

## MECHANICAL ENGINEERING

MECHANICAL ENGINEERING							
	UI Course #	University of Iowa Course Title	SH		ICCC Course #	Iowa Central CC Course Title	SH
<b>Semester 1</b>							
Fall	MATH:1550	Engineering Math I – Single Variable Calculus	4	<b>BOTH</b>	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	<b>ALL</b>	ENG 105	Composition I	3
					ENG 106	Composition II	3
	ENGR:1000	Engr Success for First-Year Students	1*		No equivalent course offered		
		Total	16				
<b>Semester 2</b>							
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	<b>CHOOSE 1</b>	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				
<b>Semester 3</b>							
Fall	MATH:2560	Engineering Math IV: Differential Equations	3		MAT 226	Differential Equations with Laplace	3
	PHYS:1612	Introductory Physics II (Without Lab)	3		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		
			General Education Component #2	3			
	ME:2020	Sophomore Seminar: Mechanical Engineering	0		No equivalent course offered		
		Total	17				
<b>Semester 4</b>							
OR Spring	ENGR:2720	Materials Science	3		No equivalent course offered		
	ENGR:2750	Mechanics of Deformable Bodies	3		No equivalent course offered		
	ENGR:2760	Design for Manufacturing	3		No equivalent course offered		
	STAT:2020	Probability and Stat for Engineering & Phys Sci	3		No equivalent course offered		
	ENGR:2710	Dynamics	3		No equivalent course offered		
		Elective Focus Area #1	3				
		Total	15				

# MECHANICAL ENGINEERING

	UI Course #	University of Iowa Course Title	SH		ICCC Course #	Iowa Central CC Course Title	SH
<b>Semester 5</b>							
	MATH:3550	Engineering Math V: Vector Calculus	3			No equivalent course offered	
	ENGR:2510	Fluid Mechanics	4			No equivalent course offered	
OR	STAT:2020	Probability and Stat for Engineering & Phys Sci	3			No equivalent course offered	
	ENGR:2760	Design for Manufacturing	3			No equivalent course offered	
Fall	ENGR:2730	Computers in Engineering (Section 002)	2			No equivalent course offered	
	ME:3351	Engineering Instrumentation	2			No equivalent course offered	
		Elective Focus Area #2	3				
	ME:3091	Professional Seminar: Mechanical Engineering	0			No equivalent course offered	
		<b>Total</b>	<b>17</b>				
<b>Semester 6</b>							
Spring	ME:3040	Thermodynamics II	3			No equivalent course offered	
	ME:3045	Heat Transfer	3			No equivalent course offered	
	ME:3052	Mechanical Systems	4			No equivalent course offered	
		Elective Focus Area #3	3				
		General Education Component #3	3				
		<b>Total</b>	<b>16</b>				
<b>Semester 7</b>							
	ME:4048	Energy Systems Design	4			No equivalent course offered	
	ME:4055	Mechanical Systems Design	3			No equivalent course offered	
OR		Elective Focus Area #4	3				
	ME:4086	Mechanical Engineering Design Project	3			No equivalent course offered	
OR		Elective Focus Area #5	3				
	ME:4080	Experimental Engineering	4			No equivalent course offered	
Fall		General Education Component #4	3				
	ME:3091	Professional Seminar: Mechanical Engineering	0			No equivalent course offered	
		<b>Total</b>	<b>16</b>				
<b>Semester 8</b>							
OR	ME:4086	Mechanical Engineering Design Project	3			No equivalent course offered	
		Elective Focus Area #4	3				
OR	ME:4080	Experimental Engineering	4			No equivalent course offered	
		Elective Focus Area #5	3				
Spring		Elective Focus Area #6	3				
		Elective Focus Area #7	3				
		General Education Component	3				
		<b>Total</b>	<b>16</b>				

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