

**Undergraduate Curriculum in Biological Systems Engineering
Bioenvironmental Engineering Option**

2015-2016 Catalog

Total Credits 128

First Year (32 cr.)

| Semester 1 (16 cr.) | | Semester 2 (16 cr.) | |
|----------------------------|---------------------------------------|----------------------------|-------------------------------------|
| R | Engr101 Orientation (FS) | 1 | A B E 110 Experiencing BSE (S) |
| 3 | A B E 170 Graphics and Design (FS) | 3 | A B E 160 Engineering Problems (FS) |
| 4 | Math 165 Calculus I (FSSS) | 4 | Math 166 Calculus II (FSSS) |
| 4 | Chem 167 General Chemistry (FS) | 5 | Phys 221 Classical Physics I (FSSS) |
| 1 | Chem 167L General Chemistry Lab (FS) | 3 | → SS&H Elective (FSSS) |
| 3 | Engl 150 Crit. Think. and Comm.(FSSS) | | |
| 1 | Lib 160 Information Literacy (FSSS) | | |

Second Year (34 cr.)

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

Third Year (31 cr.)

| Semester 5 (15 cr.) | | Semester 6 (16 cr.) | |
|----------------------------|---|----------------------------|--|
| 3 | A B E 316 Applications and Systems Modeling (F) | 3 | A B E 380 Principles of BSE (S) |
| 4 | A B E 363 Electric Power and Electronics (F) | 3 | C E 372 Engr. Hydrology & Hydraulics (FS) |
| 3 | E M 378 Mechanics of Fluids (FSSS) | 3 | ME 231 Thermodynamics (FSSS) |
| 1 | EM 327 Mechanics of Materials Lab (FSSS) | 3 | Micro 302 Biology of Microorganisms (FSSS) |
| 3 | Chem 231 Elementary Organic Chemistry (FSSS) | 1 | Micro 302L Microbiology Lab (FSSS) |
| 1 | Chem 231L Elementary Organic Chem Lab (FSSS) | 3 | Stat 305 Engineering Statistics (FSSS) |

Fourth Year (31 cr.)

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

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