



# BIOSYSTEMS ENGINEERING GENERAL OPTION

Course Plan  
2021-2022  
121 Hours

## Year 1

16 Credit Hours

**BAE 1012**  
Intro Biosystems  
2 Hours

**BAE 1022**

**MATH 2144**  
Calculus 1  
4 Hours  
Note 1

**MATH 2153**  
**PHYS 2014**  
**BAE 2013**  
**BAE 3033**  
**ENSC 2113**  
**ENSC 2113**

**BIOL 1114 or**  
**PBIO 1404**  
4 Hours

**BAE 2013**  
**BAE 3033**

**HIST 1103**  
American Hist  
3 Hours  
Note 2

**ENGL 1213**

**ENGL 1113**  
Engl Comp 1  
3 Hours  
Note 3, 4

18 Credit Hours

**BAE 1022**  
Exper Methods  
2 Hours

**BAE 1012**

**MATH 2153**  
Calculus II  
3 Hours

**MATH 2144**

**MATH 2163**  
**MATH 2233**  
**IEM 3503**  
**ENSC 2613**

**PHYS 2014**  
Gen. Physics I  
4 Hours

**MATH 2144**

**BAE 3033**  
**PHYS 2114**  
**ENSC 2113**  
**ENSC 2213**

**CHEM 1414**  
Gen Chemistry  
4 Hours

**ENSC 2213**

**ENGL 1213**  
Engl Comp II  
3 Hours  
Note 5

**ENGL 1113**

**ENGR 1332**  
Engr Design  
2 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**

## Year 2

16 Credit Hours

**BIOL 1114**  
**MATH 2144**

**BAE 2013**  
Modeling  
3 Hours

**MATH 2153**

**MATH 2163**  
Calculus III  
3 Hours

**STAT 4033 or 4073**

**PHYS 2014**

**PHYS 2114**  
Gen. Physics II  
4 Hours

**ENSC 2613**

**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

**MATH 2144**  
**BIOL 1114**  
**PHYS 2014**

**BAE 3033**  
Biomaterials  
3 Hours

**BAE 4314**

**MATH 2153**

**MATH 2233**  
Diff Equations  
3 Hours

**ENSC 2113**

**ENSC 2123**  
Dynamics  
3 Hours

**MATH 2153**  
**ENSC 2113**

**ENSC 3233**  
Fluid Mech  
3 Hours

**ENSC 2113**

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

**BAE 3013**  
**BAE 3213**  
**BAE 3223**  
**BAE 4283**  
**BAE 4314**  
**BAE 4413**  
**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.

### 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 "H", "S", "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



