

Michigan Technological University Bachelor of Science Degree Audit

Major Program: Environmental Data Science

Program Code: FEDS, Academic Year 2024-2025

Total credits required for the degree: 120

Math and Computer Science Core: 34 credits

- CS 1121 (3)
- CS 1122 (3)
- CS 2321 (3)
- CS 3000 (3) or SAT 1700 (3)
- CS 3425 (3)
- CS 4821 (3)
- DATA 1201 (2)
- DATA 1202 (3)
- MA 1135 (4)
- MA 2330 (3)
- MA 2720 (4)

Science Core: 31 credits

- BL 1400 (3)
- BL 1410 (1)
- CH 1150 (3)
- CH 1151 (1)
- FW 1050 (2)
- FW 2051 (2)
- FW 2060 (3)
- FW 3020 (3)
- FW 3200 (4)
- FW 3540 (4)
- FW 4500 (3) or CS 3141 (3)
- FW 4800 (2)

Environmental Directed Electives: 6 credits

Choose 6 credits numbered 3000 or higher with prefixes of BL, FW, or GE that are not already used in your program.

Free Electives: 6 to 15 credits

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

Select one of four tracks: 10 to 19 credits

Choose one of four tracks in consultation with your academic advisor.

Track in Global Change Science: 18-19 credits

- FW 3110 (3) or FW 3313 (3)
- FW 3330 (4) or FW 4300 (3)
- FW 4370 (3)
- FW 4380 (3)
- FW 4421/5421 (3) or UN 4400 (3)
- FW 4710 (3) or GE 2640 (3) or FW 5519 (3)

Track in Environmental Statistics: 18 credits

- MA 3720 (3)
- MA 3740 (3)
- MA 4710 (3)
- MA 4720 (3)
- MA 4730 (3) or MA 4780 (3)
- MA 4790 (3) or EET 4501 (3)

Track in Geographic Information Systems: 10-17 credits

- FW 4540 (3)
- FW 4545 (2)
- FW 5541 (1)
- FW 4554 (2)
- FW 5553 (3)
- FW 5557 (3)
- SU 4012 (3) or EET 4501 (3)

Track in Genetics, Genomics and Bioinformatics: 18 credits

- BL 3300 (3)
- FW 2100 (3)
- FW 3075 (3)
- FW 3320 (3)
- FW 4082 (3)
- FW 4099 (3) or FW 4128 (3)

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.