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

Core Requirements: $\mathbf{3 2}$ credits

| Course | Credits |
| :--- | :---: |
| CEE 1000 | 1 |
| CEE 1001 | 1 |
| CEE 3101 | 3 |
| CEE 3331 | 2 |
| CEE 3810 | 4 |
| EC 3400 | 3 |
| ENG 1101 or <br> 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: $\mathbf{3 4}$ 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 |

## Concentration Requirements: 9 credits

Project Work: 6 credits

| Course | Credits |
| :--- | :---: |
| ENT 3950 | 1 |
| ENT 3960 | 1 |
| ENT 4950 | 2 |
| ENT 4960 | 2 |

ENT Modules: 3 credits

| Course | Credits |
| :--- | :---: |
|  | 1 |
|  | 1 |
|  | 1 |

## Engineering Science Electives: $\mathbf{3}$ 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 |
| :--- | :--- |
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|  |  |
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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 ( $\mathbf{2 5}$ 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 ( $\mathbf{2 4}$ to $\mathbf{2 6}$ 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 ( $\mathbf{2 6}$ to $\mathbf{2 7}$ 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: $\mathbf{3}$ 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 |
| :--- | :--- |
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