

**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 ..... 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 / ENGR 1222 ( <i>Programming in C++</i> ) ..... 3 hr ___ General Education ..... 3 hr
2	___ MATH 2173 ( <i>Engineering Math B</i> ) ..... 3 hr ___ STAT 3470 ( <i>Probability &amp; Statistics</i> ) ..... 3 hr ___ MECHENG 2040 ( <i>Statics &amp; Mechanics</i> ) ..... 4 hr ___ Additional Science <sup>1</sup> ..... 4 hr ___ General Education ..... 3 hr	___ MATH 2174 ( <i>Lin Alg &amp; Diff Eq</i> ) ..... 3 hr ___ ISE 2400 ( <i>Design of Work</i> ) ..... 2 hr ___ Engineering Science <sup>2</sup> ..... 3 hr ___ ISE 2040 ( <i>Engineering Economics</i> ) ..... 2 hr ___ General Education ..... 3 hr
3	___ ISE 3200 ( <i>Linear &amp; Integer Programming</i> ) ..... 3 hr ___ ISE 3400 ( <i>Prod Plan &amp; Fac Design</i> ) ..... 4 hr ___ ISE 2500 ( <i>Intro to Manf. Engineering</i> ) ..... 3 hr ___ ISE 3700 ( <i>Cognitive Systems Eng</i> ) ..... 3 hr ___ General Education ..... 3 hr	___ ISE 3210 ( <i>Non-linear Programming</i> ) ..... 3 hr ___ ISE 3800 ( <i>Project Management</i> ) ..... 3 hr ___ ISE 4120 ( <i>Quality Control &amp; DOE</i> ) ..... 3 hr ___ ISE 3600 ( <i>Workplace Ergonomics</i> ) ..... 3 hr ___ General Education ..... 3 hr
4	___ ISE 5100 ( <i>Stoch Modeling &amp; Simulation</i> ) ..... 4 hr ___ Technical Elective <sup>3</sup> ..... 3 hr ___ Technical Elective ..... 3 hr ___ Technical Elective ..... 3 hr ___ General Education ..... 3 hr	___ ISE 4900 ( <i>Capstone Design</i> ) ..... 4 hr ___ Technical Elective ..... 3 hr ___ Technical Elective ..... 3 hr ___ Technical Elective ..... 3 hr ___ General Education ..... 3 hr

**Total Hours to complete the degree program = 127**

**Program Options**

<sup>1</sup> Choose either Chemistry 1250 (4) or Biology 2100 (4)

<sup>2</sup> Choose one: MATSCEN 2010 (3 hr), ECE 2300 (3 hr), CSE 2111 (3 hr), CSE 2122 (3 hr), MECHENG 2030 (3 hr), MECHENG 2850 (3 hr), MECHENG 3500 (3 hr)  
 (Note: MECHENG 3500 and MATSCEN 2010 require Chemistry 1250 as a prerequisite; MECHENG 2850 requires permission of instructor.)

<sup>3</sup> At least three technical electives must be taken as a set, from a list of approved packages; a maximum of two technical electives may come from programs other than Industrial & Systems Engineering

**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; and CSE 1222. A minimum 2.0 EPHR is required. Applications are accepted during both Autumn and Spring Terms.

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## Technical and Other Electives

The ISE program includes 18 semester hours of technical electives. At least 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.

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## 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 United States

*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.*

\_\_\_\_\_ 0 / 3 hr

### Foreign Language

*Pre-approved substitutions*

- A. Substitution A: Completion through 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 Gen Ed course requirement as a Cultures & Ideas.
- B. Substitution B: Completion of a foreign language minor can be substituted for two Gen Ed courses: one course as a Social Science, (Individuals & Groups or Organizations & Politics subgroups only) and one course as either a Literature or a Cultures & Ideas.

Parameters: These substitutions are permitted when the credit is earned through successful completion of the course at OSU. Credit earned at another institution (K credit), or credit by examination (EM credit) is not applicable.

Students must choose either Substitution A OR Substitution B. Both substitutions cannot be applied simultaneously.

### 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. See the list of approved general education courses for additional details: [www.engineering.osu.edu/major](http://www.engineering.osu.edu/major).