

Michigan Technological University**Minor in Structural Materials**

Program Code MSSM, Academic Year 2021-22

Department of Materials Science and Engineering

Total Credits Required: 18

Required Courses: 9 credits

Course	Credits
MSE 2110 Intro to Materials Science & Engineering II	3
MSE 4100 Mechanical Behavior of Materials	3
MSE 4120 Materials and Process Selection	3

Elective Courses: 9 credits

Course	Credits
CEE 3101 Civil Engineering Materials	3
MSE 3120 Materials Characterization I (4) or MSE 3121 Materials Characterization I (3) and MSE 3122 Materials Characterization I Lab (1)	4
MSE 3130 Materials Characterization II (4) or MSE 3131 Materials Characterization II (3) MSE 3132 Materials Characterization II Lab (1)	4
MSE 4110 Intro to Polymer Engineering (3) OR CM/CH 4610 Intro to Polymer Science (3)	3
MSE 4310 Principles of Metal Casting	3
MSE 4320 Corrosion & Environmental Effects	3
MSE 4330 Advanced Physical Metallurgy	3
MSE 4410 Science of Ceramic Materials	3
MSE 4430 Composite Materials	3
MSE 4510 Contact Mechanics & Nanoindentation	3
MSE 4990 Undergraduate Research	1-3

Courses listed in this minor have the following prerequisites (shown in parenthesis). Concurrency is illustrated by the letter C: CEE3101 (ENG2120 or MEEM2150), CH4610 (CH1160), CM4610 (CH1160), MSE2110 (MSE2100 or BE2800), MSE3120 (MSE2110), MSE3131 and MSE3132 (MSE2100 or BE2800), MSE4100 (MSE2110) and (MEEM2150 or ENG2120), MSE4110 (MSE2100 and CH1160), MSE4120 (MSE2100), MSE4310 (MSE2100 or BE2800), MSE4330 (MSE3140), MSE4430 (MSE2100 or BE2800)