Michigan Technological University Bachelor of Science Degree Audit
Major Program: Software Engineering
Program Code: SSEN, Academic Year 2026-2027
Minimum credits required for the degree: 120

Core Requirements: 45 to 46 credits
- CS 1000 (1)
- CS 1131 (5) or (CS 1121 and CS 1122 (6))
- CS 1142 (3)
- CS 2311(3) or MA 3210 (3)
- CS 2321 (3)
- CS 3000 (3)
- CS 3141 (3)
- CS 3311 (3)
- CS 3421 (3)
- CS 3425 (3)
- CS 3712 (3)
- CS 4321 (3)
- CS 3760 (3)
- CS 4770 (3)
- HU 3120 (3)

Software Engineering Electives: 6 credits
Choose two of the following options:
- CS 3765 (3)
- CS 4710 (3)
- CS 4711 (3)
- CS 4740 (3)

Capstone Project: 6 credits
Choose one of the following options:
Option 1
- CS 4791 (3)
- CS 4792 (3)
Option 2
- ENT 3950 (1)
- ENT 3960 (1)
- ENT 4950 (2)
- ENT 4960 (2)

Math Requirements: 10 to 12 credits
- MA 1160 (4) or MA 1161 (5)
- MA 2330 (3)
- MA 2720 (4) or MA 3710 (3) or MA 3720 (3)

Math/Science Electives: 9 to 11 credits
- Choose any combination of MA courses 3000-level or higher or science courses from the STEM Science list.
- Math Requirements and Math/Science Electives must total 21 credits.

Technical Electives: 6 credits
- Choose courses from the list of approved technical electives.
- Technical electives should align with the chosen Senior Design or Enterprise project. Consult with the academic advisor.

Essential Education Requirements

- Students must complete three main components of Essential Education (First-Year Experience, Distribution or Minor Pathway, and Activities for Well-being and Success) with the credit distributions as shown below. A minimum of 37 credits is required to complete these requirements.
- Up to five Essential Education requirements and the Michigan Tech Seminar may be shared (double-counted) with major requirements. Work with your advisor to determine which major requirements may satisfy Essential Education requirements.
- Some courses are on more than one list, but each course can satisfy only one Essential Education requirement.
- Students may choose between an Essential Education minor or the Distribution Pathway. The list of Essential Education minors can be found here.
- Lists of courses for each requirement can be found on the Essential Education page.

First-Year Experience (16 credits)

- Michigan Tech Seminar (1)
- Math (3)
- Natural and Physical Science (3)
- STEM (3)
- Composition (3)
- Foundations of the Human World (3)

Distribution Pathway (18 credits)

- Communication Intensive (3)
- Intercultural Competency (3)
- Arts and Culture (3)
- STEM (3)
- SHAPE (3)
- Essential Education Experience (3)

Activities for Well-being and Success (3 credits)

Free Electives

- Any coursework is allowable, excluding coursework below the 1000-level.
- The number of free elective credits required is dependent on how many additional credits are required beyond Major requirements and Essential Education requirements to reach the total credits required for the degree as indicated on the audit.

Additional Graduation Requirements

- Satisfy the 2.0 departmental and cumulative Grade Point Average
- Earn 30 upper-level credits at Michigan Tech
- Apply for Graduation