Below is the *advised sequence* of courses for this degree program and prerequisites as of 3/07/17. The official degree requirements and prerequisites can be found in the University General Catalog and the prerequisites are subject to change.

<table>
<thead>
<tr>
<th>COURSE NUMBER AND TITLE</th>
<th>UNITS</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1ST SEMESTER</strong></td>
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<tr>
<td>MATH 122A/B or MATH 125 Calculus I with Applications</td>
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<td>Appropriate Math Placement</td>
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<tr>
<td>CHEM 151 General Chemistry I or CHEM 105A/106A</td>
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<td>Appropriate Math Placement</td>
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<tr>
<td>ENGL 101 or 107 or 109H First-Year Composition</td>
<td>3</td>
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<tr>
<td>ENGR 102A/B Introduction to Engineering or ENGR 102</td>
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<td>Concurrent enrollment or completion of MATH 122B or 125</td>
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<tr>
<td>Tier I General Education</td>
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<tr>
<td><strong>2ND SEMESTER</strong></td>
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<tr>
<td>MATH 129 Calculus II</td>
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<td>MATH 122A/B or 125 with C or better</td>
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<tr>
<td>CHEM 152 General Chemistry II or CHEM 105B/106B</td>
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<td>CHEM 151 or 105A/106A</td>
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<tr>
<td>PHYS 141 Introductory Mechanics or PHYS 161H</td>
<td>4</td>
<td>MATH 122B or 125; Concurrent enrollment or completion of MATH 129</td>
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<tr>
<td>ENGL 102 or 108 or 109H First-Year Composition</td>
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<td>ENGL 101 or ENGL 107</td>
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<td><strong>3RD SEMESTER</strong></td>
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<tr>
<td>CE 214 Statics</td>
<td>3</td>
<td>PHYS 141 or 161H; MATH 129</td>
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<tr>
<td>ABE 284 Biosystems Thermal Engineering</td>
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<td>MATH 129; PHYS 141</td>
</tr>
<tr>
<td>ABE 201 Introduction to Biosystems Engineering</td>
<td>2</td>
<td>MATH 122B or 125</td>
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<tr>
<td>MATH 223 Vector Calculus</td>
<td>4</td>
<td>MATH 129 with C or better</td>
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<tr>
<td>MCB 181R/L Introductory Biology I OR PLS 240 Plant Bio</td>
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<td>Appropriate Math Placement</td>
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<td><strong>4TH SEMESTER</strong></td>
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<tr>
<td>ABE 205 Engineering Analytic Computer Skills</td>
<td>3</td>
<td>College of Engineering Major</td>
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<tr>
<td>MATH 254 Intro to Ordinary Differential Equations</td>
<td>3</td>
<td>MATH 129 or 223 with C or better</td>
</tr>
<tr>
<td>PHYS 241 Introductory Electricity and Magnetism or PHYS 261H</td>
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<td>PHYS 141, MATH 129</td>
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<tr>
<td>ECOL 182R/L Introductory Biology II or MIC 205 A/L General Microbiology or PSIO 201 Human Anatomy and Physiology</td>
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<td>ECOL182R/L &amp; MIC 205: Appropriate Math Placement</td>
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<tr>
<td>COURSE NUMBER AND TITLE</td>
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<tr>
<td><strong>5TH SEMESTER</strong></td>
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<tr>
<td>CE 218 Mechanics of Fluids or AME 331 Introduction to Fluid Mechanics</td>
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<tr>
<td>SIE 265 Engineering Management I</td>
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<tr>
<td>ABE 221 Introduction to Computer Aided Design</td>
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<td>ABE 447 Sensors and Controls</td>
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<td>SIE 305 Engineering Probability and Statistics</td>
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<td><strong>6TH SEMESTER</strong></td>
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<tr>
<td>ABE 423 Biosystems Analysis and Design</td>
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<td>ABE Design Elective – See major advisor for course approval</td>
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<tr>
<td>ABE Technical Elective – See major advisor for course approval</td>
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<tr>
<td>ENGL 308 Technical Writing or ENVS 408 Scientific Writing for ENVIR+AG+LF SCI AGTM 422 Communicating Knowledge in Ag and Life Sciences</td>
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<td>Tier I General Education</td>
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<td><strong>7TH SEMESTER</strong></td>
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<tr>
<td>ABE 496A Seminar in Engineering Careers and Professionalism</td>
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<td>ABE 498A Senior Design: Biosystems Engineering Design I or ENGR 498A Cross-disciplinary Design (Fall Only) – Senior Status</td>
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<td>ABE Technical Elective – See major advisor for course approval</td>
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<tr>
<td>ABE Design Elective – See major advisor for course approval</td>
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<td>ABE 393 Internship</td>
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<td>AME 324A Mechanical Behavior of Engineering Materials</td>
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<td>Tier II General Education</td>
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<tr>
<td><strong>8TH SEMESTER</strong></td>
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<td>ABE 498B Senior Design: Biosystems Engineering Design I or ENGR 498B Cross-disciplinary Design (Spring Only) – Senior Status</td>
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<tr>
<td>Tier II General Education</td>
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</table>

Tier I and II General Education Courses must meet University general education requirements. One course must be recognized by the university as meeting the Diversity Requirement.