### Suggested Curriculum

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Autumn</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>CHEM 1210 <em>(Gen Chem I)</em> 5 hr</td>
<td>CHEM 1220 <em>(Gen Chem II)</em> 5 hr</td>
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<tr>
<td></td>
<td>MATH 1151 <em>(Calculus I)</em> 5 hr</td>
<td>MATH 1172 <em>(Engineering Math A)</em> 5 hr</td>
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<td></td>
<td>ENGR 1181.xx <em>(Fundamentals of ENGR I)</em> 2 hr</td>
<td>ENGR 1182.xx <em>(Fundamentals of ENGR II)</em> 2 hr</td>
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<tr>
<td></td>
<td>ENGR 1100.15 <em>(Engineering Survey)</em> 1 hr</td>
<td>Engr 1221* 2 hr</td>
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<tr>
<td></td>
<td>General Education 1201 <em>(Launch Seminar)</em> 1 hr</td>
<td>General Education <em>(Foundation)</em> 3 hr</td>
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<tr>
<td>2</td>
<td>CHEM 2510 <em>(Organic Chemistry I)</em> 4 hr</td>
<td>CHEM 2520 <em>(Organic Chemistry II)</em> 4 hr</td>
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<tr>
<td></td>
<td>MATH 2173 <em>(Mathematical Topics for Engineers)</em> 3 hr</td>
<td>CHEM 2540 <em>(Organic Chemistry Lab I)</em> 2 hr</td>
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<td></td>
<td>PHYSICS 1250 <em>(Mechanics, Thermal, Waves)</em> 5 hr</td>
<td>CBE 2345 <em>(Computational Methods for ChE)</em> 3 hr</td>
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<td>CBE 2100 <em>(Chemical Engineering Seminar)</em> 1 hr</td>
<td>CBE 3508 <em>(Thermodynamics I)</em> 3 hr</td>
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<td>CBE 2200 <em>(Process Fundamentals)</em> 3 hr</td>
<td>General Education <em>(Foundation)</em> 3 hr</td>
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<tr>
<td>3</td>
<td>CBE 2420 <em>(Transport Phenomena I)</em> 3 hr</td>
<td>CHEM 4300 <em>(Physical Chemistry I)</em> 3 hr</td>
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<td>CBE 2523 <em>(Separation Processes)</em> 3 hr</td>
<td>CBE 3421 <em>(Transport Phenomena II)</em> 3 hr</td>
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<td>CBE 3509 <em>(Thermodynamics II)</em> 3 hr</td>
<td>CBE 3610 <em>(Kinetics and Reactor Design)</em> 3 hr</td>
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<td></td>
<td>CBE 5779 or Math/Stats Technical Elective 3 hr</td>
<td>CBE 3730 <em>(Unit Operations Lab I)</em> 1 hr</td>
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<td>General Education <em>(Foundation)</em> 3 hr</td>
<td>CBE 3731 <em>(Unit Operations Lab II)</em> 1 hr</td>
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<td>General Education <em>(Foundation)</em> 3 hr</td>
<td>General Education <em>(Foundation)</em> 3 hr</td>
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<tr>
<td>4</td>
<td>CBE 3422 <em>(Transport Phenomena III)</em> 3 hr</td>
<td>CBE 4624 <em>(Process Dynamics and Control)</em> 3 hr</td>
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<td>CBE 3732 <em>(Unit Operations Lab III)</em> 2 hr</td>
<td>CBE 4755 <em>(Process Safety)</em> 2 hr</td>
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<td>CBE 4760 <em>(Process Design, Econ, &amp; Strategy)</em> 3 hr</td>
<td>CBE 4764 <em>(Process Sim &amp; Product Eng)</em> 3 hr</td>
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<td>Technical Elective 3 hr</td>
<td>Technical Elective 3 hr</td>
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<td></td>
<td>General Education <em>(Foundation)</em> 3 hr</td>
<td>General Education <em>(Foundation)</em> 3 hr</td>
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<td></td>
<td>General Education <em>(Theme: Citizenship for JUST)</em> 4 hr</td>
<td>General Education <em>(Theme: Student Choice)</em> 4 hr</td>
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### Program Options

Students who have credit for Biology 1101 or higher may substitute Biochemistry 4511 in place of Chemistry 2520.

### Acceptance Criteria

Acceptance into this program is based on a holistic review of the student’s record including an essay. Admission to major is considered only after a student has taken at least 12 credit hours of letter grade in their undergraduate career at OSU and have completed the following courses: MATH 1151, 1172; ENGR 1181, 1182; Chem 1220, (or their equivalents). Applications are accepted Autumn and Spring semester ONLY. Students must complete the online Major Application the semester in which the student is completing their pre-major requirements (i.e. the semester before the student wants to enter the 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.

____CBE XXXX…………………………(3 hr)
____CBE XXXX…………………………(3 hr)
____CBE 5779 or Math/Stat elective……………….(2-4 hr)
____Additional Course XXXX …..(2-4 hr)

___Total Hours (minimum of 12 are required)

General Education Requirements
Launch Seminar
GENED 1201 1 hr

Foundations
Complete all of the following.
Writing and Information Literacy 3 hr
Historical and Cultural Studies 3 hr
Social and Behavioral Sciences 3 hr
Race, Ethnicity, and Gender Diversity 3 hr
Literary, Visual, and Performing Arts 3 hr

Thematic Pathways
Citizenship for a Just and Diverse World 4-6 hr
Additional Theme(s) 4-6 hr