S INDICATES COURSE IS OFFERED SPRING SEMESTER

Su INDICATES COURSE IS OFFERED SUMMER SEMESTER

(L) INDICATES A COURSE WHICH INCLUDES A LAB MUST BE SCHEDULED IN ADDITION TO THE LECTURE

(C) INDICATES THE COURSE CAN EITHER BE TAKEN AT THE SAME TIME (CO-REQ) OR TAKEN PRIOR TO THE COURSE (PRE-REQ)

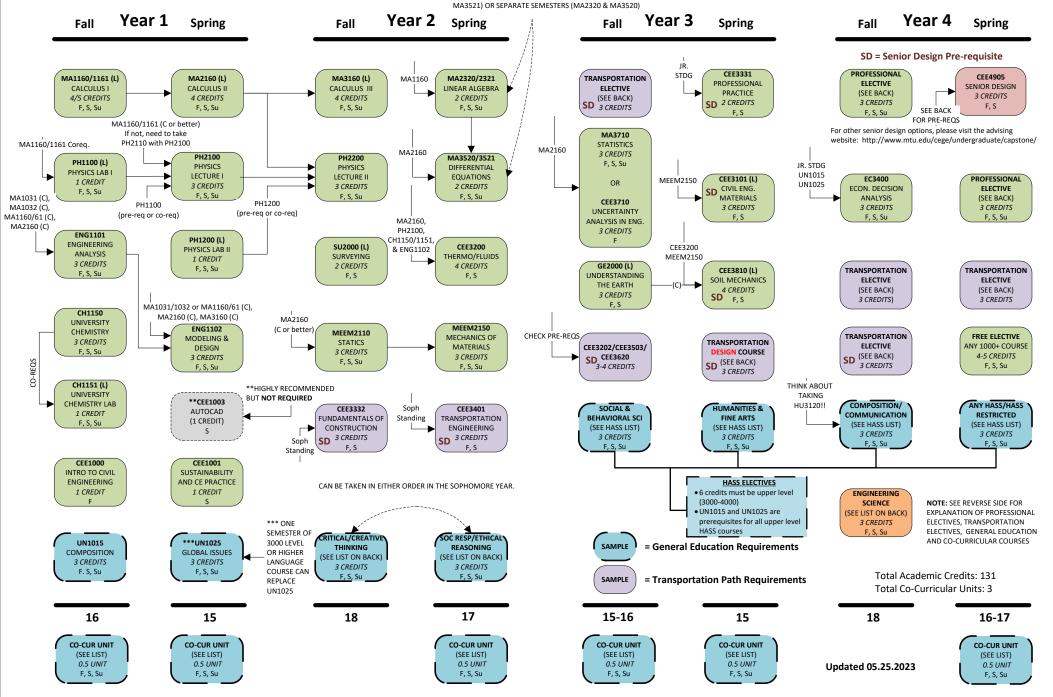
CIVIL ENGINEERING FLOWCHART Transportation Path Academic Year 2023-24

Michigan Tech

This is not an official list of degree requirements.

Adjustments may be required due to curriculum changes.

NOTE: LINEAR ALGEBRA & DIFFERENTIAL EQUATIONS CAN
BE TAKEN DURING THE SAME SEMESTER (MA2321 &



TRANSPORTATION REQUIREMENTS

Choose 1 course from the following			
CEE3202	STRUCTURAL ANALYSIS	F, Sp	3 cr.
CEE3503	ENVIRONMENTAL ENG.	Sp	3 cr.
CEE3620	WATER RESOURCES ENG	F, Sp, Su	4 cr.

TRANSPORTATION DESIGN COURSE (Select 1)

OPT. METHODS IN CEE

TRAFFIC FLOW THEORY

SPECIAL TOPICS

CEE4401	PAVEMENT DESIGN	Fall	3 cr.
CEE4407	TRANSPORTATION DESIGN	Spring	3 cr.

