# Undergraduate Curriculum in Biological Systems Engineering
## Bioenvironmental Engineering Option
### 2015-2016 Catalog
Total Credits 128

### First Year (32 cr.)

<table>
<thead>
<tr>
<th>Semester 1 (16 cr.)</th>
<th>Semester 2 (16 cr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R Engr101 Orientation (FS)</td>
<td>1 A B E 110 Experiencing BSE (S)</td>
</tr>
<tr>
<td>3 A B E 170 Graphics and Design (FS)</td>
<td>3 A B E 160 Engineering Problems (FS)</td>
</tr>
<tr>
<td>4 Math 165 Calculus I (FSSS)</td>
<td>4 Math 166 Calculus II (FSSS)</td>
</tr>
<tr>
<td>4 Chem 167 General Chemistry (FS)</td>
<td>5 Phys 221 Classical Physics I (FSSS)</td>
</tr>
<tr>
<td>1 Chem 167L General Chemistry Lab (FS)</td>
<td>3 → SS&amp;H Elective (FSSS)</td>
</tr>
<tr>
<td>3 Engl 150 Crit. Think. and Comm. (FSSS)</td>
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<tr>
<td>1 Lib 160 Information Literacy (FSSS)</td>
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### Second Year (34 cr.)

<table>
<thead>
<tr>
<th>Semester 3 (17 cr.)</th>
<th>Semester 4 (17 cr.)</th>
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<tbody>
<tr>
<td>3 A B E 216 Fund. Ag. and Biol. Engineering (F)</td>
<td>2 A B E 218 Project Mgmt/Design Ag &amp; Bio Engr (S)</td>
</tr>
<tr>
<td>3 EM 274 Statics of Engineering (FSSS)</td>
<td>1 A B E 201 Preparing for the Workplace (FS)</td>
</tr>
<tr>
<td>5 Phys 222 Classical Physics II (FSSS)</td>
<td>3 EM 324 Mechanics of Materials (FSSS)</td>
</tr>
<tr>
<td>3 Biol 212 Principles of Biology II (FSSS)</td>
<td>4 Math 267 Differential Equations (FSSS)</td>
</tr>
<tr>
<td>3 Engl 250 Writ/Oral/Vis/Elec Composition (FSSS)</td>
<td>2 Chem 211 Environmental Analysis (FS)</td>
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<td>2 Chem 211L Environmental Analysis Lab (FS)</td>
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<td>3 → SSH Elective (FSSS)</td>
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### Third Year (31 cr.)

<table>
<thead>
<tr>
<th>Semester 5 (15 cr.)</th>
<th>Semester 6 (16 cr.)</th>
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<tbody>
<tr>
<td>3 A B E 316 Applications and Systems Modeling (F)</td>
<td>3 A B E 380 Principles of BSE (S)</td>
</tr>
<tr>
<td>4 A B E 363 Electric Power and Electronics (F)</td>
<td>3 C E 372 Engr. Hydrology &amp; Hydraulics (FS)</td>
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<tr>
<td>3 E M 378 Mechanics of Fluids (FSSS)</td>
<td>3 ME 231 Thermodynamics (FSSS)</td>
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<tr>
<td>1 EM 327 Mechanics of Materials Lab (FSSS)</td>
<td>3 Micro 302 Biology of Microorganisms (FSSS)</td>
</tr>
<tr>
<td>3 Chem 231 Elementary Organic Chemistry (FSSS)</td>
<td>1 Micro 302L Microbiology Lab (FSSS)</td>
</tr>
<tr>
<td>1 Chem 231L Elementary Organic Chem Lab (FSSS)</td>
<td>3 Stat 305 Engineering Statistics (FSSS)</td>
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### Fourth Year (31 cr.)

<table>
<thead>
<tr>
<th>Semester 7 (14 cr.)</th>
<th>Semester 8 (17 cr.)</th>
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<tbody>
<tr>
<td>2 A B E 415 Ag &amp; Biosystems Engr. Design I (FS)</td>
<td>2 A B E 416 Ag &amp; Biosystems Engr. Design II (FS)</td>
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<tr>
<td>3 A B E 404 Instrumentation for Ag and Bio Engr (F)</td>
<td>3 CE 326 Environmental Engineering (FS)</td>
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<tr>
<td>3 A B E 431 Soil and Water Conservation (F)</td>
<td>3 → Bioenvironment Elective II (FS)</td>
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<tr>
<td>3 A B E 480 Engineering Analysis of Bio Systems (F)</td>
<td>3 → U. S. Diversity Elective (FSSS)</td>
</tr>
<tr>
<td>3 → Bioenvironment Elective I (FS)</td>
<td>3 → International Perspectives Elective (FSSS)</td>
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<tr>
<td></td>
<td>3 → Communication Elective (FSSS)</td>
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</tbody>
</table>

*Please check the current catalog and Schedule of Classes for most recent offerings*

Updated 12/31/2014