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## Year 3

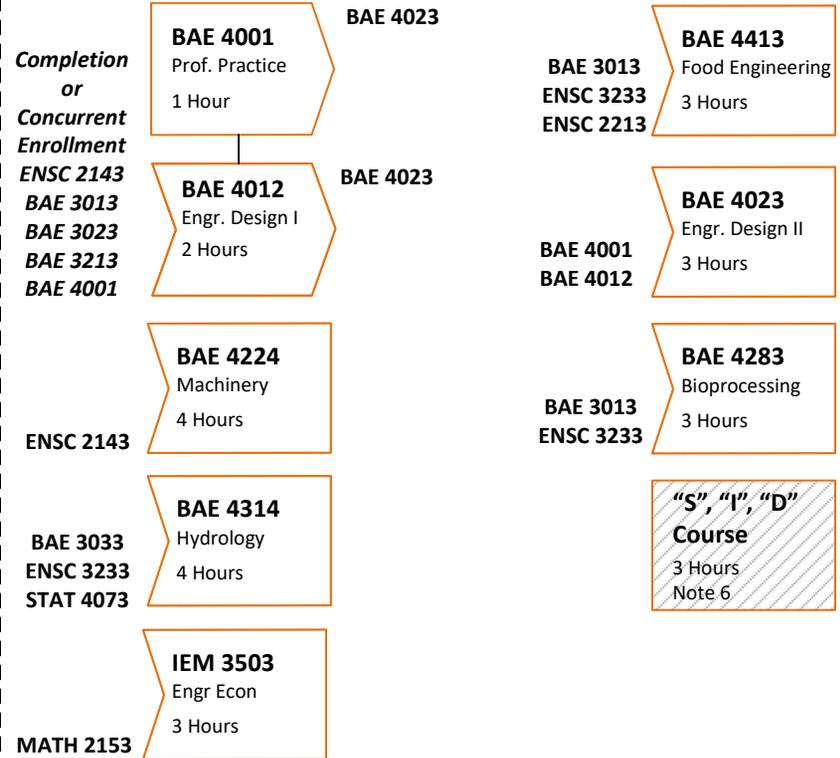
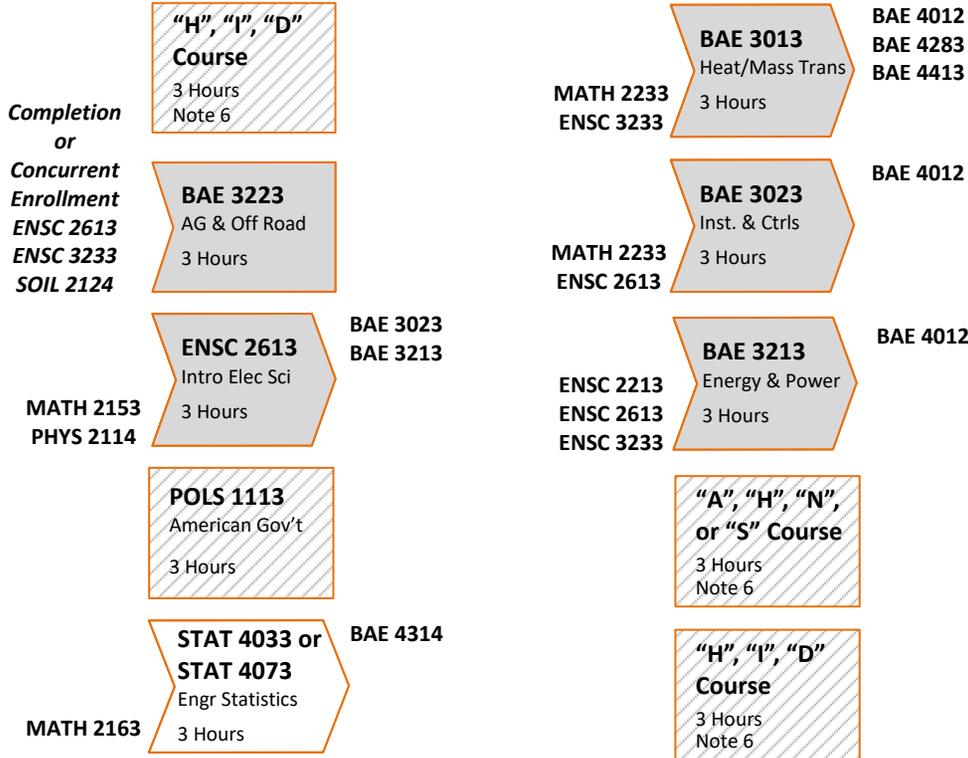
## Year 4

15 Credit Hours

15 Credit Hours

14 Credit Hours

12 Credit Hours



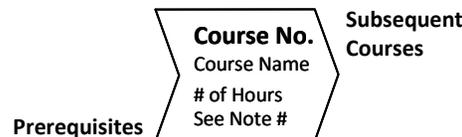
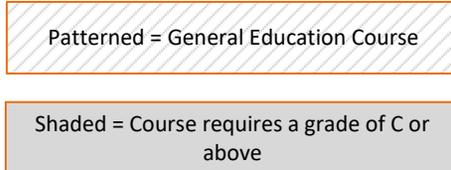
**Master's Programs:**

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.



**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.