

Michigan Technological University Bachelor of Science Degree Audit

Major Program: Materials Science and Engineering

Program Code: EMSE, Academic Year 2024-2025

Total credits required for the degree: 128

Required Courses: 53 credits

- ENG 1101 (3)
- ENG 1102 (3)
- MEEM 2110 (3) or ENG2120 (4)
- MSE 2100 (3)
- MSE 2110 (3)
- MSE 3100 (4)
- MSE 3110 (4)
- MSE 3120 (4) or
 - MSE 3121 (3) and MSE 3122 (1)
- MSE 3130 (4) or
 - MSE 3131 (3) and MSE 3132 (1)
- MSE 3140 (3)
- MSE 3160 (3)
- MSE 3170 (3)
- MSE 3190 (3)
- MSE 4100 (3)
- MSE 4110 (3) or CM 4610 (3)
- MSE 4130 (2)
- MSE 4140 (2)

Approved Electives: 12 credits

MSE4240, MSE4292, MSE4310, MSE4320,
MSE4330, MSE4410, MSE4430, MSE4510,
MSE4520, MSE4530, MSE4540, MSE4740,
MSE4777, AF3010, BE4300, CH2410, CH4640,
CEE3101, CM3979, CM4620, ENT3959, ENT3966,
MA3710, MEEM3600, MEEM4170, MEEM4405,
MEEM4610, MEEM4635, MET3500, OSM4650,
PH4510

Required Math and Science: 35 credits

- CH 1150 (3)
- CH 1151 (1)
- CH 1160 (3)
- CH 1161 (1)
- MA 1160 (4)
- MA 2160 (4)
- MA 2320 (2) or MA 2321 (2)
- MA 3160 (4)
- MA 3520 (2) or MA 3521 (2)
- PH 1100 (1)
- PH 1200 (1)
- PH 2100 (3)
- PH 2200 (3)
- PH 2400 (3)

Free Electives: 4 credits

Any coursework is allowable, excluding co-curricular and coursework below the 1000- level.

General Education Core, Humanities, Fine Arts, and Social Science (HASS) Requirements: 24 credits

Courses used to complete Core and HASS requirements may not be used to complete other degree requirements. Students must complete 12 credits of Core coursework and 12 credits of Humanities, Fine Arts, and Social Science (HASS) coursework. Repeatable courses may not be repeated for general education credit. Core and HASS courses can be found on the [General Education](#) page.

Core: 12 credits

- UN 1015 (3)
- UN 1025 or an upper level modern language (3)
- Critical and Creative Thinking (3)
- Social Responsibility and Ethical Reasoning (3)

HASS: 12 credits, six of the 12 credits must be at the 3000- or 4000- level

- Communication/Composition (minimum 3 credits)
- Humanities and Fine Arts (minimum 3 credits)
- Social and Behavioral Sciences (minimum 3 credits)
- Any course from the General Education Core, HASS, or Restricted HASS [course list](#) (0 to 3 credits)

Co-curricular Activities: 3 credits

Required for graduation, but not included in the GPA calculation or in the overall credits required for the degree. Only courses on the co-curricular course list are eligible. Half (0.5) credit courses may be repeated to a maximum of one time for co-curricular credit. Find eligible courses on the [General Education](#) page.