Michigan Technological University Bachelor of Science Degree Audit
Major Program: Chemical Engineering
Program Code: ECM, Academic Year 2024-2025
Total credits required for the degree: 131

Required Engineering Courses: 47 credits

- CM 2110 (3)
- CM 3110 (3)
- CM 3120 (3)
- CM 3215 (3)
- CM 3230 (4)
- CM 3240 (3)
- CM 3310 (4)
- CM 3510 (3)
- CM 3980 (1)
- CM 4110 (3)
- CM 4120 (3)
- CM 4320 (2)
- CM 4855 (3)
- CM 4860 (2)
- CM 4861 (1) or CM 4910 (1 to 3)
- ENG 1101 (3)
- ENG 1102 (3)

Required Math and Science: 40 credits

- CH 1150 (3)
- CH 1151 (1)
- CH 1153 (1)
- CH 1160 (3)
- CH 1161 (1)
- CH 2410 (3)
- CH 2411 (1)
- CH 3510 (3)
- MA 1121 (4) or MA 1160 (4) or MA 1161 (5)
- MA 2160 (4)
- MA 2320 (2) or MA 2321 (2) or MA 2330 (3)
- MA 3160 (4)
- MA 3520 (2) or MA 3521 (2) or MA 3530 (3) or MA 3560 (3)
- PH 1100 (1)
- PH 1200 (1)
- PH 2100 (3)
- PH 2200 (3)

Technical Elective Courses: 17 credits

Technical elective courses must total to at least 17 credits. Students choosing CM4910, MA2330, MA3530 or MA3560 may use additional credits as technical electives.

Choose courses from the following list:
BL 1100, BL 1110, BL 1200, BL 1210, BL 1400, BL 1410, CM 1000, CS 1111, CS 1121, CS 1122, CS 1131, CS 1142, EET 1121, EET 1122, EET 1411, FW 1035, MA 1600, PH 1090, PH 1091, PH 1500, PH 1600, PH 1610

Or choose from any regularly graded 2000-level or higher undergraduate course from the following departments (Pass/fail courses are ineligible.):

- Biomedical Engineering (BE)
- Biological Sciences (BL)
- Civil and Environmental Engineering (CEE)
- Chemistry (CH)
- Chemical Engineering (CM)
- Computer Science (CS)
- Electrical Engineering (EE)
- Electrical Engineering Technology (EET)
- Engineering Fundamentals (ENG)
- Enterprise (ENT)
- Forest Resources and Environmental Sciences (FW)
- Geological and Mining Engineering and Sciences (GE)
- Mathematical Sciences (MA)
- Mechanical Engineering (ME)
- Management Information Systems (MIS)
- Materials Science and Engineering (MSE)
- Operation and Supply Chain Management (OSM)
- Physics (PH)
- System Administration Technology (SAT)
- University Wide (UN)

Free Electives: 3 credits

Students with more than 104 credits in major requirements area, or more than 24 credits in the general education requirements will not require 3 credits of free electives.

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.