

Electrical Engineering- Computer Track

	UI Course #	University of Iowa Course Title	SH		IHCC Course #	Indian Hills 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	Engineering Problem Solving I	3		EGR 160	Engineering I	3
	CHEM:1110	Principles of Chemistry I	4	BOTH	CHM 157	Principles of Chemistry I	3
					CHM 158	Principles of Chemistry II	3
				OR	CHM 166	General Chemistry I	5
	RHET:1030	Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required)	4	CHOOSE 1	ENG 105	Composition I (Writing Component I)	3
					ENG 106	Composition II (Writing Component II)	3
					SPC 101	SPC 101: Fundamentals of Oral Communication (Speech Component)	3
					SPC 112	SPC 112: Public Speaking (Speech Component)	3
ENGR:1000	Engr Success for First-Year Students	1*		No equivalent course offered			
	Total	16					
Semester 2							
Spring	MATH:1560	Engineering Math II – Multivariable Calculus	4		MAT 219**	Calculus III	4
	MATH:2550	Engineering Math III – Matrix Algebra	2		EGR 162	Engineering Math - Matrix Algebra	2
	ENGR:1300	Engineering Problem Solving II	3	CHOOSE 1	EGR 165	Engineering II	3
					CIS 171	Java	3
					CIS 169	C#	3
	PHYS:1611	Introductory Physics I with Lab	4	BOTH	PHY 200	Classical Physics I	3
					PHY 201	Classical Physics II	3
		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	BOTH	PHY 201	Classical Physics II	3
					PHY 202	Classical Physics III	3
	ENGR:2110	Engineering Fundamentals I: Statics	2		EGR 180	Statics	3
	ENGR:2120	Engineering Fundamentals II: Electrical Circuits	3		EGR 284	Intro to Electrical Circuits	3
	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3		EGR 290	Thermodynamics	3
	Total	15					
Semester 4							
Spring	MATH:3550	Engineering Math V: Vector Calculus	3		No equivalent courses offered		
	ECE:2400	Linear Systems I	3		No equivalent courses offered		
	ECE:2410	Principles of Electronic Instrumentation	4		No equivalent courses offered		
	ENGR:2730	Computers in Engineering	3		No equivalent courses 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 courses offered	
	ECE:3320	Intro to Digital Design	3			No equivalent courses offered	
	CS:2210	Discrete Structures	3			No equivalent courses offered	
	ECE:3330	Introduction to Software Design	3			No equivalent courses offered	
	ECE:3700	Electromagnetic Theory	3			No equivalent courses offered	
	ECE:3000	Professional Seminar: Electrical Engineering	1			No equivalent courses offered	
		Total		16			
Semester 6							
Spring	CS:2230	Computer Science II (EFA #1)	3			No equivalent courses offered	
	ECE:3350	Computer Architecture and Organization	3			No equivalent courses offered	
	ECE:3360	Embedded Systems and System Software	3			No equivalent courses 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 courses offered	
	CS:3330	Algorithms	3			No equivalent courses offered	
		Elective Focus Area #4	3				
		Track Breadth Elective	3			No equivalent courses offered	
		General Education Component #4	3				
		Total		15			
Semester 8							
Spring	ECE:4890	Senior Electrical Engineering Design	3			No equivalent courses offered	
		Track Depth Elective	3			No equivalent courses 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