

INDUSTRIAL ENGINEERING

Department of Industrial and Systems Engineering



Sample Four-Year Plan

First Year

1st Semester		sh	2nd Semester		sh
ALL	RHET:1030 Rhetoric	4	ALL	General Education Course	3
F/S	MATH:1550 Math I: Single Variable Calculus <i>(P: ALEKS score ≥ 75 or MPT Level 3 score ≥ 9)</i>	4	F/S	MATH 1560 Math II: Multivariable Calculus <i>(P: MATH:1550)</i>	4
ALL	CHEM:1110 Principles of Chemistry I <i>(P: ALEKS score ≥ 55 or MPT Level 3 score ≥ 9)</i>	4	ALL	MATH:2550 Math III: Matrix Algebra <i>(P: MATH:1550)</i>	2
F	ENGR:1100 Intro to Engineering Problem Solving	3	ALL	PHYS:1611 Introductory Physics I / Lab <i>(C: MATH:1550)</i>	4
F	ENGR:1000 Engineering Success for First-Year Students <i>(First semester standing)</i>	1	F/S	ENGR:1300 Intro to Engineering Computing <i>(C: MATH:1550)</i>	3
		16			16

Second Year

3rd Semester		sh	4th Semester		sh
ALL	PSY:1001 Elementary Psychology (General Education Course)	3	ALL	STAT:2020 Probability & Statistics For Engr & Phys Sci <i>(P: MATH:1560)</i>	3
ALL	MATH:2560 Math IV: Differential Equations <i>(P: MATH:1560 & MATH:2550)</i>	3	S	ISE:2500 Engineering Economy <i>(C: STAT:2020)</i>	3
F/S	PHYS:1612 Introductory Physics II / Lab <i>(P: PHYS:1611; C: MATH:1560)</i>	4	S	ISE:3500 Information Systems Design <i>(P: ENGR:1300)</i>	3
ALL*	Elective: Engineering Fundamentals	2/3	ALL*	Elective: Engineering Fundamentals	3
ALL*	Elective: Engineering Fundamentals	3	ALL*	Elective: Engineering Fundamentals	3
F	ISE:2000 Sophomore Seminar: Industrial Engineering <i>(Status: Sophomore)</i>	0	ALL*	Required/Elective: Focus Area, Minor, Certificate, etc.	3
		15/16			18

Third Year

5th Semester		sh	6th Semester		sh
ALL	General Education Course	3	ALL	General Education Course	3
F	ISE:2360 Design for Manufacturing	3	S	ISE:3300 Manufacturing Systems <i>(P: ISE:2360, ISE:3700)</i>	3
F	ISE:3400 Human Factors <i>(P: PSY:1001)</i>	3	S	ISE:3450 Ergonomics	3
F	ISE:3610 Stochastic Modeling <i>(P: STAT:2020; C: ISE:3700)</i>	3	S	ISE:3660 Data Analytics with R <i>(P: STAT:2020)</i>	3
F/S	ISE:3700 Operations Research <i>(P: MATH:2550; C: STAT:2020)</i>	3	S	ISE:3750 Digital Systems Simulation <i>(P: ISE:3700 & ISE:3610)</i>	3
		15	ALL	Required/Elective: Focus Area, Minor, Certificate, etc.	3
			S	ISE:3000 Professional Seminar: Industrial Engineering <i>(Status: Junior)</i>	0
					18

Fourth Year

7th Semester		sh	8th Semester		sh
ALL	General Education Course	3	F/S	ISE:4600 Industrial Engineering Design Project (IEDP) <i>(C: ALL IE Required Courses - ISE:2500, ISE:3300, ISE:3350, ISE:3400, ISE:3450, ISE:3500, ISE:3600, ISE:3660, & ISE:3750)</i>	4
F	ISE:3350 Process Engineering <i>(P: ISE:3700)</i>	3	F/S	Elective: Focus Area - Systems	3
F	ISE:3600 Quality Control <i>(P: STAT:2020, or BAIS:9100 or (STAT:3100 & STAT:3101 & STAT:3200)</i>	3	F/S	Required/Elective: Focus Area - Math / Science	3
ALL	Required/Elective: Focus Area, Minor, Certificate, etc.	3	F/S	Required/Elective: Focus Area, Minor, Certificate, etc.	3
ALL	Required/Elective: Focus Area, Minor, Certificate, etc.	3	F/S	Required/Elective: Focus Area, Minor, Certificate, etc.	3
		15	S	ISE:3000 Professional Seminar: Industrial Engineering	0
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