### Suggested Curriculum

This should be used as a guide only. Semester offerings are subject to change. (**BOLD** courses offered only indicated semesters.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Autumn</th>
<th>Spring</th>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td></td>
<td>ENGR 1110.10 <em>(Engineering Survey 1)</em></td>
<td>ENGR 1120.10 <em>(Engineering Survey 2)</em></td>
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<td>CHEM 1210 <em>(General Chemistry 1)</em></td>
<td>CHEM 1220 <em>(General Chemistry 2)</em></td>
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<td></td>
<td>ENGR 1181 <em>(Fundamentals of ENGR 1)</em></td>
<td>ENGR 1182 <em>(Fundamentals of ENGR 2)</em></td>
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<td>MATH 1151 <em>(Calculus 1)</em></td>
<td>MATH 1172 <em>(Calculus 2)</em></td>
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<td>2</td>
<td>FABE 2100 <em>(Introduction to FABE)</em></td>
<td>FABE 2110 <em>(Fluid Mechanics in FABE)</em></td>
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<td>MATH 2177 <em>(Math Topics for Engineers)</em></td>
<td>Biology 1114 <em>(Biology II)</em></td>
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<td>PHYSICS 2151 <em>(E&amp;M, Optics, Modern Physics)</em></td>
<td>CHEM 2310 <em>(Organic Chemistry)</em></td>
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<td>Biology 1113 <em>(Biology I)</em></td>
<td>MECHENG 2040 <em>(Statics &amp; Mechanics)</em></td>
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<td>General Education <em>(English 1110)</em></td>
<td>ENG 1221** <em>(Computer Programming)</em></td>
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<td>FABE 3120 <em>(Thermodynamics FABE)</em></td>
<td>FABE 3130 <em>(Heat &amp; Mass Transfer FABE)</em></td>
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<td>ISE 2040 <em>(Engineering Economics)</em></td>
<td>FABE 3140 <em>(Professional Develop in FABE)</em></td>
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<td>Advanced Biology elective</td>
<td>FABE 3150 <em>(Systems Dynamics &amp; Electricity)</em></td>
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<td>General Education course <em>(2nd writing)</em></td>
<td>FABE 3510 <em>(Intro to Biological Engineering)</em></td>
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<td>FABE 4900 <em>(Capstone Design 1)</em></td>
<td>Required Senior Exit Survey via E-mail for FABE</td>
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<td>FABE 5160 <em>(Electr, Msmt &amp; Instrumentation)</em></td>
<td>FABE 4910 <em>(Capstone Design 2)</em></td>
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Total Hours to complete the degree program = 132

- Check On-line Course Bulletin for availability of other courses.
- * Honors alternative course options available
- ** CSE 1222 which is 3 credit hours is also accepted
- *# Either Engineering 4410.01 offered in Autumn or Engineering 4410.02 (Solid Works), offered in Spring semesters, accepted.

### Acceptance Criteria

Acceptance into the Food, Agricultural and Biological Engineering major will depend upon the cumulative point-hour ratio (CPHR) and the earned point-hour ratio (EPHR) at completion of the following pre-major courses: Math 1151, 1172; Physics 1250; Chemistry 1210 or 1250; Engineering 1181 and 1182. A minimum EPHR of 2.0 is required. Currently there is no limit to the number of students accepted annually. See the department's Undergraduate Academic Program Coordinator in 260-B AE for application details.
Technical and Other Electives

**Technical Electives** (10 hours required) *recommended

- BIOMEDE 2000 (3)
- BIOMEDE 4310 (3)
- BIOMEDE 4410 (3)
- BIOMEDE 4510 (3)
- BIOMEDE 4610 (3)
- CHBE 3610 (3)
- CHBE 5740 (3)
- CHBE 5765 (3)
- CHBE 5766 (3)
- CHBE 5771 (3)
- CHBE 5772 (3)

- ENGR 5050* (3)
- ENGR 4692.01S (1-3)
- ENGR 5710 (3)
- ENGR 5797.XX (1-15)
- FABE 3610 (3)
- FABE 3810 (3)
- FABE 4410 (3)
- FABE 4998 (1-5)
- FABE 5200* (3)
- FABE 5520* (3)
- FABE 5540* (3)
- FABE 5550* (3)
- FABE 5797.XX* (3)
- FABE 5820* (3)
- ISE 4500 (3)
- ISE 5820 (3)
- MATSCEN 2010* (3)
- MATSCEN 3611 (3)
- MECHENG 5180 (3)
- MECHENG 5541 (3)
- MECHENG 5682 (3)
- STATS 3460 (3)
- STATS 3470 (3)

**Advanced Biology Electives** (7 hours required)

- ANATOMY 2220 (4)
- ANIMSCI 2200.01 (3)
- ANIMSCI 2200.02 (1)
- ANIMSCI 3130 (3)
- BIOCHEM 4511* (4)
- ENTMLGY 4000 (3)
- EEOB 2510 (3)
- EEOB 2520 (3)
- EEOB 3310 (3)
- EEOB 4410 (3)
- EEOB 4998 (1-5)
- FABE 3610 (3)
- FABE 3810 (3)
- FABE 4410 (3)
- FABE 4998 (1-5)
- FABE 5200* (3)
- FABE 5520* (3)
- EEOB 3510 (3)
- EEOB 4550 (3)
- EEOB 2200 (3)
- EEOB 2201 or 2202 (3)
- HCS 2200 (3)
- MICROBIOL 4000* (4)
- MICROBIOL 5150 (3)
- MOLGEN 4500* (3)
- MOLGEN 5607 (3)
- MOLGEN 5608 (3)
- NEUROSC 3000 (3)
- NEUROSC 3010 (3)
- NEUROSC 3050 (3)
- NEUROSC 3070 (3)
- PHYSIO 3101 or 3102 (3)
- PLNTPTH 3001 (3)
- PLNTPTH 4550 (3)
- PLNTPTH 4550 (3)

**General Education Requirement**

**Writing and Communication**

- English 1110.xx 3 hr
- Second Writing Course* 3 hr

*Recommend ENGR 2367

**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 & Polities 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

Revised 2/24/2017