

Industrial Engineering 2024-2025 Catalog: Suggested Course Sequence

Degrees	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	
B.S. in IE 122 or 123 credits	MATH 1650 Calc I 4 cr Placement Exam or C- or better in Math 1430	MATH 1660 Calc II 4 cr C- or better in MATH 1650	MATH 2650 Calc III 4 cr C- or better in MATH 1660 or MATH 1660H	MATH 2670 Diff Eq/Lap 4 cr C- or better in MATH 1660 or MATH 1660H	IE 3050 Engr Econ Analysis 3 cr MATH 1660	IE 3480 Solidif Processes 3 cr IE 2480 MATE 2730 <i>Spring Only</i>	IE 4130 Stoch Modeling 4 cr Math 2650 Stat 2310 <i>Fall Only</i>	IE 4410 IE Design 3 cr IE 2480, IE 2710, IE 3610, Credit/Enrollment in IE 3410, IE 4130, IE 4480	
	Social Sciences and Humanities Elective 3 cr	PHYS 2310 & PHYS 2310L Classical Phys I 5 cr Credit/enrollment in MATH 1660	IE 2480 Intro Mfg Processes 3 cr MATH 166, PHYS 2310 & 2310L, Credit/enrollment in IE 1010, MAT E 2730 <i>Fall Only</i>	STAT 2310 Prob & Stat 4 cr Credit/enrollment in MATH 2650 or MATH 2650H	IE 3120 Optimization 3 cr Credit/enrollment in MATH 2670 <i>Fall Only</i>	IE 3610 Quality Assurance 3 cr STAT 2310	ENGL 3140 Tech Comm 3 cr Junior Classification ENGL 2500	IE 4480 Manuf Sys Engr 3 cr IE 2480 <i>Spring Only</i>	
	CHEM 1670 Engr Chem 4 cr MATH 1400 & CHEM 500 or HS Equivalent	Social Sciences and Humanities Elective 3 cr	MATE 2730 Principles of Materials Science 3 cr CHEM 1670 or 1770, MATH 1650	IE 2220 Design & Analysis Sys Improvements 3 cr Credit/ enrollment in IE 2710 <i>Spring Only</i>	IE 3410 Production Systems 3 cr STAT 2310, Credit/enrollment in IE 3120 <i>Fall Only</i>	Engineering Topic Elective 3 cr	ME 2310 Engineering Thermodynamics I 3 cr MATH 1660, CHEM 1670, PHYS 2310 & PHYS 2310 L	Focus Elective 3 cr	
	IE 1480 Information Engr 3 cr Credit/enrollment in MATH 1430	ENGL 1500 Critical Thinking and Communication 3 cr	PHYS 2320 & PHYS 2320 L Classical Phys II 5 cr PHYS 2310& 2310 L MATH 1660	IE 2710 Appl Ergonomics 3 cr PHYS 2310 & PHYS 2310L <i>Spring Only</i>	IE 4320 Ind. Automation 3cr OR: EE 4420 Intro to Circuits 2 cr PHYS 2320 & 232L(both), Math 2670(EE 4420 only)	Social Sciences and Humanities Elective 3 cr	Focus Elective 3 cr	Management Elective 3 cr	
	ENGR 1010 Orientation R cr	LIB 1600 Intro to College Level Research 1 cr	ENGL 2500 or ENGL 2500H Written, Oral, Visual, & Electronic Composition 3 cr C or better in ENGL 1500 or placement, Credit/enrollment in LIB 1600		SPCM 2120 Fund of Public Speaking 3 cr	CE 2740 Statics 3 cr PHYS 2310 & 2310L, Credit/enrollment in MATH 1660	Social Sciences and Humanities Elective 3 cr	Engineering Topic Elective 3 cr	
			IE 1010 IE Orient R cr						
	122 or 123 Total Credits	14 cr	16 cr	18 cr	14 cr	15-14 cr	15cr	16 cr	15 cr

Applicable prerequisites and co-requisites are listed under each course.

Note: Please verify all prerequisites and semester offerings with current course catalog

Elective List can be found on the IMSE website at <http://www.imse.iastate.edu/undergraduate-program/advising/>

Course Descriptions can be found at: <http://catalog.iastate.edu/azcourses/>

Light blue shading indicates Basic Program classes for all Engineering Majors; Dark blue indicates the IE core, course descriptions on the back of this page

Last Updated

9/13/2023 DPS