MECHANICAL ENGINEERING TECHNOLOGY, BSET

Requirements for Students Matriculating in or before Academic Year 2023-2024. Learn more about University Academic Regulation 3.1 (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 (http://catalog.okstate.edu/university-academic-regulations/#english-composition)		
ENGL 1113	Composition I [1]	3
or ENGL 1313	Critical Analysis and Writing I	
ENGL 3323	Technical Writing [1]	3
American History & Government		
Select one of the following:		3
HIST 1103	Survey of American History	
HIST 1483	American History to 1865 (H)	
HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
Analytical & Quantitative Thought (A)		
MATH 2144	Calculus I (A)	4
MATH 2153	Calculus II (A)	3
Humanities (H)		
Courses designated (H)		6
Natural Sciences (N) and Scientific Investigation (L)		
Select one of the following:		4
CHEM 1215	Chemical Principles I (LN)	
CHEM 1314	Chemistry I (LN)	
CHEM 1414	General Chemistry for Engineers (LN)	
PHYS 2014	University Physics I (LN)	4
PHYS 2114	University Physics II (LN)	4
Social & Behavioral Sciences (S)		
Select one of the following:		3
SPCH 2713	Introduction to Speech Communication (S)	
Additional General Education		
Preparation for Calculus (A) (or three hours of (A) or (N) or (S) if MATH 1813 is not needed)		3
Course designated (A) or (H) or (N) or (S)		1
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		
Specialty		
MET 2313	Fundamentals of Hydraulic Fluid Power	3
MET 3543	Manufacturing Processes [3]	3
MET 4223	Geometric Dimensioning and Tolerancing	3
or MET 2223	Geometric Dimensioning and Tolerancing with Computer-Aided Design	
Related Specialty		
ENGR 1111	Introduction to Engineering	1
ENGR 1412	Introductory Engineering Computer Programming	2
or EET 1003	Introduction to Microcomputer Programming	
ENSC 2113	Statics	3
ENSC 2613	Introduction to Electrical Science	3
ENSC 2411	Electrical Science Lab	1
Select three hours from the following:		3
MET 1123	Technical Drawing and Basic CAD [4]	
OR		
ENGR 1322 & MET 1121	Engineering Design with CAD and Technical Graphics	
OR		
ENGR 1332 & MET 1121	Engineering Design with CAD for MAE and Technical Graphics	
ENSC 2141	Strength of Materials Lab	1
ENSC 3231	Fluids and Hydraulics Lab	1
ENSC 3311	Material Science Lab	1
ENSC 3431	Thermodynamics and Heat Transfer Lab	1
ENGR 2421	Engineering Data Acquisition Controls Lab	1
Hours Subtotal		**27**
Major Requirements		
ENSC 2143	Strength of Materials	3
or GENT 3323	Strength of Materials	
MET 3433	Basic Thermodynamics [5]	3
or ENSC 2213	Thermodynamics	
MET 3453	Heat Transfer [6]	3
MET 3003	Dynamics	3
or ENSC 2123	Elementary Dynamics	
MET 3113	Basic Instrumentation	3
MET 3313	Applied Fluid Mechanics	3
MET 3343	Metallurgy and Polymers	3
MET 4003	Machine Elements	3
MET 4103	Senior Design I	3
or MET 4133	Interdisciplinary Design I	
MET 4123	Senior Design II	3
or MET 4143	Interdisciplinary Design II	
IEM 3503	Engineering Economic Analysis	3
or IEM 3513	Economic Decision Analysis	
Select 9 hours of the following:		9
MET 3353	Plastics	
MET 3413	Fundamentals of Pneumatic Fluid Power	
MET 3423	Intermediate Hydraulic Fluid Power	
MET 3573	Advanced Production Processes	
MET 3803	Fundamentals of Mechatronics	
MET 4023	Advanced Mechanical Computer-Aided Design	

MET 4033	Applied Vibration and Acoustics	
MET 4050	Advanced Mechanical Design	
MET 4113	Practical Computational Fluid Dynamics	
MET 4203	Finite Element Methods	
MET 4173	Additive Manufacturing: Materials, Methods and Applications	
MET 4303	Computer Integrated Manufacturing	
MET 4313	Electrohydraulics and Motion Control	
MET 4413	Ground Source Heat Pump Systems	
MET 4503	Petroleum Operations	
MET 4713	Internal Ballistics	
MET 4723	External Ballistics	
MET 4733	Terminal Ballistics and Armor	
MET 4803	Mechatronic System Design	
MET 4993	Mechanical Engineering Technology Practice	
MET 4953	Industrial Assessment and Improvement	
Hours Subtotal		**42**
Electives		
A total of 8 credit hours from the following with at least 3 being upper-division hours: Accounting, Astronomy, Biology, Chemistry, Computer Science, Engineering, Engineering Technology, Entrepreneurship and Emerging Enterprise, Finance, Geology, Legal Studies in Business, Management, Marketing, Mathematics, Physics and Statistics. [7]		8
Hours Subtotal		**8**
Total Hours		**121**

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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/)).

2

MET 1223 also permitted.

3

MET 1213 or GENT 1223 also permitted.

4

GENT 1153 also permitted.

5

GENT 3433 is also permitted.

6

MET 4433 or GENT 4433 is also permitted.

7

MATH 1513 can be taken here if a student needs to take MATH 1513 as a prerequisite for MATH 1813.

Graduation Requirements

1. A minimum average Technical GPA of 2.00 is required. The technical GPA is calculated from all courses counting in the curriculum with a prefix belonging to the degree program, or substitutions for these courses.
2. A grade of 'C' or better is required in all courses with an analytical or natural science designation or engineering or engineering technology prefix.
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.
4. The minimum requirements for the Mechanical Engineering Technology degree is 121. In cases where two courses can meet a requirement and they have differing credit hours, the lower credit hour course is typically recommended. The alternatives are largely listed to facilitate transfer into the MET degree from other programs.

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.