

ELECTRICAL ENGINEERING – Computer Track

	UI Course #	University of Iowa Course Title	SH		ICCC Course #	Iowa Central CC Course Title	SH	
Semester 1								
Fall	MATH:1550	Engineering Math I – Single Variable Calculus	4	BOTH	MAT 210	Calculus I	4	
					MAT 216	Calculus II	4	
	ENGR:1100	Introduction to Engineering Problem Solving	3		No equivalent course offered			
	CHEM:1110	Principles of Chemistry I & Lab	4		CHM 165	General Chemistry I	4	
	RHET:1030	Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required)	4	ALL	ENG 105	Composition I	3	
					ENG 106	Composition II	3	
SPC 112					Public Speaking	3		
ENGR:1000	Engr Success for First-Year Students	1*		No equivalent course offered				
	Total		16					
Semester 2								
Spring	MATH:1560	Engineering Math II: Multi-Variable Calculus	4		MAT 219**	Calculus III	4	
	MATH:2550	Engineering Math III: Matrix Algebra	2		No equivalent course offered			
	ENGR:1300	Introduction to Engineering Computing	3	CHOOSE 1	CIS 172	Java	4	
					CIS 162	C++	4	
	PHYS:1611	Introductory Physics I	4		PHY 212	Classical Physics I	5	
		General Education Component #1	3					
	Total		16					
Semester 3								
Fall	MATH:2560	Engineering Math IV: Differential Equations	3		MAT 226	Differential Equations with Laplace	3	
	PHYS:1612	Introductory Physics II	4		PHY 222	Classical Physics II	5	
	ENGR:2110	Engineering Fundamentals I – Statics	2	No equivalent course offered				
	ENGR:2120	Engineering Fundamentals II: Electrical Circuits	3	No equivalent course offered				
	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3	No equivalent course offered				
		Total		15				
Semester 4								
Spring	MATH:3550	Engineering Math V: Vector Calculus	3	No equivalent course offered				
	ECE:2400	Linear Systems I	3	No equivalent course offered				
	ECE:2410	Principles of Electronic Instrumentation	4	No equivalent course offered				
	ENGR:2730	Computers in Engineering	3	No equivalent course offered				
		General Education Component #2	3					
		Total		16				

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Semester 5								
Fall	STAT:2020	Probability and Stat for Engineering & Phys Sci	3		No equivalent course offered			
	ECE:3320	Intro to Digital Design	3		No equivalent course offered			
	CS:2210	Discrete Structures	3	CHOOSE 1	MAT 150	Discrete Math	3	
					CIS 153	Data Structures	4	
	ECE:3330	Introduction to Software Design	3		No equivalent course offered			
	ECE:3700	Electromagnetic Theory	3		No equivalent course offered			
	ECE:3000	Professional Seminar: Electrical Engineering	1		No equivalent course offered			
	Total		16					
Semester 6								
Spring	CS:2230	Computer Science II (EFA #1)	3		No equivalent course offered			
	ECE:3350	Computer Architecture and Organization	3		No equivalent course offered			
	ECE:3360	Embedded Systems and System Software	3		No equivalent course offered			
		Elective Focus Area #2	3					
		Elective Focus Area #3	3					
		General Education Component #3	3					
		Total		18				
Semester 7								
Fall	ECE:4880	Principles of Electrical Engineering Design	3		No equivalent course offered			
	CS:3330	Algorithms	3		No equivalent course offered			
		Elective Focus Area #4	3					
		Track Breadth Elective	3		No equivalent course offered			
		General Education Component #4	3					
		Total		15				
Semester 8								
Spring	ECE:4890	Senior Electrical Engineering Design	3		No equivalent course offered			
		Track Depth Elective	3		No equivalent course offered			
		Elective Focus Area #5	3					
		Elective Focus Area #6	3					
		General Education Component #5	3					
		Total		15				

2017-18 Curriculum

updated June 2018

* 1sh; does not count toward 128 sh total required for graduation

**Students must have completed Calculus I, II, and III to receive credit for Engineering Math II