



BIOSYSTEMS ENGINEERING

GENERAL OPTION

Course Plan
2025-2026
120 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 I
4 Hours
Note 2

MATH 2153
PHYS 2014
BAE 3033
ENSC 2113
ENSC 2213

CHEM 1414
Gen Chemistry
4 Hours

ENSC 2213

ENGL 1113
Engl Comp I
3 Hours
Note 3

ENGL 1213

HIST 1103
American History
3 Hours
Note 4

14 Credit Hours

BAE 1022
Exper Methods
2 Hours
Note 1

MATH 2144 **PHYS 2014**
Univ. Physics I
4 Hours

BAE 3033
ENSC 2113
ENSC 2213

MATH 2144 **MATH 2153**
Calculus II
3 Hours

MATH 2163
MATH 2233
IEM 3503
ENSC 3233
ENSC 2613

ENGR 1332
Engr Design
2 Hours

ENGL 1113 **ENGL 1213**
Engl Comp II
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

MATH 2153 **MATH 2163**
Calculus III
3 Hours

**STAT 4033 or
STAT 4073**

MATH 2144 **PHYS 2014** **CHEM 1414** **ENSC 2213**
Thermodynamics
3 Hours

BAE 3213
BAE 4413

MATH 2144 **PHYS 2014** **ENSC 2113**
Statics
3 Hours

ENSC 2123
ENSC 2143
ENSC 3233

15 Credit Hours

**BIOL 1113 &
BIOL 1111 or
BIOL 1114 or
PBIO 1404
MATH 2144
PHYS 2014**

BAE 3033
Biomaterials
3 Hours

BAE 4314

**Global Cultural
Competency
Course (G)**
3 Hours
Note 5

MATH 2153 **MATH 2233**
Diff Equations
3 Hours

BAE 3013
BAE 3023

MATH 2153 **ENSC 3233**
Fluid Mech
3 Hours

BAE 3013
BAE 3213
BAE 4283
BAE 4314
BAE 4413

ENSC 2113 **ENSC 2143**
Strength of Mat'l
3 Hours

BAE 4012
BAE 4224

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.

Patterned = General Education Course

Shaded = Course requires a grade of C or above

Course No.
Course Name
of Hours
See Note #

**Subsequent
Courses**

Prerequisites

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) 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 hour requirements.
- 6) An upper level (3000 or 4000) BAE or AST course as approved by advisor. Suggested courses: ENSC 2123 (F, SP), BAE 3223 (F), BAE 4283 (SP), BAE 4413 (F), AST 4203 (F), AST 4213 (F). Some courses may require specific prerequisites.
- 7) BAE 4001 and BAE 4012 are to be taken concurrently.
- 8) Select one of the following: PLNT 4443 or PLNT 4543 (F), HORT 4963 (F), ENVR 4033 or NREM 4033 (SP), NREM 3013 (F), MICR 2123 (SP), BIOL 3204 (F, SP). Some courses may require specific prerequisites.



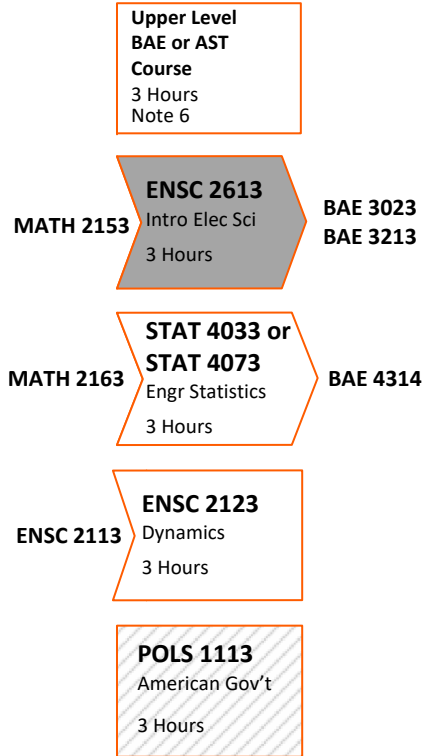
BIOSYSTEMS ENGINEERING

GENERAL OPTION

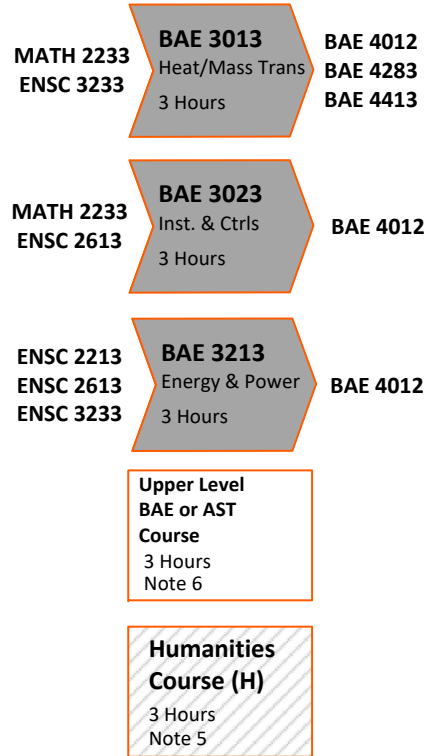
Course Plan
2025-2026
120 Hours

Year 3

15 Credit Hours

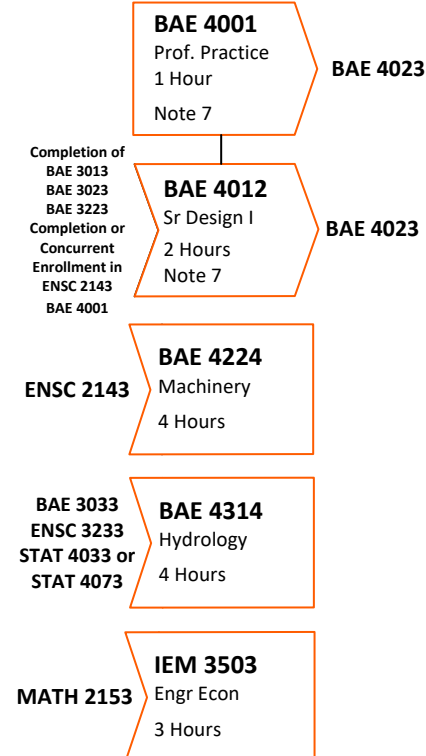


15 Credit Hours



Year 4

14 Credit Hours



15 Credit Hours



Patterned = General Education Course

Shaded = Course requires a grade of C or above

Course No.
Course Name
of Hours
See Note #

Subsequent
Courses

Prerequisites

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 2031.