

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

SAMPLE = General Education Requirement

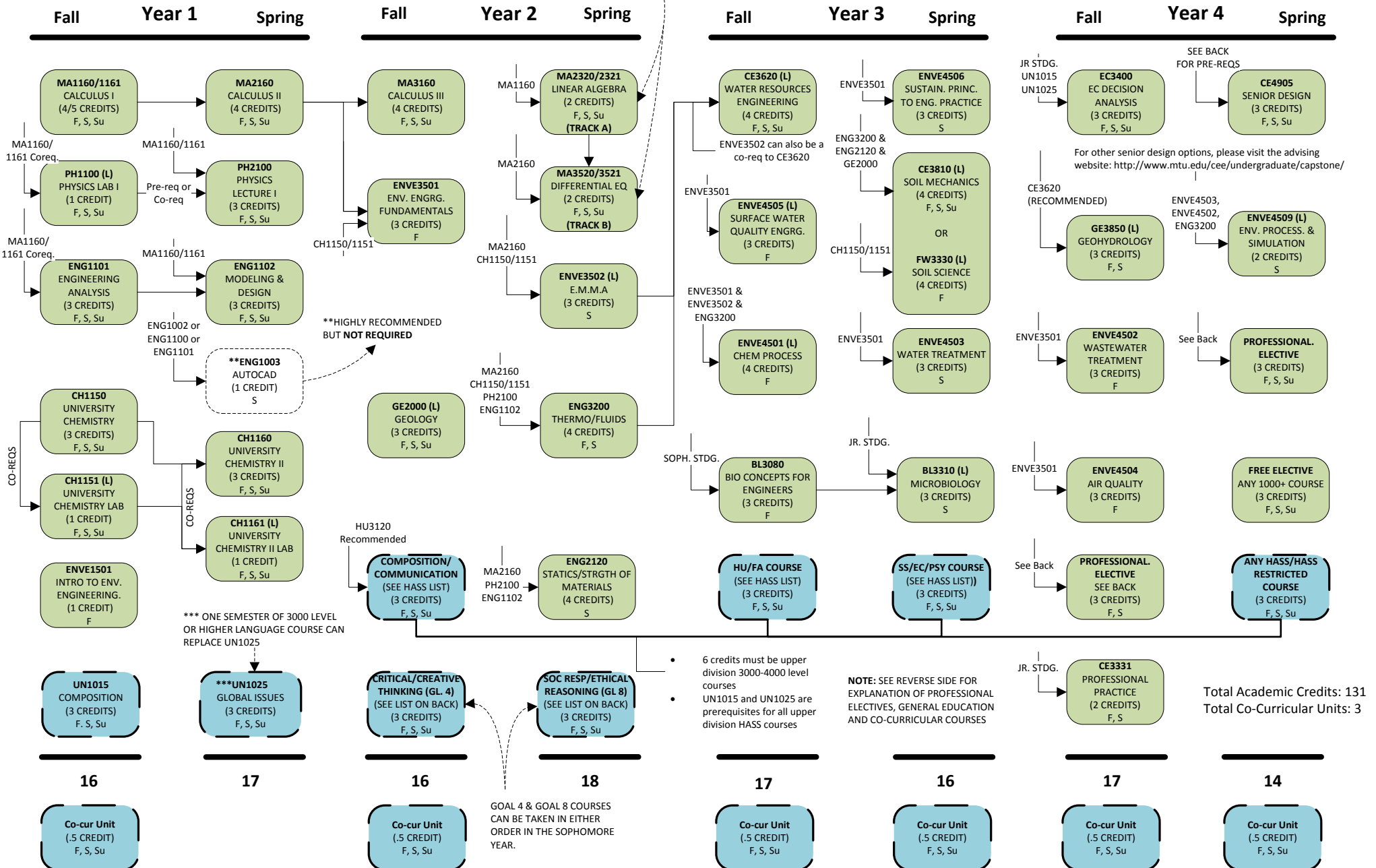
ENVIRONMENTAL ENGINEERING FLOWCHART

Academic Year 2016-17

Updated: 7/29/16

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

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



PROFESSIONAL ELECTIVES

Specialty Area	Course #	Course Title	Credits	Semester	Prerequisites
Air Quality	ENVE4515	Atmospheric Chemistry	3	Spring	ENVE4504 or ENVE4501, SR
	UN4000	Remote Sensing Seminar	1	Fall, Spring	Sophomore Standing
Surface Water Quality	ENVE5504	Surface Water Quality Modeling	3	Spring	ENVE4505
	FW4220	Wetlands	4	Fall	---
Groundwater	GE3040	Fund. of Applied and Environ. Geophysics	4	Spring	PH2200
	GE4800	Groundwater Engineering	3	On Demand	GE3850
Manufacturing	MEEM4685	Env Resp Design & Manuf	3	Spring – alt yrs	Senior Standing
Water Resources	CE4620	River and Floodplain Hydraulics	3	Fall	CE3620
	CE4640	Stormwater Management and LID	3	Summer (Online)	CE3620
	CE5664	Water Resources Modeling	3	On Demand	CE3620
	ENVE4507	Distribution and Collection	3	Spring	CE3620 and ENVE3501
	FW3540*	Intro to GIS for Natural Resource Mgmt	4	Spring	ENVE3502
	FW4220	Wetlands	4	Fall	---
	UN4000	Remote Sensing Seminar	1	Fall, Spring	Sophomore Standing
Math/Physical Science	ENVE4518	Aquatic Biogeochemistry	3	Fall	ENVE4501 (C), ENVE4505 (C)
	ENVE4528	Global Biogeochemistry	3	Fall	ENVE4501 (C)
	MA4630	Numerical Methods	3	Fall	MA3530**
	PH1200/2200	Physics II	4	Fall, S, Su	PH2100, MA2160 (co-req)
Computer Science	CS1121	Intro to Programming I	3	Fall, S, Su	MA1032 (Co-req)
	CS1122	Intro to Programming II	3	Fall, S, Su	CS1121
Business & Construction	ACC2000	Accounting Principles I	3	Fall, S, Su	---
	MKT3000	Principles of Marketing	3	Fall, S, Su	Cannot be a Freshman
	CE3332	Fundamentals of Construction Engineering	3	Fall, S, Su	Sophomore Standing
