

ELECTRICAL ENGINEERING

Department of Electrical and Computer Engineering

IOWA

Sample Four-Year Plan

First Year

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

Second Year

3rd Semester		sh	4th Semester		sh
F/S	MATH:2560 Engineering Differential Equations (P: MATH:1560 & MATH:2550)	3	ALL	General Education Course	3
ALL	PHYS:1612 Introductory Physics II (P: PHYS:1611; C: MATH:1560)	4	F/S	MATH:3550 Engineering Vector Calculus (P: MATH:1560 & MATH:2550; C: MATH:2560)	3
ALL	ENGR:2120 Electrical Circuits (C: MATH:2560)	3	F/S	STAT:2020 Probability & Statistics For Engr & Phys Sci (P: MATH:1560)	3 OR
F/S	ENGR:2730 Computers in Engineering (P: ENGR:1300)	3	ALL	Elective: Focus Area -Technical	3
F	ECE:3320 Intro to Digital Design (Sophomore Status)	3	F/S	ECE:2400 Linear Systems I (P: ENGR:2120 & MATH:2560)	3
		16	F/S	ECE:2410 Principles of Electronic Instrumentation (P: PHYS:1612, ENGR:2120, & MATH:2560)	4
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Third Year

5th Semester		sh	6th Semester		sh
F	ECE:3000 Professional Seminar: Electrical Engineering (Junior Status)	1	S	ECE:3500 Communication Systems (P: ECE:2400)	3
F/S	ECE:3360 Embedded Systems (P: ENGR:2730 & ECE:3320; C: ECE:2410)	3	S	ECE:3600 Control Systems (P: ECE:2400)	3
ALL	Elective: Focus Area - ECE	3	S	ECE:3720 Semiconductor Devices (P: PHYS:1612 & ECE:3410)	3
F	ECE:3400 Linear Systems II (P: ECE:2400)	3	F/S	ECE:3360 Embedded Systems (P: ENGR:2730 & ECE:3320; C: ECE:2410)	3
F	ECE:3410 Electronic Circuits (P: ECE:2400 & ECE:2410)	4	ALL	Elective: Focus Area - ECE	3
F	ECE:3700 Electromagnetic Theory (P: MATH:3550 & PHYS:1612)	3	ALL	Elective: Focus Area	3
F/S	STAT:2020 Probability & Statistics For Engr & Phys Sci (P: MATH:1560)	3 OR	ALL	General Education Course	3
ALL	Elective: Focus Area -Technical	3			
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4th Year

7th Semester		sh	8th Semester		sh
ALL	General Education Course	3	ALL	General Education Course	3
F/S	ECE:4880 ECE Senior Design 1 (P: Senior Status; ECE:2410, & ENGR:2730)	3	F/S	ECE:4890 ECE Senior Design 2 (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
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Last edited: 6/30/2026