University of Iowa- College of Engineering &
Des Moines Area Community College

THE UNIVERSITY OF IOWA
College of Engineering

Electrical Engineering – Electrical Track

	UI Course #	University of Iowa Course Title	SH		DMACC Course #	DMACC Course Title	SH
Semester 1							
Fall	MATH:1550	Engineering Math I – Single Variable Calculus	4	**BOTH**	MAT 211	Calculus I	5
					MAT 217	Calculus II	5
	ENGR:1100	Introduction to Engineering Problem Solving	3		EGR 166	Engineering Graphics/Conceptual Design	4
	CHEM:1110	Principles of Chemistry I & Lab	4		CHM 165	General/Inorganic Chemistry I	4
	RHET:1030	Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required)	4		ENG 105	Composition I	3
				CHOOSE 1	ENG 106	Composition II	3
					ENG 108	Composition II: Technical Writing	3
					SPC 101	Fundamentals of Oral Communication	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		MAT 148	Linear Algebra w/ Applications	4
	ENGR:1300	Introduction to Engineering Computing	3	**CHOOSE 1**	CIS 161	C++	3
					CIS 169	C#	3
					CIS 171	Java	3
				OR BOTH	CIS 125	Intro to Programming Logic	3
					EGR 155	Engineering C/C++	2
	PHYS:1611	Introductory Physics I	4		PHY 213	Classical Physics I	6
		General Education Component #1	3				
		Total	**16**				
Semester 3							
Fall	MATH:2560	Engineering Math IV: Differential Equations	3		MAT 227	Differential Equations with Laplace	4
	PHYS:1612	Introductory Physics II	4		PHY 223	Classical Physics II	6
	ENGR:2110	Engineering Fundamentals I:Statics	2		EGR 180	Statics	3
	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**				

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
	ECE:3400	Linear Systems II	3		No equivalent course offered
	ECE:3410	Electronic Circuits	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	ECE:3500	Communication Systems	3		No equivalent course offered
	ECE:3600	Control Systems	3		No equivalent course offered
	ECE:3720	EE Materials and Devices	3		No equivalent course offered
		Elective Focus Area #1	3		
		Elective Focus Area #2	3		
		General Education Component #3	3		
		Total	**18**		
Semester 7					
Fall	ECE:4880	Principles of Electrical Engineering Design	3		No equivalent course offered
		Elective Focus Area #3	3		
		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**		

2017-2018 Curriculum

updated May 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