	EC3300	Industrial Organization	3	Fall, S, Su	EC2001, UN1015, UN1025
Environmental Policy	SS3520	U.S. Environmental History	3	Spring - alt yrs	UN1015, UN1025
	SS3630	Environmental Policy and Politics	3	Fall	UN1015, UN1025
Other applicable courses	ENVE4511	Solid and Hazardous Waste Engineering	3	Spring	ENVE3501
	CE4820	Foundation Engineering	3	Fall	CE3810
	CE4830	Geosynthetics Engineering	3	Spring	CE3810
	CE4990	Special Topic (Varies by semester)	3	Fall, Spring	Varies
	SU2000	Surveying & GIS Fundamentals	2	Fall, Spring	---

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

*FW3540 WILL BE OPEN TO FORESTRY MAJORS ONLY UNTIL THE INITIAL REGISTRATION PERIOD IS OVER

**MA3520/3521 SHOULD SUBSTITUTE FOR MA3530

SENIOR DESIGN PREREQUISITES:

REQUIRED

ENVE3501 OR ENVE3503, ENVE3502, AND CE3620

PLUS 4 OF THE FOLLOWING:

CE3810, ENVE4502, ENVE4504, ENVE4506 OR GE3850

GENERAL EDUCATION REQUIREMENTS

A. CORE COURSES (12 CREDITS)

1. **UN1015** (COMPOSITION)
2. **UN1025** (GLOBAL ISSUES)
3. CRITICAL AND CREATIVE THINKING (**Goal 4**) *
4. SOCIAL RESPONSIBILITY AND ETHICAL REASONING (**Goal 8**) **

*GOAL 4 LIST

FA2330
FA2520
FA2720
FA2820
HU2130
HU2503
HU2538
HU2700
HU2820
HU2910
SS2300

**GOAL 8 LIST

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

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

1. SECOND COURSE IN COMMUNICATION/COMP

2. HU OR FA COURSE (HASS LIST)

3. SS OR EC OR PSY COURSE (HASS LIST)

4. ANY HASS OR HASS RESTRICTED COURSE (HASS LIST)

- 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)

PE/FA/AR/AF _____
PE/FA/AR/AF _____
PE/FA/AR/AF _____

PE/FA/AR/AF _____
PE/FA/AR/AF _____
PE/FA/AR/AF _____

UNDERGRADUATE CATALOG: <http://www.mtu.edu/catalog/undergraduate/course-descriptions/>

GENERAL EDUCATION: <http://www.mtu.edu/provost/academic-policies/general-education/programs/>

CO-CURRICULAR LIST: <http://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/>