

# Industrial Engineering

1 <sup>st</sup> YEAR	Session	Course	Industrial Engineering	SH	Pre-Requisite or /Co-Requisite
1 <sup>st</sup> Semester	All	22M:031	Engineering Math I – Single Variable Calculus	4	P: H.S. Algebra & Trigonometry
	F	059:005	Engineering Problem Solving I	3	
	All	004:011	Principles of Chemistry I	4	
	All	010:003	Accelerated Rhetoric (or 10:001 & 10:002)	4	
	F	059:090	First-Year Engineering Seminar	1	
<b>Total</b>				<b>16</b>	
2 <sup>nd</sup> Semester	All	22M:032	Engineering Math II – Multivariable Calculus	4	P: 22M:031
	S	059:006	Engineering Problem Solving II	3	C: 22M:031
	F/S	029:081	Introductory Physics I	4	C: 22M:031
	All	22M:033	Engineering Math III – Matrix Algebra	2	P: 22M:032
	All		General Education Component #1	3	
	S	056:010	First-Year Seminar: Industrial Engineering	0	P: First Year & Trans. Students
<b>Total</b>				<b>16</b>	
<b>2<sup>nd</sup> YEAR</b>					
1 <sup>st</sup> Semester	All	22M:034	Engineering Math IV – Differential Equations	3	P: 22M:032 and 22M:033
	F/S	029:082	Introductory Physics II	3	P: 29:081; C: 22M:032
	All	059:007	Engineering Fundamentals I – Statics	2	P: 22M:031; C: 29:081, 22M:032
	F/S	059:008	Engineering Fundamentals II – Electrical Circuits	3	C: 22M:034
	All	059:009	Engineering Fundamentals III – Thermodynamics	3	P: 22M:032, 4:011, 29:081
	F/S	031:001	Elementary Psychology (General Education Component #2)	3	
	F/S	056:020	Sophomore Seminar: Industrial Engineering	0	P: Soph. & Trans. Students Only
<b>Total</b>				<b>17</b>	
2 <sup>nd</sup> Semester	S	056:054	Engineering Economy	3	C: 22S:039
	F/S	22S:039	Probability & Statistics for Engineers	3	P: 22M:032
	F/S	057:015	Materials Science	3	P: 4:011; C: 22M:031
	S		Systems Design Elective	3	
	All		Elective Focus Area #1	3	
	F/S	056:020	Sophomore Seminar: Industrial Engineering	0	P: Soph. & Trans. Students Only
<b>Total</b>				<b>15</b>	
<b>3<sup>rd</sup> YEAR</b>					
1 <sup>st</sup> Semester	All	056:166	Stochastic Modeling	3	P: 56:171
	F/S	056:032	Design for Manufacturing	3	C: 57:015
	F	056:144	Human Factors	3	P: 31:001
	F	056:171	Operations Research	3	P: 22S:039, 22M:033
	All		General Education Component #3	3	
	F/S	056:091	Professional Seminar: Industrial Engineering	0	P: Junior Status
<b>Total</b>				<b>15</b>	
2 <sup>nd</sup> Semester	S	056:131	Manufacturing Systems	3	P: 56:032, 56:171
	S	056:147	Ergonomics	3	
	S	056:150	Information Systems Design	3	P: 57:017
	S	22S:030	Statistical Methods and Computing	3	
	S	056:178	Digital Systems Simulation	3	P:56:171
	All		General Education Component #4	3	
	F/S	056:091	Professional Seminar: Industrial Engineering	0	P: Junior Status
<b>Total</b>				<b>18</b>	
<b>4<sup>th</sup> YEAR</b>					
1 <sup>st</sup> Semester	F	056:134	Process Engineering	4	P: 56:171
	All		Elective Focus Area #2	3	
	F	056:162	Quality Control	3	P: 22S:039, 22S:030
	F		Elective Focus Area #3	3	
	All		General Education Component #5	3	
	F/S	056:091	Professional Seminar: Industrial Engineering	0	P: Junior Status
<b>Total</b>				<b>16</b>	
2 <sup>nd</sup> Semester	S	56:160	Operational Systems Design	4	P: 56:134, 56:054, Senior Status
	All		Math/Science Elective (Elective Focus Area #4)	3	
	All		Elective Focus Area #5	3	
	All		Elective Focus Area #6	3	
	All		Elective Focus Area #7	3	
<b>Total</b>				<b>16</b>	