

# MECHATRONICS AND ROBOTICS, BSET

**Requirements for Students Matriculating in or before Academic Year 2022-2023.** Learn more about University Academic Regulation 3.1 (<http://catalog.okstate.edu/university-academic-regulations/#matriculation>).

**Minimum average technical grade-point-average: 2.0**

**Total Hours: 122**

Code	Title	Hours
<b>General Education Requirements</b>		
All General Education coursework requirements are satisfied upon completion of this degree plan		
<i>English Composition</i>		
See Academic Regulation 3.5 ( <a href="http://catalog.okstate.edu/university-academic-regulations/#english-composition">http://catalog.okstate.edu/university-academic-regulations/#english-composition</a> )		
ENGL 1113	Composition I	3
or ENGL 1313	Critical Analysis and Writing I	
ENGL 3323	Technical Writing	3
<i>American History &amp; Government</i>		
Select one of the following: 3		
HIST 1103	Survey of American History (or)	
HIST 1483	American History to 1865 (H) (or)	
HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
<i>Analytical &amp; Quantitative Thought (A)</i>		
MATH 2144	Calculus I (A)	4
MATH 2153	Calculus II (A)	3
STAT 4013	Statistical Methods I (A)	3
<i>Humanities (H)</i>		
Courses designated (H) 6		
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (L) course		
PHYS 2014	University Physics I (LN)	4
<i>Social &amp; Behavioral Sciences (S)</i>		
SPCH 2713	Introduction to Speech Communication (S)	3
<i>Additional General Education</i>		
Any course with A, N, L, or S. 3		
Any upper-division courses from the following: 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 3		
<b>Hours Subtotal</b>		<b>41</b>
<b>Diversity (D) &amp; International Dimension (I)</b>		
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		
<b>College/Departmental Requirements</b>		
ENGR 1111	Introduction to Engineering	1
ENGR 2421	Engineering Data Acquisition Controls Lab	1

MATH 2163	Calculus III	3
MATH 3263	Linear Algebra and Differential Equations	3
or EET 3423	Applied Analysis for Technology	
EET 2303	Technical Programming	3
EET 1104	Fundamentals of Electricity	4
EET 1244	Circuit Analysis I	4
EET 2544	Pulse and Digital Techniques	4
EET 2633	Solid State Devices and Circuit I	3
MET 1123	Technical Drawing and Basic CAD	3
MET 3223	Geometric Dimensioning and Tolerancing	3
MET 2313	Fundamentals of Hydraulic Fluid Power	3
ENSC 2113	Statics	3
ENSC 2123	Elementary Dynamics	3
or MET 3003	Dynamics	
ENSC 2143	Strength of Materials	3
<b>Hours Subtotal</b>		<b>44</b>

## Major Requirements

EET 3373	Programmable Logic Controller Fundamentals	3
MET 3803	Fundamentals of Mechatronics	3
or EET 3803	Fundamentals of Mechatronics	
MET 4003	Machine Elements	3
MERO 4213	Industrial Robots	3
EET 4314	Elements of Control	4
MET 4803	Mechatronic System Design	3
EET 4903	Mechatronics of Autonomous Systems	3
MERO 4833	Senior Design I	3
MERO 4843	Senior Design II	3
IEM 3503	Engineering Economic Analysis	3
Select 6 hours from a MERO-related specialty		6
<b>Hours Subtotal</b>		<b>37</b>
<b>Total Hours</b>		<b>122</b>

## Additional Requirements

- A grade of "C" or better is required in all courses with an analytical or natural science designation or engineering or engineering technology prefix.
- A grade of "C" or better is required for courses with the prefix EET/MET/MERO, and any course in physics and mathematics is required to enroll in subsequent courses.

## 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.

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- Degrees that follow this plan must be completed by the end of Summer 2028.