

## Michigan Technological University Bachelor of Science Degree Audit

### Major Program: Electrical Engineering, Concentration: Environmental Applications

Program Code: EEEV, Academic Year 2022-2023

Total credits required for the degree: 128

#### Core Requirements: 42 credits

- CS 1111 (3)
- EE 2111 (3)
- EE 2112 (4)
- EE 2174 (4)
- EE 3120 (3)
- EE 3131 (4)
- EE 3140 (3)
- EE 3160 (3)
- EE 3171 (4)
- EE 3180 (3)
- EE 3901 (2)
- ENG 1101 (3) or ENG 1001 (2) *and* ENG 1100 (2)
- ENG 1102 (3)

#### Math and Science: 28 credits

- CH 1150 (3)
- CH 1151 (1)
- MA 1121 (4) or MA 1160 (4) or MA 1161 (5)
- MA 2160 (4)
- MA 2321 (2) or MA 2320 (2)
- MA 3160 (4)
- MA 3521 (2) or MA 3520 (2)
- PH 1100 (1)
- PH 1200 (1)
- PH 2100 (3)
- PH 2200 (3)

#### EE Technical Electives: 9 credits

Any EE course except CS1000, EE3010, EE3173, EE4000, EE4805, EE4901, EE4910, and those in major requirements. No more than three credits of EE2000 – EE2999 are allowed. Department approval is required for EEnXXe.

#### Free Electives: 1 to 3 credits

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

#### Choose one Option: 4 to 6 credits

##### Option 1: Senior Design Path: 4 credits

- EE 4901 (2) and EE 4910 (2), *or*
- MEEM 4901 (2) and MEEM 4911 (2)

##### Option 2: Enterprise Design Path: 6 credits

- ENT3950, ENT3960, ENT4950 and ENT4960, *or*
- ENT 3960, ENT4950, ENT4960 and ENT Module from the following: ENT2961, ENT2962, ENT3959, ENT3963, ENT3966, ENT3967, ENT3971, ENT4951

#### Concentration Requirements: 18 credits

- CEE 3501 (3)
- CEE 3502 (3)

#### Remote Sensing Area Elective

Choose one set of courses:

- GE 4250 (3) and EE 4252 (4)
- EE 2190 (3) and EE 3190 (3)

#### Environmental Quality Engineering Area Elective

Choose two courses:

- CEE 4502 (3)
- CEE 4503 (3)
- CEE 4504 (3)
- CEE 4505 (3)
- CEE 4507 (3)
- CEE 4511 (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.