

BIOSYSTEMS ENGINEERING ENVIRONMENT AND NATURAL RESOURCES OPTION

Course Plan 2025-2026 125 Hours

Year 1

16 Credit Hours

BAE 1011

Intro to **Biosystems** 1 Hour Note 1

UNIV 1111

First Yr. Seminar

1 Hour

Prerequisites: C or better in one of the following-**MATH 1613 MATH 1715 MATH 1813**

MATH 2144

Calculus 1 **BAE 3033** 4 Hours **ENSC 2113** Note 2 **ENSC 2213**

CHEM 1414

Gen Chemistry

4 Hours

CIVE 3833 CIVE 2081 SOIL 2124 BAE 4324

ENSC 2213

MATH 2153

PHYS 2014

ENGL 1113

Engl Comp I 3 Hours Notes 3

ENGL 1213

HIST 1103

American Hist

3 Hours Note 4

- A minimum 2.0 Technical GPA. The Technical GPA is calculated from all BAE prefixes or substitutions to BAE courses.
- 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.

14 Credit Hours

BAE 1022

Exper Methods 2 Hours Note 1

PHYS 2014

MATH 2144 Univ. Physics I 4 Hours

BAE 3033 ENSC 2213 ENSC 2113

MATH 2163

MATH 2153 MATH 2144

MATH 2233 Calculus II **ENSC 3233 IEM 3503** 3 Hours **ENSC 2613**

ENGR 1322 Or ENGR 1332

Engr Design

2 Hours

ENGL 1213 Engl Comp II **ENGL 1113**

3 Hours Note 3

Year 2

16 Credit Hours

BAE 2013

Comp Methods 3 Hours

Note 1

BIOL 1113 & BIOL 1111 or BIOL 1114 or **PBIO 1404** 4 Hours

BAE 3033

CHEM 1414

BIOL 1113 &

BIOL 1111 or

BIOL 1114 or

PBIO 1404

MATH 2144

PHYS 2014

CIVE 2081

Environ, Chem. 1 Hour

16 Credit Hours

BAE 3033

Biomaterials

3 Hours

MATH 2163 MATH 2153

MATH 2144

PHYS 2014

CHEM 1414

MATH 2144

PHYS 2014

hour requirements.

Calculus III 3 Hours

ENSC 2113

Statics

3 Hours

STAT 4033 or **STAT 4073**

MATH 2153

MATH 2233 Diff Equations

3 Hours

BAE 4324

BAE 3013

BAE 3213

BAE 4314

ENSC 2213 Thermodynamics **BAE 3213**

3 Hours

ENSC 2143

ENSC 3233

BAE 4323

ENSC 2113

ENSC 3233 MATH 2153 Fluid Mech 3 Hours

ENSC 2143

3 Hours

Strength of Mat'l

BAE 3013 BAE 3213 BAE 4314

CIVE 3833

ENSC 2113

BAE 4012

POLS 1113 American Gov't 3 Hours

Other Requirements:

- Students are required to complete the

Patterned = General Education Course

Shaded = Course requires a grade of C or above

Course No. Course Name # of Hours See Note # **Prerequisites**

Subsequent Courses

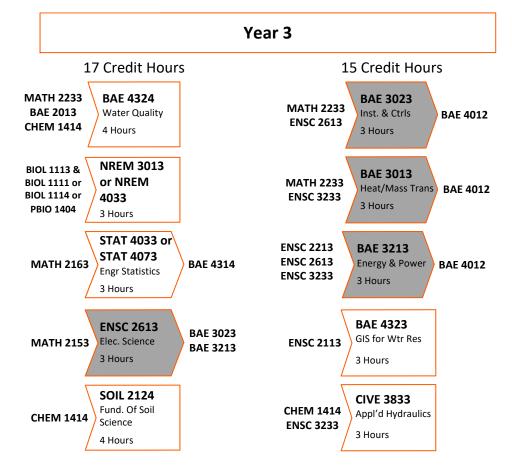
NOTES: (F)-offered in Fall, (SP)-offered in Spring

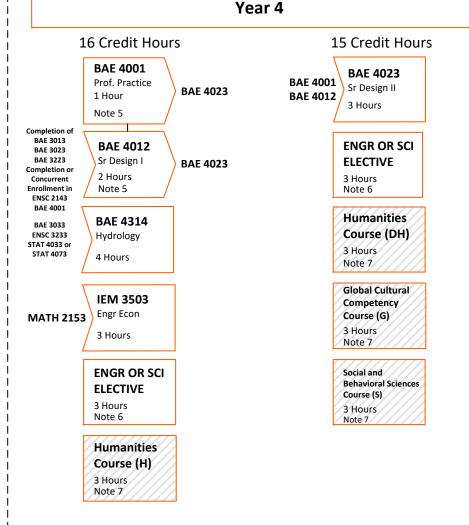
- 1) BAE 1011, BAE 1022 and BAE 2013 can often be substituted for students transferring into the department internally or externally from another institution. Please contact the department for more information.
- 2) The prerequisite for MATH 2144 is to score a minimum of 75 on the Math Placement Test or by earning a minimum grade of "C" in MATH 1813 or MATH 1715 or MATH 1613.
- 3) See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition).
- 4) HIST 1103 can be replaced with HIST 1483 (H) or HIST 1493 (DH).
- 5) BAE 4001 and BAE 4012 are to be taken concurrently.
- 6) An engineering and/or science elective to be selected from the following list: AST 2313 (F), AST 4203 (F), CIVE 3714 (F.SP), CIVE 3813
- (F), CIVE 4833 (F), PLNT 4033 (SP). Some of these courses may require specific prerequisites. 7) Additional general education credit hours are required to meet the total 40-hour minimum of general education credit. Students must take 3 hours of credit in courses designated "G," 3 hours of credit in courses designated "S," 3 hours of credit in courses designated "D," and 6 hours of credit in courses designated "H." Additionally, students must take a course designated "Q," "H," "N," "S," "D," "G," or "F." There will be courses that can be paired, for example (DH) courses, that can be used to meet multiple general education designation



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Prerequisites

Course No.
Course Name
of Hours

See Note#

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
- 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 2031.