TRANSPORTATION ELECTIVES (select 4) CEE4020 DIGITAL PROJECT DELIVERY

CEE4760

CEE5190

CEE5402

CEE4101	BITUMINOUS MATERIALS	Fall	3 cr.
CEE4333	ESTIMATING, PLAN., CONST	Fall	3 cr.
CEE4344	CONSTRUCTION SCHEDULING	Spring	3 cr.
CEE4401	PAVEMENT DESIGN	Fall	3 cr.
CEE4402	TRAFFIC ENGINEERING	Fall	3 cr.
CEE4404	RAILROAD ENGINEERING	Fall	3 cr.
CEE4406	AIRPORT PLANNING	Spring	3 cr.
CEE4407	TRANSPORTATION DESIGN	Spring	3 cr.
CEE4410	TRANSPORTATION PLANNING	Fall	3 cr.

SENIOR DESIGN (SD) PRE-REQS

(complete 7 of the following)

CEE3101, (CEE3202 or CEE3503 or CEE3620), CEE3331, CEE3332, CEE3401, CEE3810 TRANSPORTATION DESIGN COURSE, & 2 TRANSPORTATION ELECTIVES

ENGINEERING SCIENCE ELECTIVE

(select 1)

BE2700 BIOMEDICAL SIGNALS & SYSTEMS
CM2110 MATERIAL AND ENERGY BALANCES
CM2200 INTRO TO MINERALS & MATERIALS
EE3010 CIRCUITS AND INSTRUMENTATION
MSE2100 INTRO TO MATERIALS SCI & ENGRG
MEEM2201 INTRODUCTORY THERMODYNAMICS
MEEM2700 DYNAMICS

UNDERGRADUATE CATALOG: (COURSE DESCRIPTIONS)

https://www.mtu.edu/catalog/courses/

GENERAL EDUCATION: (CO-CURRICULAR & HASS LIST)

https://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/

PROFESSIONAL ELECTIVES

3 cr.

UNDERGRADUATE CATALOG: https://www.mtu.edu/catalog/courses/

- Any 1000 or higher level course in Computer Science, Fine Arts or Forestry. (CS, ART, FW, MUS, SND, THEA)
- Any <u>2000</u> or higher level course in <u>Biological Sciences</u>, <u>Chemistry</u>, <u>Construction Management</u>, <u>Geology</u>, <u>Physics</u> or <u>Geospatial Engineering</u>. (BL, CH, CMG, GE, PH, SU)
- Any <u>2000</u> or higher level course in **Business or Economics** (ACC, BUS, EC, FIN, MGT, MIS, MKT, OSM).

Fall

Spring

Varies 3 cr.

Spring (alt) 3 cr.

3 cr.

- Any <u>3000</u> or higher level course in **Mathematics, Humanities, Psychology, Social Sciences or University Wide** (MA, HU, PSY, SS, UN).
- Any 3000 or higher level course in Civil and Environmental Engineering (CEE) or any other Engineering Dept.

NOTE: OTHER COURSES MAY BE USED TO SATISFY THE PROFESSIONAL ELECTIVES REQUIREMENT IF APPROVED BY THE DEPARTMENT OF CIVIL, ENVIRONMENTAL, AND GEOSPATIAL ENGINEERING ACADEMIC ADVISOR.

GENERAL EDUCATION REQUIREMENTS

- A. CORE COURSES (12 CREDITS)
- 1. UN1015 (COMPOSITION)
- 2. **UN1025** (GLOBAL ISSUES) or 3000+ level Modern Language Course
- 3. CRITICAL AND CREATIVE THINKING

ART1000, HU2130, HU2324, HU2501, HU2503, HU2538, HU2700, HU2701, HU2820, HU2910, MUS1000, SND1000, SS2300, THEA1000

4. SOCIAL RESP. & ETHICAL REASONING

EC2001, PSY2000, SS2100, SS2200, SS2400, SS2500, SS2501, SS2502, SS2503, SS2504, SS2505, SS2600, SS2610, SS2700

B. HASS COURSES (12 CREDITS)
(General Ed Website, left)

1. COMM/COMP:	
2. HUMANITIES/FINE ARTS:	

3. SOCIAL & BEHAVIORAL SCIENCES:

4. ANY HASS OR HASS RESTRICTED COURSE:

 6 credits must be upper division 3000-4000 level courses

 No more than 3 credits from the HASS Restricted list can be used to satisfy HASS requirements.

• Each course can satisfy only one requirement.

C. CO-CURRICULAR ACTIVITIES (3 UNITS)
(General Ed Website, left)

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