

Industrial Engineering 2023-2024 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 165 Calc I 4 cr Placement Exam or C- or better in Math 143	MATH 166 Calc II 4 cr C- or better in MATH 165	MATH 265 Calc III 4 cr C- or better in MATH 166 or MATH 166H	MATH 267 Diff Eq/Lap 4 cr C- or better in MATH 166 or MATH 166H	I E 305 Engr Econ Analysis 3 cr MATH 166	I E 348 Solidif Processes 3 cr IE 248 MAT E 273 <i>Spring Only</i>	I E 413 Stoch Modeling 4 cr Math 265 Stat 231 <i>Fall Only</i>	I E 441 IE Design 3 cr IE 248, IE 271, IE 361, Credit/Enrollment in IE 341, IE 413, IE 448
	Social Sciences and Humanities Elective 3 cr	PHYS 231 & PHYS 231L Classical Phys I 5 cr Credit/enrollment in MATH 166	I E 248 Intro Mfg Processes 3 cr MATH 166, PHYS 231 & 231L, Credit/enrollment in IE 101, MAT E 273 <i>Fall Only</i>	STAT 231 Prob & Stat 4 cr Credit/enrollment in MATH 265 or MATH 265H	I E 312 Optimization 3 cr Credit/enrollment in MATH 267 <i>Fall Only</i>	I E 361 Quality Assurance 3 cr STAT 231	ENGL 314 Tech Comm 3 cr Junior Classification ENGL 250	I E 448 Manuf Sys Engr 3 cr IE 248 <i>Spring Only</i>
	CHEM 167 Engr Chem 4 cr MATH 140 & CHEM 50 or HS Equivalent	Social Sciences and Humanities Elective 3 cr	MAT E 273 Principles of Materials Science 3 cr CHEM 167 or 177, MATH 165	I E 222 Design & Analysis Sys Improvements 3 cr Credit/ enrollment in IE 271 <i>Spring Only</i>	I E 341 Production Systems 3 cr STAT 231, Credit/enrollment in IE 312 <i>Fall Only</i>	Engineering Topic Elective 3 cr	M E 231 Engineering Thermodynamics I 3 cr MATH 166, CHEM 167, PHYS 231 & PHYS 231L	Focus Elective 3 cr
	IE 148 Information Engr 3 cr Credit/enrollment in MATH 143	ENGL 150 Comp I 3 cr	PHYS 232 & PHYS 232 L Classical Phys II 5 cr PHYS 231 & 231 L MATH 166	I E 271 Appl Ergonomics 3 cr PHYS 231 & PHYS 231L <i>Spring Only</i>	IE 432 Ind. Automation 3cr OR: E E 442 Intro to Circuits 2 cr PHYS 232 & 232L(both), Math 267(EE 442 only)	Social Sciences and Humanities Elective 3 cr	Focus Elective 3 cr	Management Elective 3 cr
	ENGR 101 Orientation R cr	LIB 160 Library 1 cr	ENGL 250 or ENGL 250H Comp II 3 cr C or better in ENGL 150 or placement, Credit/enrollment in LIB 160, <i>Sophomore or above</i>		SP CM 212 Fund of Public Speaking 3 cr	C E 274 Statics 3 cr PHYS 231 & 231L, Credit/enrollment in MATH 166	Social Sciences and Humanities Elective 3 cr	Engineering Topic Elective 3 cr
		I E 101 I E 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