MECHATRONICS AND ROBOTICS, 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 average technical grade-point-average: 2.0
Total Hours: 122

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
Select one of the following:
HIST 1103 Survey of American History (or) 3
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
STAT 4013 Statistical Methods I (A) 3

Humanities (H)
Courses designated (H) 6
Natural Sciences (N)
Must include one Laboratory Science (L) course
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, 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

Hours Subtotal 41

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
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

Hours Subtotal 44

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

Hours Subtotal 37

Total Hours 122

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.
- Degrees that follow this plan must be completed by the end of Summer 2029.