Michigan Technological University
Minor in Manufacturing Systems
Program Code EMSM, Academic Year 2026-2027
College of Engineering
Minimum Credits Required: 18

Required Courses: 13 Credits

- MET 3500 Manufacturing Processes (4) *Prereqs: MSE2100 and MET2153*
- MET 4510 Lean Manufacturing and Production Planning (3) *Prereqs: none*
- MET 4550 Computer Aided Manufacturing (3) *Prereqs: MET2153 and MET2400*
- MET 4780 Advanced Manufacturing (3) *Prereqs: MET3500*

Elective Courses: 5 credits

- EET 3373 Introduction to Programmable Controllers (3) *Prereqs: (EET1121 and EET1122) or EET1411 or EET2121 or PH2230 or EE2112 or EE3010 or EET2411 or EE2174*
- EET 4144 Real-Time Robotics Systems (4) *Prereqs: (EET1121 and EET1122) or EET1411 or EET2121 or PH2230 or EE2112 or EE3010*
- EET 4147 Industrial Robotic Vision Systems & Advanced Teach Pendant Programming (4) *Prereqs: EET4144*
- EET 4373 Advanced Programmable Controllers (4) *Prereqs: EET3373 or EE3373*
- MET 4210 Applied Quality Techniques (3) *Prereqs: MA2720(C) or MA3710(C) or MA2710 (C)*
- MET 4355 Industrial Digital Twin Systems (3) *Prereqs: none*
- MET 4585 Facilities Layout and Safety Design (3) *Prereqs: none*