# Mechanical Engineering Technology, BSET

## Requirements for Students Matriculating in or before Academic Year 2018-2019

Learn more about University Academic Regulation 3.1 [here](http://catalog.okstate.edu/university-academic-regulations/#matriculation).

**Minimum Overall Grade Point Average:** 2.00  
**Total Hours:** 121

## Code | Title | Hours
---|---|---

### General Education Requirements

All General Education coursework requirements are satisfied upon completion of this degree plan.

#### English Composition

See Academic Regulation 3.5 [here](http://catalog.okstate.edu/university-academic-regulations/#english-composition)

- ENGL 1113 Composition I 3
- or ENGL 1313 Critical Analysis and Writing I 3
- ENGL 3323 Technical Writing 1 3

#### American History & Government

Select one of the following:

- HIST 1103 Survey of American History 3
- HIST 1483 American History to 1865 3
- HIST 1493 American History Since 1865 3
- POLS 1113 American Government 3

#### Analytical & Quantitative Thought (A)

Select one of the following:

- MATH 1715 Precalculus (A) 3
- MATH 1513 College Algebra (A) 3  
- MATH 1613 and Trigonometry (A) 3
- MATH 1513 College Algebra (A) 3  
- MATH 1813 and Preparation for Calculus (A) 3

#### Humanities (H)

Courses designated (H) 6

#### Natural Sciences (N)

Must include one Laboratory Science (L) course

Select one of the following:

- CHEM 1215 Chemical Principles I (LN) 4
- CHEM 1314 Chemistry I (LN) 4
- CHEM 1414 General Chemistry for Engineers (LN) 4
- PHYS 1114 College Physics I (LN) 4  
- or PHYS 2014 University Physics I (LN) 4
- PHYS 1214 College Physics II (LN) 4  
- or PHYS 2114 University Physics II (LN) 4

#### Social & Behavioral Sciences (S)

Select one of the following:

- SPCH 2713 Introduction to Speech Communication (S) 3
- SPCH 3703 Small Group Communication 3
- SPCH 3723 Business and Professional Communication 3

Courses designated (S) 3

### Additional General Education

Courses designated (A) or (N) 3

#### 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

**Hours Subtotal:** 44

## College/Departmental Requirements

### Mathematics

- MATH 2123 Calculus for Technology Programs I (A) 3
  
- or MATH 2144 Calculus I (A) 3
- MATH 2133 Calculus for Technology Programs II (A) 3
  
- or MATH 2153 Calculus II (A) 3

### Specialty

- MET 1213 Manufacturing Processes (or GENT 1223) 3
- MET 2223 Intermediate Mechanical Computer-Aided Design (Or MET 1223) 3
- MET 2103 Industrial Materials 3
- MET 2313 Fundamentals of Hydraulic Fluid Power 3

### Related Specialty

- GENT 2323 Statics 3
  
- or ENSC 2113 Statics 3
- ENGR 1412 Introductory Engineering Computer Programming 2
  
- or EET 1003 Introduction to Microcomputer Programming 2
- MET 1123 Technical Drawing and Basic CAD (Or GENT 1153) 3

### Hours Subtotal

**26**

## Major Requirements

- GENT 3323 Strength of Materials 3
  
- or ENSC 2143 Strength of Materials 3
- MET 3433 Basic Thermodynamics (or GENT 3433) 3
- MET 4433 Heat Transfer (or GENT 4433) 3
- MET 3003 Dynamics 3
- MET 3113 Basic Instrumentation 3
- MET 3313 Applied Fluid Mechanics 3
- MET 3343 Physical Metallurgy 3
- MET 4003 Machine Elements 3
- MET 4103 Senior Design I 3
- MET 4123 Senior Design II 3
- MET 4463 Thermal Fluids Laboratory 3  
- or EET 3104 Elements of Electricity and Electronics 3
  
- or ENSC 2613 Introduction to Electrical Science 3
- IEM 3503 Engineering Economic Analysis 3
  
- or IEM 3513 Economic Decision Analysis 3

Select 9 hours of the following:

- MET 3413 Fundamentals of Pneumatic Fluid Power 3
- MET 3423 Intermediate Hydraulic Fluid Power 3
- MET 3573 Advanced Production Processes 3
- MET 4013 Parametric Computer-Aided Modeling 3
- MET 4023 Advanced Mechanical Computer-Aided Design 3
- MET 4033 Applied Vibration and Acoustics 3
- MET 4050 Advanced Mechanical Design 3
### Mechanical Engineering Technology, BSET

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET 4113</td>
<td>Practical Computational Fluid Dynamics</td>
</tr>
<tr>
<td>MET 4203</td>
<td>Finite Element Methods</td>
</tr>
<tr>
<td>MET 4303</td>
<td>Computer Integrated Manufacturing</td>
</tr>
<tr>
<td>MET 4313</td>
<td>Electrohydraulics and Motion Control</td>
</tr>
<tr>
<td>MET 4413</td>
<td>Ground Source Heat Pump Systems</td>
</tr>
<tr>
<td>MET 4453</td>
<td>Applied Thermodynamics</td>
</tr>
<tr>
<td>MET 4503</td>
<td>Petroleum Operations</td>
</tr>
<tr>
<td>MET 4883</td>
<td>Tool Design</td>
</tr>
<tr>
<td>MET 4993</td>
<td>Mechanical Engineering Technology Practice</td>
</tr>
</tbody>
</table>

**Hours Subtotal**: 48

**Electives**


**Hours Subtotal**: 3

**Total Hours**: 121

1. If B or higher is not earned in ENGL 1113 Composition I or ENGL 1313 Critical Analysis and Writing I, ENGL 1213 Composition II or ENGL 1413 Critical Analysis and Writing II is also required (per Academic Regulation 3.5 [http://catalog.okstate.edu/university-academic-regulations]).

### Graduation Requirements

1. A minimum average GPA of 2.00 is required in all courses with an engineering or engineering technology prefix.
2. A grade of C or better is required in a 1000-3000-level GENT, EET, ENSC, or MET course in order to advance to a course for which the GENT, EET, ENSC, or MET course is prerequisite.
3. Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made so long as the changes do not delay graduation or result in semester hours being added.

### 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 2024.