

Student Information

Name: _____ OSU ID: _____ OSU Admit Term: _____

Phone: _____ Email (*name.number@osu.edu*): _____

Suggested Curriculum*

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

Year	Autumn	Spring
1	___ PHYSICS 1250 (<i>Intro Physics 1</i>) 5 hr ___ MATH 1151 (<i>Calculus 1</i>) 5 hr ___ ENGR 1181 (<i>Fundamentals of ENGR 1</i>) 2 hr ___ ENGR 1100 (<i>Engineering Survey</i>) 1 hr ___ General Education (<i>Social Science</i>) 3 hr	___ PHYSICS 1251 (<i>Intro Physics 2</i>) 5 hr ___ MATH 1172 (<i>Engineering Math A</i>) 5 hr ___ ENGR 1182 (<i>Fundamentals of ENGR 2</i>) 2 hr ___ CSE 1222 (<i>Programming C++</i>) 3 hr ___ General Education (<i>Writing I, English 1110.xx</i>)... 3 hr
2	___ MATH 2568 (<i>Linear Algebra</i>) 3 hr ___ STAT 3470 (<i>Probability & Statistics</i>) 3 hr ___ MECHENG 2040 (<i>Statics & Mechanics</i>) 4 hr ___ Additional Science ¹ 4 hr ___ General Education (<i>Writing II, Engr. 2367</i>) 3 hr	___ MATH 2415 (<i>Ordinary & Partial Diff Eq</i>) 3 hr ___ ISE 2400 (<i>Design of Work</i>) 2 hr ___ MECHENG 2850 (<i>Numerical Methods</i>) 3 hr ___ ISE 2040 (<i>Engineering Economics</i>) 2 hr ___ General Education (<i>Ethics + Cultures & Ideas</i>)... 3 hr
3	___ ISE 3200 (<i>Linear & Integer Programming</i>) 3 hr ___ ISE 3600 (<i>Workplace Ergonomics</i>) 3 hr ___ ISE 2500 (<i>Intro to Manf. Engineering</i>) 3 hr ___ ISE 3700 (<i>Cognitive Systems Eng</i>) 3 hr ___ General Education (<i>History</i>) 3 hr	___ ISE 3210 (<i>Non-linear & Dynamic Optimization</i>)... 3 hr ___ ISE 3800 (<i>Project Management</i>) 3 hr ___ ISE 4120 (<i>Quality & Reliability Engineering</i>) 3 hr ___ ISE 3400 (<i>Prod Plan & Fac Design</i>) 4 hr ___ General Education (<i>Literature</i>) 3 hr
4	___ ISE 4100 (<i>Stoch Modeling & Simulation</i>) 4 hr ___ Technical Elective ² 3 hr ___ Technical Elective 3 hr ___ Technical Elective 3 hr ___ General Education (<i>Visual & Performing Arts</i>)... 3 hr	___ ISE 4900 (<i>Capstone Design</i>) 4 hr ___ Technical Elective 3 hr ___ Technical Elective 3 hr ___ Technical Elective 3 hr ___ General Education (<i>2nd Social Science</i>) 3 hr

Total Hours to complete the degree program = 127

Program Options

¹ Choose either Chemistry 1250 (4) or Biology 2100 (4)

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. A minimum 2.0 EPhR is required. Applications are accepted during both Autumn and Spring Terms.

Technical and Other Electives

² The ISE program includes 18 semester hours of technical electives. Three technical elective courses must be taken as a set, from a list of Technical Elective packages approved by the ISE Undergraduate Studies Committee. These packages are designed to provide depth within an area of ISE that is of particular interest to each student. In total, a maximum of two technical elective courses may come from programs other than Industrial & Systems Engineering.*

General Education Requirement

Writing and Communication

English 1110.xx 3 hr

Second Writing Course ENGR 2367 3 hr

Social Science

Only one course per Social Science group may count.

_____ 3 hr

_____ 3 hr

Literature

_____ 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

Course may overlap with another general education category.

_____ 0 / 3 hr

Ethics

Ethics courses listed below may overlap with their corresponding general education category.

Social Science, Individual & Groups sub-category: Economics 3048.

Social Science, any sub-category: Sociology 3302, Sociology 3464.

Cultures & Ideas: Comparative Studies 2341, Philosophy 1332,

Philosophy 1337.

_____ 0 / 3 hr

Foreign Language

Pre-approved substitutions

- A. Completion by enrollment in a foreign language sequence through 1103, or enrollment in a foreign language course with a prerequisite of 1103, can be substituted for one general education course in Cultures and Ideas.
- B. Completion of a foreign language minor can be substituted for two general education courses, one in Social Science groups A or B, and one in Cultures and Ideas.

University Capstone (Cross-Disciplinary Seminar)

Pre-approved substitutions

Completion of a Social Science 3597 or 4597 can be substituted for a Social Science general education course in any group. Completion of an Arts & Humanities 3597 or 4597 can be substituted for a Visual/Performing Arts general education course. (This capstone is not a substitute for ISE 4900.)

A list of approved general education courses can be found at engineering.osu.edu/major.