

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	___ ENGR 1110 (<i>Engineering Survey</i>) 1 hr ___ ENGR 1181 (<i>Fundamentals of Engr 1</i>) 2 hr ___ MATH 1151 (<i>Calculus I</i>) 5 hr ___ PHYSICS 1250 (<i>Mechanics, Thermal, Waves</i>) 5 hr ___ General Education 3 hr	___ ENGR 1182 (<i>Fundamentals of Engr 2</i>) 2 hr ___ MATH 1172 (<i>Engineering Math A</i>) 5 hr ___ * CHEM 1250 (<i>Gen Chem for Engineers</i>) 4 hr (see Chem note below) ___ General Education 3 hr ___ General Education 3 hr
2	___ MATSCEN 2010 (<i>Intro to Mats Sci & Engr</i>) 3 hr ___ MATH 2173 (<i>Engineering Mathematics B</i>) 3 hr ___ PHYSICS 1251 (<i>E&M, Optics, Modern Phys</i>) 5 hr ___ STAT 3450 (<i>Statistics for Engineers</i>) 2 hr ___ MECHENG 2040 (<i>Statics & Mechanics</i>) 4 hr	___ MATH 2174 (<i>Lin Alg Diff Eq for Engineers</i>) 3 hr ___ MATSCEN 2251 (<i>Mat Thermodyn</i>) 3 hr ___ WELDENG 3001 (<i>Survey of Weld Eng</i>) 3 hr ___ WELDENG 3601 (<i>Intro Arc Welding Lab</i>) 1 hr ___ ECE 2300 (<i>Electrical Cir and Elect Devices</i>) 3 hr ___ ENGR 1221 (<i>Comp Prog MATLAB</i>) 2 hr
3	___ MATSCEN 3141 (<i>Structural Transformations</i>) 3 hr ___ MATSCEN 3333 (<i>Mat Processing Lab 1</i>) 2 hr ___ WELDENG 4001 (<i>Phy Prin Weld Proc & Lab</i>) 4 hr ___ WELDENG 4201 (<i>Engr Anlys Dsgn Sim & Lab</i>) 4 hr ___ General Education 3 hr	___ WELDENG 4002 (<i>Phy Prin Weld Proc & Lab 2</i>) 4 hr ___ WELDENG 4101 (<i>Welding Metallurgy 1</i>) 3 hr ___ WELDENG 4202 (<i>Welding Design</i>) 3 hr ___ WELDENG 4301 (<i>Nondestr Eval & Lab</i>) 3 hr ___ WELDENG 4611 (<i>Welding Mtlrgy Lab 1</i>) 1 hr ___ ISE 4500 (<i>Fund of Manufacturing Engr</i>) 3 hr
4	___ WELDENG 4189 (<i>Industrial Experience</i>) 1 hr ___ WELDENG 4102 (<i>Welding Mtlrgy 2</i>) 3 hr ___ WELDENG 4612 (<i>Welding Mtlrgy Lab 2</i>) 1 hr ___ WELDENG 4901 (<i>Capstone Weld Dsgn 1</i>) 2 hr ___ Technical Elective 2 hr ___ Technical Elective 2 hr ___ General Education 3 hr	___ WELDENG 4902 (<i>Capstone Weld Dsgn 2</i>) 3 hr ___ ISE 2040 (<i>Engineering Economics</i>) 2 hr ___ Technical Elective 3 hr ___ General Education 3 hr ___ General Education 3 hr ___ General Education 3 hr

Total Hours to complete the degree program = 129

Program Options

* Chem 1210 + Chem 1220 may be used to fulfill Chemistry requirements. Please consult with academic advisor.

Acceptance Criteria

Admission to the major program requires a formal application and is based on a student's cumulative point-hour ratio (CPHR), eligibility point-hour ratio (EPhR), and additional admission to major courses.

EPhR courses: MATH 1151, 1172; ENGR 1181, 1182; CHEM 1250 or 1210; PHYSICS 1250; MATSCEN 2010; or course equivalents.

Additional admission to major courses not included in EPhR calculation: ENGLISH 1110. Applications are accepted during autumn term only.

Technical and Other Electives

Seven credit hours of technical electives are required. One credit hour may be taken in a non-graded (S/U) course, usually taken as WELDENG 4193.01 – *Lincoln Electric Welding “Boot Camp.”* In general, technical electives may be any course in Engineering, Math, Biological, or Physical Sciences numbered 3000 or higher. WELDENG courses used as technical electives must be numbered 4000 or higher. Exceptions and recommendations: Chem 2310 or 2510 (*Organic Chemistry*) may be used as a technical elective.

General Education Requirement

Writing and Communication

English 1110.xx 3 hr

Second Writing Course 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

Some courses may overlap with another GE category, See course list.

0 / 3 hr

Ethics

Some courses may overlap with another GE category, See course list.

0 / 3 hr

Foreign Language

Pre-approved substitutions

- A. Credit (including EM) for a foreign language sequence through 1103, or credit for a foreign language course with a prerequisite of 1103, can be substituted for one Gen Ed course requirement as a Cultures & Ideas.
- 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: 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.advising.engineering.osu.edu.