# Michigan Technological University Bachelor of Science Degree Audit Major Program: Mathematics and Computer Science

Program Code: SMCS, Academic Year 2023-24 Total credits required for the degree: 120

### Core Requirements: 32 - 35 credits

- MA 1160 (4) or MA 1161 (5)
- MA 2160 (4)
- MA 2330 (3) or MA 2320 (2) or MA 2321 (2)
- MA 2710 (3) or MA 2720 (4) or MA 3710 (3)
- MA 3160 (4)
- MA 3210 (3)
- MA 3310 (3)
- MA 3450 (3)
- MA 3560 (3)
- MA 4945 (3)

## Computer Science Requirements: 26 to 27 credits

- CS 1121 (3) and CS 1122 (3) or CS 1131 (5)
- CS 1142 (3)
- CS 2321 (3)
- CS 3141 (3)
- CS 3311 (3)
- CS 3421 (3)
- CS 3425 (3)
- CS 4321 (3)

### Advanced Electives: 15 credits

Minimum 15 credits required, with at least two courses from each discipline (CS and MA). Complete any 3000- or 4000- level CS course; any 4000- level MA course, or MA3202, MA3203, MA3720, MA3740, MA3924.

- CS 3XXX or CS 4XXX (3)
- CS 3XXX or CS 4XXX (3)
- MA 4XXX (3)
- MA 4XXX (3)
- CS/MA

#### Mathematical Sciences Project Capstone: 3 credits

MA 4900 (3)

### Lab Science Requirements: 7 credits minimum

Students must complete two science courses in two different disciplines from the general education science course list; at least one of these must include or be taken with the accompanying laboratory. Find eligible courses on the <u>General Education</u> webpage.

# General Education Core *Humanities, Fine Arts, and Social Science* (HASS): 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— at least 6 credits must be upper-division

- 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.

### Free Electives: 9 - 13 credits

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