

Student Information

Name: _____ OSU Email: _____

Suggested Curriculum

This should be used as a **guide** only. Semester offerings are subject to change. **Bolded courses are offered only in the terms indicated.**

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 2001 (<i>Survey of Weld Eng</i>) 3 hr ___ WELDENG 2601 (<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 & Lab 1</i>) 4 hr ___ WELDENG 4202 (<i>Welding Design</i>) 3 hr ___ WELDENG 4301 (<i>Nondestr Eval & Lab</i>) 3 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 & Lab 2</i>) 4 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 and spring terms. **Admitted students will begin major courses in spring term, regardless of the term in which they are admitted.**

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

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.

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.