

## INDUSTRIAL 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
				SPC 112		Public Speaking			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				
	PSY:1001	Elementary Psychology (General Education#2)		3		PSY 111	Introduction to Psychology		3	
	IE:2000	Sophomore Seminar: Industrial Engineering		0		No equivalent course offered				
	Total		17							
<b>Semester 4</b>										
Spring	IE:2500	Engineering Economy		3		No equivalent course offered				
	STAT:2020	Probability and Stat for Engineering & Phys Sci		3		No equivalent course offered				
	ENGR:2720	Material Science		3		No equivalent course offered				
	IE:3500	Information Systems Design		3		No equivalent course offered				
		Elective Focus Area #1		3						
	Total		15							

# INDUSTRIAL ENGINEERING

	UI Course #	University of Iowa Course Title	SH		ICCC Course #	Iowa Central CC Course Title	SH
<b>Semester 5</b>							
Fall	IE:3610	Stochastic Modeling	3			No equivalent course offered	
	ENGR:2760	Design for Manufacturing	3			No equivalent course offered	
	IE:3400	Human Factors	3			No equivalent course offered	
	IE:3700	Operations Research	3			No equivalent course offered	
		General Education Component #3	3				
	<b>Total</b>		<b>15</b>				
<b>Semester 6</b>							
Spring	IE:3300	Manufacturing Systems	3			No equivalent course offered	
	IE:3450	Ergonomics	3			No equivalent course offered	
	IE:3760	Applied Linear Regression	3			No equivalent course offered	
	IE:3750	Digital Systems Simulation	3			No equivalent course offered	
		Elective Focus Area #2	3				
		General Education Component #4	3				
	IE:3000	Professional Seminar: Industrial Engineering	0			No equivalent course offered	
	<b>Total</b>		<b>18</b>				
<b>Semester 7</b>							
Fall	IE:3350	Process Engineering	4			No equivalent course offered	
	IE:3600	Quality Control	3			No equivalent course offered	
		Elective Focus Area #3	3				
		Elective Focus Area #4	3				
		General Education Component #5	3				
		<b>Total</b>		<b>16</b>			
<b>Semester 8</b>							
Spring	IE:4600	Industrial Engineering Design Project (IEDP)	4			No equivalent course offered	
		Systems Elective	3			No equivalent course offered	
		Math/Science Elective Focus Area #5	3				
		Elective Focus Area #6	3				
		Elective Focus Area #7	3				
	IE:3000	Professional Seminar: Industrial Engineering	0			No equivalent course offered	
	<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