AEROSPACE ENGINEERING, BSAE

Requirements for Students Matriculating in or before Academic Year 2019-2020. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.50
Total Hours: 123

Code | Title | Hours
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**General Education Requirements**
All General Education coursework requirements are satisfied upon completion of this degree plan

**English Composition**
See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition)
ENGL 1113 | Composition I | 3
or ENGL 1313 | Critical Analysis and Writing I | 3
Select one of the following: | | 3
ENGL 1213 | Composition II | 1
ENGL 1413 | Critical Analysis and Writing II | 1
ENGL 3323 | Technical Writing | 3

**American History & Government**
Select one of the following: | | 3
HIST 1103 | Survey of American History | 3
HIST 1483 | American History to 1865 (H) | 3
HIST 1493 | American History Since 1865 (DH) | 3
POLS 1113 | American Government | 3

**Analytical & Quantitative Thought (A)**
MATH 2144 | Calculus I (A) | 4
MATH 2153 | Calculus II (A) | 3
MATH 2163 | Calculus III | 3

** Humanities (H)**
Courses designated (H) | 6

**Natural Sciences (N)**
Must include one Laboratory Science (L) course
CHEM 1414 | General Chemistry for Engineers (LN) | 4
or CHEM 1515 | Chemistry II (LN) | 4
PHYS 2014 | University Physics I (LN) | 4

**Social & Behavioral Sciences (S)**
Course designated (S) | 6

**Hours Subtotal** | 42

**Diversity (D) & International Dimension (I)**
May be completed in any part of the degree plan
Select at least one Diversity (D) course
Select at least one International Dimension (I) course

**College/Departmental Requirements**

**Math and Basic Science**
MATH 2233 | Differential Equations | 3
PHYS 2114 | University Physics II (LN) | 4
Select one of the following: | | 3

**Engineering**
ENGR 1111 | Introduction to Engineering | 1
ENGR 1332 | Engineering Design with CAD for MAE | 2
ENGR 1412 | Introductory Engineering Computer Programming | 1

**Engineering Science**
ENSC 2113 | Statics | 3
ENSC 2123 | Elementary Dynamics | 3
ENSC 2143 | Strength of Materials | 3
ENSC 2213 | Thermodynamics | 3
ENSC 2613 | Introduction to Electrical Science | 3

**Hours Subtotal** | 30

**Major Requirements**

**Engineering Science**
ENSC 3233 | Fluid Mechanics | 3
ENSC 3313 | Materials Science | 3

**Specific Professional School**
MAE 3013 | Engineering Analysis and Methods I | 3
MAE 3113 | Measurements and Instrumentation | 3
MAE 3253 | Applied Aerodynamics and Performance | 3
MAE 3293 | Fundamentals of Aerodynamics | 3
MAE 3324 | Mechanical Design I | 4
MAE 3403 | Computer Methods in Analysis and Design | 3
MAE 3724 | Dynamic Systems Analysis and Introduction to Control | 4

**IEM 3503 | Engineering Economic Analysis | 3

3 hours of technical elective to be selected from the following list: | 3
3000-level or above from:

BAE
CHE
CIVE
ECEN
IEM
MAE
PETE engineering
BCOM 3223 | Oral Communication

Biological Science
Biochemistry
Chemistry

Computer Science

Legal Studies in Business

MATH 3303 Advanced Perspectives on Functions and Modeling for Secondary Teachers

MGMT 3133 Developing Leadership Skills

Geology

PHIL 3803 Business Ethics (H)

PHIL 3833 Biomedical Ethics (H)

Physics

4000-level or above courses from:


Math

Mechanical Engineering Technology

MGMT 4073 Management and Ethical Leadership

MGMT 4533 Leadership Dynamics

Statistics

<table>
<thead>
<tr>
<th>Hours Subtotal</th>
<th>51</th>
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<tbody>
<tr>
<td>Total Hours</td>
<td>123</td>
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Courses that must be completed prior to admission to professional school.

**Admission to Professional School (required)**

- Refer to the OSU Catalog corresponding to your matriculation date for detailed admissions requirements.

**Graduation Requirements**

1. A minimum GPA of 2.50 is required in all MAE prefix Courses.
2. A minimum overall GPA of 2.50 is required in 4000-level MAE prefix courses.
3. A ‘C’ or better is required in each course that is a prerequisite for a major course taken.
4. The major engineering design experience, capstone course, is satisfied by MAE 4374 Aerospace System Design

**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 2025.