Student Information

Name:	OSU Email:

Suggested Curriculum

This should be used as a **guide** only. Semester offerings are subject to change.

Year	Autumn		Spring	
	PHYSICS 1250 (Intro Physics 1)	5 hr	PHYSICS 1251 (Intro Physics 2)	5 hr
1	MATH 1151 (Calculus 1)		MATH 1172 (Engineering Math A)	5 hr
	ENGR 1181 (Fundamentals of ENGR 1)	2 hr	ENGR 1182 (Fundamentals of ENGR 2)	2 hr
	ENGR 1100 (Engineering Survey)	1 hr	CSE 1223 (Programming Java)	3 hr
	General Education (1st Social Science)	3 hr	General Education (Writing I, English 1110.xx)	3 hr
	MATH 2568 (Linear Algebra)	3 hr	MATH 2415 (Ordinary & Partial Diff Eq)	3 hr
	STAT 3470 (Probability & Statistics)	3 hr	ISE 2400 (Design of Work)	2 hr
2	MECHENG 2040 (Statics & Mechanics)	4 hr	MECHENG 2850.02 (Numerical Methods)	3 hr
	Additional Science ¹ 4		ISE 2040 (Engineering Economics)	2 hr
	General Education (Writing II)		CSE 2112 (Modeling w/ Sprdst & DB for Engr.)	3 hr
3	ISE 2500 (Intro to Manf. Engineering)	3 hr	ISE 3210 (Non-linear & Dynamic Optimization))	3 hr
	ISE 3200 (Linear & Integer Programming)	3 hr	ISE 3800 (Project Management)	3 hr
	ISE 3600 (Workplace Ergonomics)	3 hr	ISE 4120 (Quality & Reliability Engineering)	3 hr
	ISE 3700 (Cognitive Systems Eng)	3 hr	ISE 3400 (Prod Plan & Fac Design)	4 hr
	General Education (History)	3 hr	General Education (Literature)	3 hr
4	ISE 4100 (Stoch Modeling & Simulation)	4 hr	ISE 4900 (Capstone Design)	4 hr
	Technical Elective ²		Technical Elective	
	Technical Elective		Technical Elective	
	Technical Elective		General Education (2 nd Social Science)	
	General Education (Visual & Performing Arts)	3 hr	General Education (Ethics + Cultures & Ideas)	3 hr

Total Hours to complete the degree program = 127

Program Options

¹ Choose one of the following: ANATOMY 2220, 2300, 3300, ANTHROP 2200, BIOLOGY 1113, 1114, 2100, CHEM 1210, 1250, EARTHSC 1911, 2155, 2203, 2204, 3203, ENR 2155, 3280, EEOB 2510, 2520, GEOG 2200, 3300, PHYSICS 3700

All students must satisfy a 32 credit hour minimum for math and basic sciences. Students with high math or science placements and transfer students without credit for lower courses should consult with an ISE academic advisor to ensure this minimum is met. Such students may be required to take additional approved coursework to meet graduation requirements.

Acceptance Criteria

Acceptance into this program is based on the eligibility point hour ratio (EPHR) of Math 1151, 1172; Engineering 1181; English 1110; Physics 1250, 1251; and CSE 1223. The following additional classes must be completed before applying to the major, but are not included in the EPHR calculation: ENGR 1100 and ENGR 1182. Additionally, Math 2568 and Statistics 3470 must be completed or in progress during the term the student applies. Acceptance into ISE requires a C or better in Math 2568, STAT 3470, CSE 1223, and ENGLISH 1110. The application review includes assessment of grades (including transfer grades) in the courses listed above, along with a complete review of each student's full academic record and personal statement. Applications are accepted during autumn and spring terms.

Technical and Other Electives

² The ISE program includes 15 semester hours of technical electives from a specific track. These tracks are designed to provide depth within an area of ISE that is of particular interest to each student and include the following options: Supply Chain Management & Logistics, Data Analytics & Optimization, Management Systems & Operations Research, Human Systems Integration & Design, and Manufacturing. The Supply Chain Management & Logistics and Data Analytics & Optimization tracks require a separate application for admission.

General Education Requirement

Writing and Communication	
English 1110.xx	3 hr
Second Writing Course	3 hr
Recommended: COMPSTD 2367, COMM 2367, ENR 2367,	
NURSING 2367	
Social Science	
Must choose each course from a distinct subgroup of this can	tegory.
	3 hr
	3 hr
Literature	
Entrature	3 hr
Visual and Performing Arts	
	3 hr
Historical Study	
	3 hr
Second Historical Study or Cultures and Ideas	
	3 hr
Social Diversity in the U.S. or Global Diversity	
Some courses may overlap with another GE category, See co	ourse list.
0	/ 3 hr
Ethics	
Some courses may overlap with another GE category, See co	ourse list.
0	/ 3 hr

Optional: Foreign Language

Foreign Language 1103 Course: credit (including EM) for a foreign language sequence through 1103, or credit for a foreign language course with a prerequisite of 1103, can be used to satisfy the Cultures & Ideas Gen Ed category.

Foreign Language Minor Courses: completion of a foreign language minor permits a student to overlap up to 6 credit hours between the Gen Ed and minor. A curricular petition must be submitted to the student's program, which will forward it to the college for review. The courses must meet the spirit of the Gen Ed category for which overlap is requested.

See the list of approved general education courses for additional details: www.advising.engineering.osu.edu