breadth	3	ALL	Elective: Focus Area - Depth	3
		15			15