

# INDUSTRIAL ENGINEERING

1 <sup>st</sup> Year	Session	Course	Course Name	SH	P: Prerequisite; C: Corequisite
	F/S	MATH:1550	Engineering Math I: Single Variable Calculus	4	P: HS Algebra & Trigonometry; Score of 75 on ALEKS
	F	ENGR:1100	Introduction to Engineering Problem Solving	3	
	ALL	CHEM:1110	Principles of Chemistry I	4	
	ALL	RHET:1030	Rhetoric	4	
	F	ENGR:1000	Engr Success for First Year Students	1	First Semester Standing
			<b>TOTAL</b>	<b>16</b>	
	F/S	MATH:1560	Engineering Math II: Multi-Variable Calculus	4	P: MATH 1550
	F/S	ENGR:1300	Introduction to Engineering Computing	3	C: MATH:1550
	ALL	PHYS:1611	Introductory Physics I	4	C: MATH:1550 or MATH:1850
	ALL	MATH:2550	Engineering Math III: Matrix Algebra	2	P: MATH:1550
	ALL		General Education Component #1	3	
2 <sup>nd</sup> Year			<b>TOTAL</b>	<b>16</b>	
	ALL	MATH:2560	Engineering Math IV: Differential Equations	3	P: MATH:1560; MATH 2550
	F/S	PHYS:1612	Introductory Physics II (Without Lab)	3	P: PHYS:1611; C: MATH:1560
	ALL	ENGR:2110	Engineering Fundamentals I: Statics	2	P: MATH:1550; C: MATH:1560, PHYS:1611
	F/S	ENGR:2120	Engineering Fundamentals II: Electrical Circuits	3	C: MATH:2560
	ALL	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3	P: CHEM:1110, PHYS:1611; C: MATH:1560
	ALL	PSY:1001	Elementary Psychology (General Education#2)	3	
	F	ISE:2000	Sophomore Seminar: Industrial Engineering	0	Sophomore Status
			<b>TOTAL</b>	<b>17</b>	
	S	ISE:2500	Engineering Economy	3	C: STAT:2020
	ALL	STAT:2020	Probability and Stat for Engineering & Phys Sci	3	P: MATH:1560
	ALL	ENGR:2720	Material Science	3	P: CHEM:1110; C: MATH:1550
	S	ISE:3500	Information Systems Design	3	P: ENGR:1300
	ALL		Elective Focus Area #1	3	
3 <sup>rd</sup> Year			<b>TOTAL</b>	<b>15</b>	
	F	ISE:3610	Stochastic Modeling	3	P: STAT:2020; C: ISE:3700
	F	ISE:2360	Design for Manufacturing	3	C: ENGR:2720
	F	ISE:3400	Human Factors	3	P: PSY:1001
	F	ISE:3700	Operations Research	3	P: MATH:2550; C: STAT:2020
	ALL		General Education Component #3	3	
			<b>TOTAL</b>	<b>15</b>	
	S	ISE:3300	Manufacturing Systems	3	P: ENGR:2760, ISE:3700
	S	ISE:3450	Ergonomics	3	
	S	ISE:3660	Data Analytics with R	3	P: STAT:2020
	S	ISE:3750	Digital Systems Simulation	3	P: ISE:3700, ISE:3610
	ALL		Elective Focus Area #2	3	
	ALL		General Education Component #4	3	
	S	ISE:3000	Professional Seminar: Industrial Engineering	0	P: Junior Status
4 <sup>th</sup> Year			<b>TOTAL</b>	<b>18</b>	
	F	ISE:3350	Process Engineering	4	P: ISE:3700
	F	ISE:3600	Quality Control	3	P: STAT:2020
	ALL		Elective Focus Area #3	3	
	ALL		Elective Focus Area #4	3	
	ALL		General Education Component #5	3	
			<b>TOTAL</b>	<b>16</b>	
	F/S	ISE:4600	Industrial Engineering Design Project (IEDP)	4	C: ALL IE Required Courses; (ISE:2500, ISE:3600; ISE:3350; ISE:3750; ISE:3450; ISE:3300; IE 3400; ISE:3500)
	F/S		Systems Elective	3	
	ALL		Math/Science Elective Focus Area #5	3	
	ALL		Elective Focus Area #6	3	
	ALL		Elective Focus Area #7	3	
	S	ISE:3000	Professional Seminar: Industrial Engineering	0	P: Junior Status
			<b>TOTAL</b>	<b>16</b>	