



BIOSYSTEMS ENGINEERING

ENVIRONMENT & NATURAL RESOURCES OPTION

Course Plan
2023-2024
125 Hours

Year 1

Year 2

16 Credit Hours

18 Credit Hours

16 Credit Hours

15 Credit Hours

Preparatory
One of These
MATH 1613
MATH 1715
MATH 1813

BAE 1012 Intro Biosystems 2 Hours	
MATH 2144 Calculus 1 4 Hours Note 1	MATH 2153 PHYS 2014 BAE 2013 ENSC 2123 ENSC 2213
BIOL 1113 & BIOL 1111 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	ENGL 1213

BAE 1022 Exper Methods 2 Hours	
MATH 2153 Calculus II 3 Hours	MATH 2163 IEM 3503
PHYS 2014 Gen. Physics I 4 Hours	BAE 3033 PHYS 2114 ENSC 2213 ENSC 2113
CHEM 1414 Gen Chemistry 4 Hours	ENSC 2213 CIVE 3833
ENGL 1213 Engl Comp II 3 Hours Note 5	ENGL 1213
ENGR 1332 Engr Design 2 Hours	ENGR 1332

BIOL 1113 & BIOL 1111 or PBIO 1404 MATH 2144	BAE 2013 Modeling 3 Hours
MATH 2153	MATH 2163 Calculus III 3 Hours
PHYS 2014	PHYS 2114 Gen. Physics II 4 Hours
MATH 2144 PHYS 2014 CHEM 1414	ENSC 2213 Thermodynamics 3 Hours
MATH 2144 PHYS 2014	ENSC 2113 Statics 3 Hours

BIOL 1113 & BIOL 1111 or PBIO 1404 MATH 2144 PHYS 2014	BAE 3033 Biomaterials 3 Hours
MATH 2153	MATH 2233 Diff Equations 3 Hours
MATH 2153	POLS 1113 American Gov't 3 Hours
MATH 2153 ENSC 2113	ENSC 3233 Fluid Mech 3 Hours
MATH 2153 PHYS 2114	ENSC 2613 Elec. Science 3 Hours

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.	Subsequent Courses
Course Name	
# of Hours See Note #	

