

Michigan Technological University

Minor in Manufacturing

Program Code EMMF, Academic Year 2021-22

Department of Mechanical Engineering – Engineering Mechanics

Total Credits Required: 18

Required Courses: 6 credits

Course	Credits
EC 3400 Economic Decision Analysis	3
MEEM 3600 Introduction to Manufacturing	3

Elective Courses: 12 credits

Process Courses: [Select at least 3 credits](#)

Course	Credits
EE/MSE 4240 Introduction to MEMS	4
EE/MSE 4777 Open-Source 3-D Printing	3
ENT 3966 Design for Manufacturing	1
MEEM 4610 Adv Machining Processes	3
MEEM 4625 Precision Manuf. & Metrology	3
MEEM 4635 Design with Plastics	3
MEEM 4640 Micromanufacturing Processes	3
MEEM 4695 Additive Manufacturing	3
MEEM 5401 Design for Reliability	3
MEEM 5670 Experimental Design in Engineering	3
MSE 4120 Material & Processing Selection in Design	3
MSE 4310 Principles of Metal Casting	3

System Courses: [Select at least 3 credits](#)

Course	Credits
ENT 3959 Fundamentals of Six Sigma 1	1
ENT 3967 Six Sigma II	1
MEEM 4430 Advanced CAD and CAM Methods	4
MEEM 4630 Human Factors	3
MEEM 4650 Quality Engineering	3
MEEM 4655 Production Planning	3
MEEM 4675 Design Material Handling Systems	3
MEEM 4705 Intro Robotics & Mechatronics	4
MEEM 4707 Autonomous Systems	3
MEEM 5655 Lean Manufacturing	3
MEEM 5680 Optimization I	3

Prerequisite courses can be found in the undergraduate catalog.