| 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    | CHEM 1210 (Gen Chem I)       5 hr        MATH 1151 (Calculus I)       5 hr        ENGR 1181.xx (Fundamentals of ENGR I)       2 hr        ENGR 1100.15 (Engineering Survey)       1 hr        General Education       3 hr | CHEM 1220 (Gen Chem II)       5 hr        MATH 1172 (Engineering Math A)       5 hr        ENGR 1182.xx (Fundamentals of ENGR II)       2 hr        Engr 1221       2 hr        General Education       3 hr   |
| 2    | CHEM 2510 (Organic Chemistry I) 4 hr MATH 2173 (Mathematical Topics for Engineers) 3 hr PHYSICS 1250 (Mechanics, Thermal, Waves) 5 hr CBE 2100 (Chemical Engineering Seminar) 1 hr CBE 2200 (Process Fundamentals) 3 hr    | CHEM 2520 (Organic Chemistry II)       4 hr        CHEM 2540 (Organic Chemistry Lab I)       2 hr        CBE 2345 (Computational Methods for ChE)       3 hr        CBE 3508 (Thermodynamics I)       3 hr        General Education       3 hr   |
| 3    | CBE 2420 (Transport Phenomena I) 3 hr CBE 2523 (Separation Processes) 3 hr CBE 3509 (Thermodynamics II) 3 hr CBE 5779 or Math/Stats Technical Elective 3 hr General Education 3 hr   | CBE 3421 (Transport Phenomena II) 3 hr CBE 3610 (Kinetics and Reactor Design) 3 hr CBE 3730 (Unit Operations Lab I) 1 hr Technical Elective 3 hr Technical Elective 3 hr General Education 3 hr  |
| 4    | CHEM 4300 (Physical Chemistry I) 3 hr CBE 3422 (Transport Phenomena III) 3 hr CBE 3731 (Unit Operations Lab II) 1 hr CBE 4760 (Process Design, Econ, & Strategy) 3 hr General Education 3 hr General Education 3 hr        | CBE 3732(Unit Operations Lab III)       2 hr         CBE 4624 (Process Dynamics and Control)       3 hr         CBE 4755(Process Safety)       2 hr         CBE 4764 (Process Sim & Product Eng)       3 hr         Technical Elective       3 hr         General Education       3 hr |

Total Hours to complete the degree program = 127

# **Program Options**

Students wishing to complete the biomolecular focus will substitute Biochemistry 4511 in place of Chemistry 2520.

# **Acceptance Criteria**

Acceptance into this program is based upon a holistic review of the student's record including essays. Please review admission/acceptance criteria on the College of Engineering website:

https://advising.engineering.osu.edu/currentstudents/applying-your-major

### **Technical and Other Electives**

Students have the option to complete a biomolecular, environmental, or polymer focus for their technical elective plan. Each focus will require the completion of two approved courses in CBE plus one additional course in CBE or in another department. All students will also be required to complete one math or statistics technical elective.

| Total Hours (minimum of 12 are required) |
|--|
| <br>Additional Course XXXX(2-4 hr)       |
| CBE 5779 or Math/Stat elective(2-4 hr)   |
| CBE XXXX(3 hr)                           |
| CBE XXXX(3 hr)                           |

# **General Education Requirement**

| Writing and | Communication |
|-------------|---------------|
|-------------|---------------|

| English 1110.xx                                      | 3 hr |
|--|------|
| Second Writing Course                                | 3 hr |
| Casial Caianas                                       |      |
| 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 |
|  |      |
| <b>Second Historical Study or Cultures and Ideas</b> |      |
|  | 3 hr |
| Carlal Diagnosita in the Harita J Ctatan             |      |
| Social Diversity in the United States                |      |

#### **Ethics**

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

0 / 3 hr

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

#### 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 & Polities subgroups only) and one course as either a Literature or a Cultures & Ideas.

Parameters: <u>Students must choose either Substitution A OR Substitution B. Both substitutions cannot be applied simultaneously.</u>

#### **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: <a href="www.advising.engineering.osu.edu">www.advising.engineering.osu.edu</a>.