

F INDICATES COURSE IS OFFERED FALL SEMESTER

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

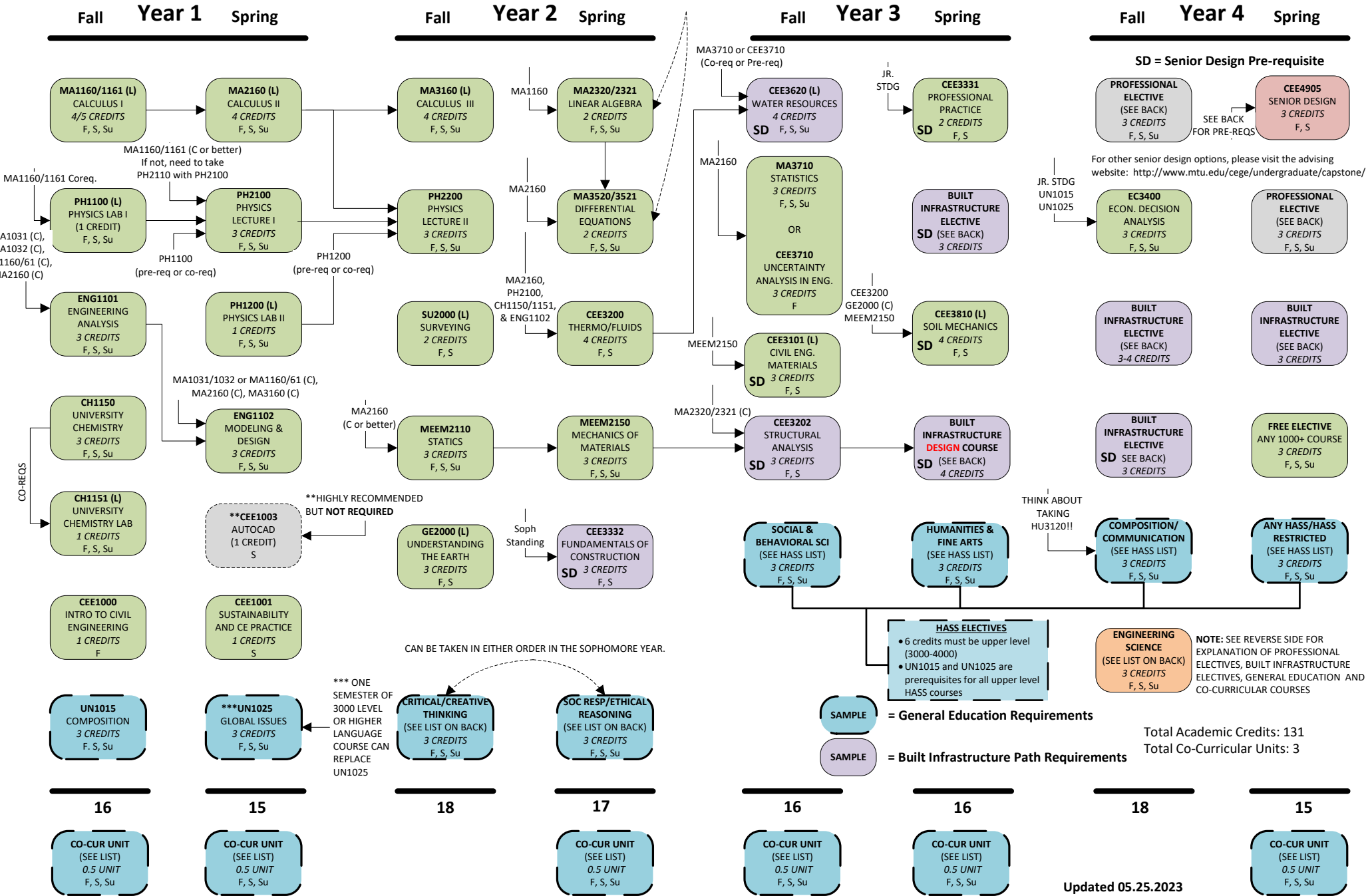
Built Infrastructure Path Academic Year 2023-24

NOTE: LINEAR ALGEBRA & DIFFERENTIAL EQUATIONS CAN
BE TAKEN DURING THE SAME SEMESTER (MA2321 &
MA3521) OR SEPARATE SEMESTERS (MA2320 & MA3520)



Michigan Tech

This is not an official list of degree requirements.
Adjustments may be required due to curriculum changes.



BUILT INFRASTRUCTURE REQUIREMENTS

BUILT INFRASTRUCTURE DESIGN COURSE (select 1)

CEE4213	STRUCTURAL CONCRETE DESIGN	Spring	4 cr.
CEE4223	STEEL DESIGN 1	Fall	4 cr.

BUILT INFRASTRUCTURE ELECTIVES (select 4)

CEE4020	DIGITAL PROJECT DELIVERY	Fall	3 cr.
CEE4201	MATRIX STRUCTURAL ANALYSIS	Fall	3 cr.
CEE4213	STRUCTURAL CONCRETE DESIGN	Spring	4 cr.
CEE4223	STEEL DESIGN 1	Fall	4 cr.
CEE4233	STRUCTURAL TIMBER DESIGN	Spring	3 cr.
CEE4244	LOADS FOR CIVIL STRUCTURES	Spring	3 cr.
CEE4333	ESTIMATING, PLANNING, CONST.	Fall	3 cr.
CEE4344	CONSTRUCTION SCHEDULING	Spring	3 cr.
CEE4820	FOUNDATION ENGINEERING	Fall	3 cr.
CEE4830	GEOSYNTHETICS	Spring	3 cr.
CEE4850	ROCK ENGINEERING	Spring	3 cr.
CEE5212	PRESTRESSED CONCRETE DESIGN	Fall	3 cr.
CEE5213	CONCRETE/MASONRY BLDG SYS	Fall	3 cr.

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

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 **2000** or higher level course in **Biological Sciences, Chemistry, Construction Management, Geology, Physics or Geospatial Engineering**. (BL, CH, CMG, GE, PH, SU)
- Any **2000** or higher level course in **Business or Economics** (ACC, BUS, EC, FIN, MGT, MIS, MKT, OSM).
- Any **3000** 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.

SENIOR DESIGN (SD) PRE-REQS

(complete 7 of the following)

CEE3101, CEE3331, CEE3332, CEE3202, CEE3620, CEE3810, BUILT INFRASTRUCTURE DESIGN COURSE, & 2 BUILT INFRASTRUCTURE 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

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)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____