## Michigan Technological University Minor in Manufacturing Systems

Program Code EMSM, Academic Year 2022-23 College of Engineering Total Credits Required: 18

## **Required Courses: 13 Credits**

- MET 3500 Manufacturing Processes (4) Preregs: (ENG1100 or ENG1101 or ENG1102) and MSE2100 and MET2153
- MET 4510 Lean Manufacturing and Production Planning (3) Preregs: none
- MET 4550 Computer Aided Manufacturing (3) Prereqs: MET2153 and MET2400
- MET 4780 Advanced Manufacturing (3) Preregs: MET3500

## **Elective Courses: 5 credits**

- EET 3373 Introduction to Programmable Controllers (3) *Preregs: EET1411 or EET2121 or PH2230 or EE2111 or EE3010 or EET2411 or EE2174*
- EET 4144 Real-Time Robotics Systems (4) Preregs: EET1411 or EET2121 or PH2230 or EE2111 or EE3010
- EET 4147 Industrial Robotic Vision Systems and Advanced Teach Pendant Programming (4) *Prereqs:*
- EET 4373 Advanced Programmable Controllers (4) Preregs: EET3373 or EE3373
- MET 4210 Applied Quality Techniques (3) Preregs: MA2720(C) or MA3710(C)
- MET 4355 Industrial Systems Simulation (3) Preregs: none
- MET 4585 Facilities Layout and Safety Design (3) Preregs: none