Prerequisites

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

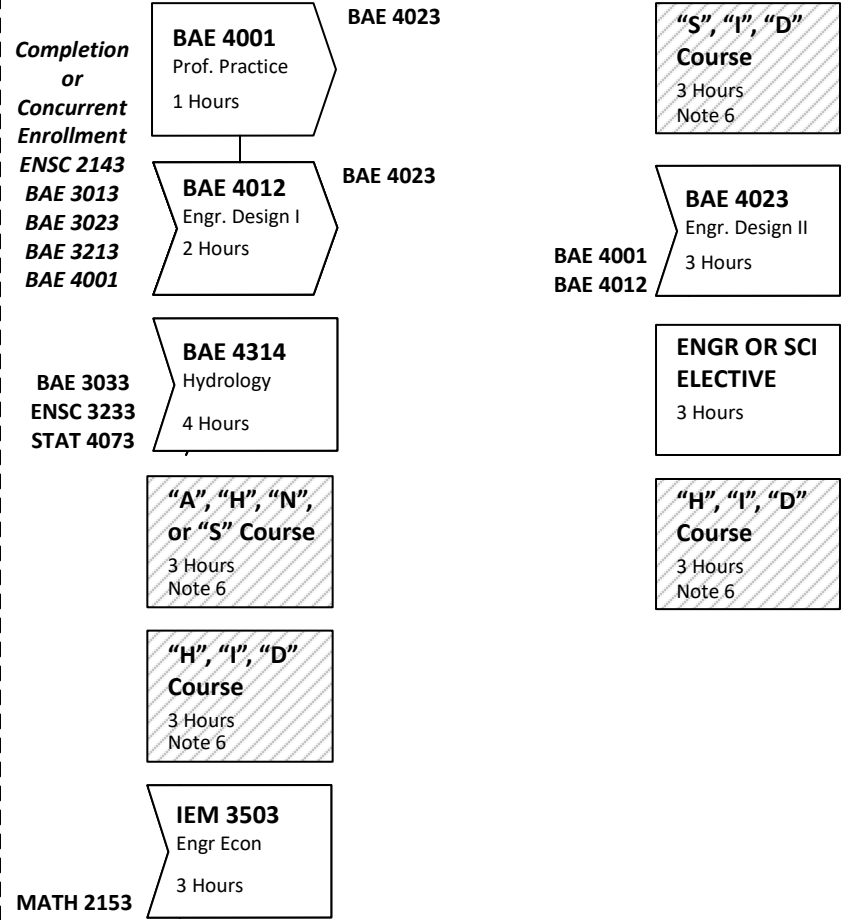
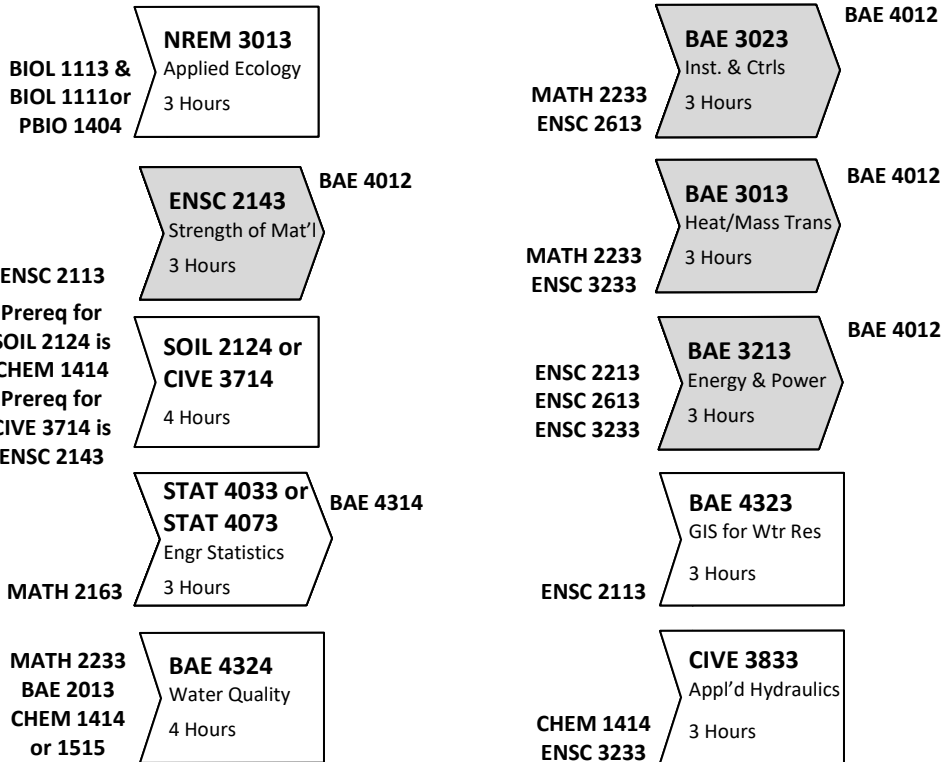
Year 4

17 Credit Hours

15 Credit Hours

16 Credit Hours

12 Credit Hours

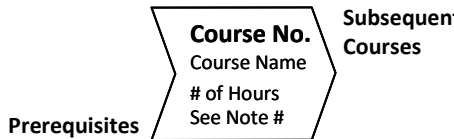


Master's Programs:
Criteria for admission to the Graduate College to pursue the Master of Science include:
1. Receive a B.S. degree from an accredited institution
2. Academic performance in undergraduate work at a level that indicates a high probability of success in a graduate program requiring a 3.0/4.0 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.

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- 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 2029.