BIO SYSTEMS ENGINEERING
ENVIRONMENT & NATURAL RESOURCES OPTION

16 Credit Hours

BAE 1012 Intro Biosystems
2 Hours

MATH 2144
Calculus I
4 Hours

MATH 2153
Calculus II
3 Hours

MATH 2144
Calculus III
3 Hours

BAE 1012
Exper Methods
2 Hours

BAE 1022
18 Credit Hours

MATH 2163
IEM 3503

MATH 2153

PHYS 2014

BAE 2013

PHYS 2114

MATH 2163
Calculus III
3 Hours

BAE 3033

PHYS 2114

MATH 2153
Gen. Physics II
4 Hours

BAE 3033

MATH 2153

ENGL 1113

ENGL 1113

ENGL 1213

ENGL 1213

Chemistry
3 Hours

Chemistry
3 Hours

English Comp II
3 Hours

English Comp II
3 Hours

4 Hours

4 Hours

4 Hours

4 Hours


NOTES:
1) MATH 2144 needs to be preceded with a minimum score of 75 on the Math Placement Test or with MATH 1513 and MATH 1813, respectively.
2) HIST 1103 can be replaced with HIST 1483 (H) or HIST 1493 (DH)
3) See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/

#english-composition)
4) ENGL 1113 can be replaced with ENGL 1313 Critical Analysis and Writing I.
5) ENGL 1213 can be replaced with ENGL 1413 or ENGL 3323.
6) At least 6 hours designated “H”, 3 hours designated “S”, and 3 hours designated “A” or “N” (A total of 12 hours). Of these, 3 hours need to meet the International Dimension “I” and 3 hours need to meet the Diversity Component “D”.
7) BAE 4001 and BAE 4012 are to be taken concurrently.

Other Requirements:
• A minimum 2.0 Technical GPA. The Technical GPA is calculated from all BAE prefixes or substitutions to BAE courses.
• Students are required to complete the Fundamentals of Engineering (FE) exam prior to graduation.
• A minimum of 40 semester credit hours and 100 grade points must be earned in courses numbered 3000 or above.
• A 2.00 GPA or higher in upper-division hours.

Shaded = Course requires a grade of C or above

Patterned = General Education Course

Course No.
Prerequisites

Course Name
# of Hours

See Note #

Subsequent Courses
# BIOSYSTEMS ENGINEERING
## ENVIRONMENT & NATURAL RESOURCES OPTION

### Master's Programs:
Criteria for admission to the Graduate College to pursue the Master of Science include:
1. Receive a B.S. degree from an accredited institution
2. Academic performance in undergraduate work at a level that indicates a high probability of success in a graduate program requiring a 3.0/4.0 minimum grade point average
Or further information, contact the School or the Office of the Dean of Engineering.

A flexible study plan is designed to meet each student's individual goals.

### Course Plan
2022-2023
123 Hours

#### Year 3
17 Credit Hours

- **PBIO 1404 or BIOL 1113/1111**
- **NREM 3013** Applied Ecology 3 Hours
- **ENSC 2143** Strength of Mat'l 3 Hours
- **BAE 4012**
- **ENSC 2113** Prereq for SOIL 2124 is CHEM 1414
- **SOIL 2124 or CIVE 3714** 4 Hours
- **MATH 2233**
- **ENSC 2613**
- **STAT 4033 or STAT 4073** Engr Statistics 3 Hours
- **MATH 2153**
- **GEOL 1114** Phys. Geology 4 Hours
- **MATH 1483 or 1513** 4 Hours

#### Year 4
15 Credit Hours

- **MATH 2233**
- **ENSC 2613**
- **BAE 3023** Inst. &Ctrls 3 Hours
- **BAE 3013** Heat/Mass Trans 3 Hours
- **BAE 3213** Energy & Power 3 Hours
- **STAT 4073**
- **BAE 4001** Prof. Practice 1 Hours
- **BAE 4012** Engr. Design I 2 Hours
- **BAE 4023**
- **GEOL 1114** Phys. Geology 4 Hours
- **CHEM 1414** or 1513

#### Additional State/OSU Requirements:
- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2027.