MECHATRONICS AND ROBOTICS, BSET

Requirements for Students Matriculating in or before Academic Year 2024-2025. 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: 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	3
or ENGL 1313	Critical Analysis and Writing I	
ENGL 3323	Technical Writing	3
American History & Government		
HIST 1103	Survey of American History	3
or HIST 1483	American History to 1865 (H)	
or 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)		
Must include one Laboratory Science (L) course		
CHEM 1314	Chemistry I (LN)	4
or CHEM 1215	Chemical Principles I (LN)	
or CHEM 1414	General Chemistry for Engineers (LN)	
PHYS 2014	University Physics I (LN)	4
Social & Behavioral Sciences (S)		
SPCH 2713	Introduction to Speech Communication (S)	3
Additional General Education		
Any course with A, N, or S. Any Statistics (A) is recommended for students considering a graduate degree.		6
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		**42**
College/Departmental Requirements		
UNIV 1111	First Year Seminar (or other approved first year seminar course) [1]	1
ENGR 2421	Engineering Data Acquisition Controls Lab	1
ENSC 2113	Statics	3
ENSC 2123	Elementary Dynamics	3
or MET 3003	Dynamics	
ENSC 2141	Strength of Materials Lab	1
ENSC 2143	Strength of Materials	3
ENSC 2411	Electrical Science Lab	1
ENSC 2613	Introduction to Electrical Science	3
EET 2303	Technical Programming	3
EET 2544	Pulse and Digital Techniques	4
EET 2633	Solid State Devices and Circuits I	3
MATH 3263	Linear Algebra and Differential Equations	3
or EET 3423	Applied Analysis for Technology	
MET 1123	Technical Drawing and Basic CAD	3
MET 2313	Fundamentals of Hydraulic Fluid Power	3
MET 4223	Geometric Dimensioning and Tolerancing	3
Hours Subtotal		**38**
Major Requirements		
EET 4314	Elements of Control	4
ENSC 3311	Material Science Lab	1
IEM 3503	Engineering Economic Analysis	3
EET 3253	Microprocessors I	3
MERO 3373	Programmable Logic Controller Fundamentals	3
MERO 4213	Industrial Robots	3
MERO 4833	Senior Design	3
MET 3343	Metallurgy and Polymers	3
MET 3803	Fundamentals of Mechatronics	3
MET 4003	Machine Elements	3
MERO-related specialty		9
Electives		
A total of 3 credit hours 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. Calculus III is recommended for students considering a graduate degree.		3
Hours Subtotal		**41**
Total Hours		**121**

1 Minimum grade of "C".

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 that is required 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.
- Degrees that follow this plan must be completed by the end of Summer 2030.