

Michigan Technological University
Bachelor of Science Degree Audit
Major Program: Civil Engineering
 Program Code ECE, Academic Year 2021-22
 Total credits required for the degree: 131

Core Requirements: 32 credits

Course	Credits
CEE 1000	1
CEE 1001	1
CEE 3101	3
CEE 3331	2
CEE 3810	4
EC 3400	3
ENG 1101 or ENG 1001 and ENG 1100	3/4
ENG 1102	3
ENG 3200	4
MEEM 2110	3
MEEM 2150	3
SU 2000	2

Math and Science: 34 credits

Course	Credits
CH 1150	3
CH 1151	1
CEE 3710 or MA 3710	3
GE 2000	3
MA 1121 or MA 1160 or MA 1161	4/5
MA 2160	4
MA 2320 or MA 2321	2
MA 3160	4
MA 3520 or MA 3521	2
PH 1100	1
PH 1200	1
PH 2100	3
PH 2200	3

Electives: 12 credits

Senior Design: 6 credits

Course	Credits
CEE 4900	3
CEE 4910	3
or	
CEE 4905	3
Professional Elective	3
or	
CEE 4915	3
CEE 4916	3

Professional Electives: 3 credits

Course	Credits
	3

Engineering Science Electives: 3 credits

Course	Credits
BE 2700	3
CM 2110	3
CM 2200	3
EE 3010	3
MSE 2100	3
MEEM 2201	3
MEEM 2700	3

Free Electives: 0 to 5 credits

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

Course	Credits

Choose a Pathway with your Academic Advisor

The options on page two represent 24 - 27 of the required credits for your degree. In consultation with your advisor you will choose one of four options:

General: 26 credits

Water Resources: 25 credits

Transportation: 24 to 25 credits

Built Infrastructure: 26 to 27 credits

Option 1: General (26 credits)

Required CEE Core Courses: 16 credits

Course	Credits
CEE 3202	3
CEE 3332	3
CEE 3401	3
CEE 3503	3
CEE 3620	4

Required Design Course: 4 credits

Course	Credits
CEE 4213	4
CEE 4223	4

Professional Electives: 6 credits

Course	Credits

Option 2: Water Resources (25 credits)

Required CEE Core Courses: 7 credits

Course	Credits
CEE 3503	3
CEE 3620	4

Select 1 course form the following: 3 credits

Course	Credits
CEE 3202	3
CEE 3332	3
CEE 3401	3

Required Design Course: 3 credits

Course	Credits
CEE 4620	3
CEE 4640	3
CEE 4665	3

Water Resources Electives: 12 credits

Course	Credits
CEE 4502	3
CEE 4503	3
CEE 4505	3
CEE 4507	3
CEE 4610	3
CEE 4620	3
CEE 4640	3
CEE 4650	3
CEE 4665	3
CEE 5620	3
CEE 5666	3
GE 3850	3
GE 4800	3

Option 3: Transportation (24 to 26 credits)

Required CEE Core Courses: 6 credits

Course	Credits
CEE 3332	3
CEE 3401	3

Select 1 course form the following: 3 to 4 credits

Course	Credits
CEE 3202	3
CEE 3503	3
CEE 3620	4

Required Design Course: 3 to 4 credits

Course	Credits
CEE 4401	3
CEE 4407	4

Transportation Electives: 12 credits

Course	Credits
CEE 4020	3
CEE 4101	3
CEE 4333	3
CEE 4344	3
CEE 4401	3
CEE 4402	3
CEE 4404	3
CEE 4406	3
CEE 4407	4
CEE 4410	3
CEE 4760	3

Option 4: Built Infrastructure (26 to 27 credits)

Required CEE Core Courses: 10 credits

Course	Credits
CEE 3202	3
CEE 3332	3
CEE 3620	4

Required Design Course: 4 credits

Course	Credits
CEE 4213	4
CEE 4223	4

Built Infrastructure Electives: 12 to 14 credits

Course	Credits
CEE 4020	3
CEE 4201	3
CEE 4213	4
CEE 4223	4
CEE 4233	3
CEE 4244	3
CEE 4333	3
CEE 4344 or CMG 4120	3
CEE 4820	3
CEE 4830	3
CEE 4850	3
CEE 5212	3
CEE 5213	3

General Education Core and HASS

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

Course	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 HASS credits must be at the 3000 or 4000 level (an upper division language course in place of UN1025 does not meet this requirement). No more than three credits may come from the HASS Restricted course list.

Course	Credits
Communication/ Composition	Minimum 3
Humanities and Fine Arts	Minimum 3
Social and Behavioral Sciences	Minimum 3
Course from any list above or from the Restricted HASS course list	0 to 3

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 credit (0.5) courses may be repeated to a maximum of one time for co-curricular credit. Find eligible courses on the [General Education](#) page.

Course	Credits