

ENVIRONMENTAL ENGINEERING FLOWCHART

Academic Year 2014-15

Updated: 7/21/14

F INDICATES COURSE IS OFFERED FALL SEMESTER

S INDICATES COURSE IS OFFERED SPRING SEMESTER

Su INDICATES COURSE IS OFFERED SUMMER SEMESTER

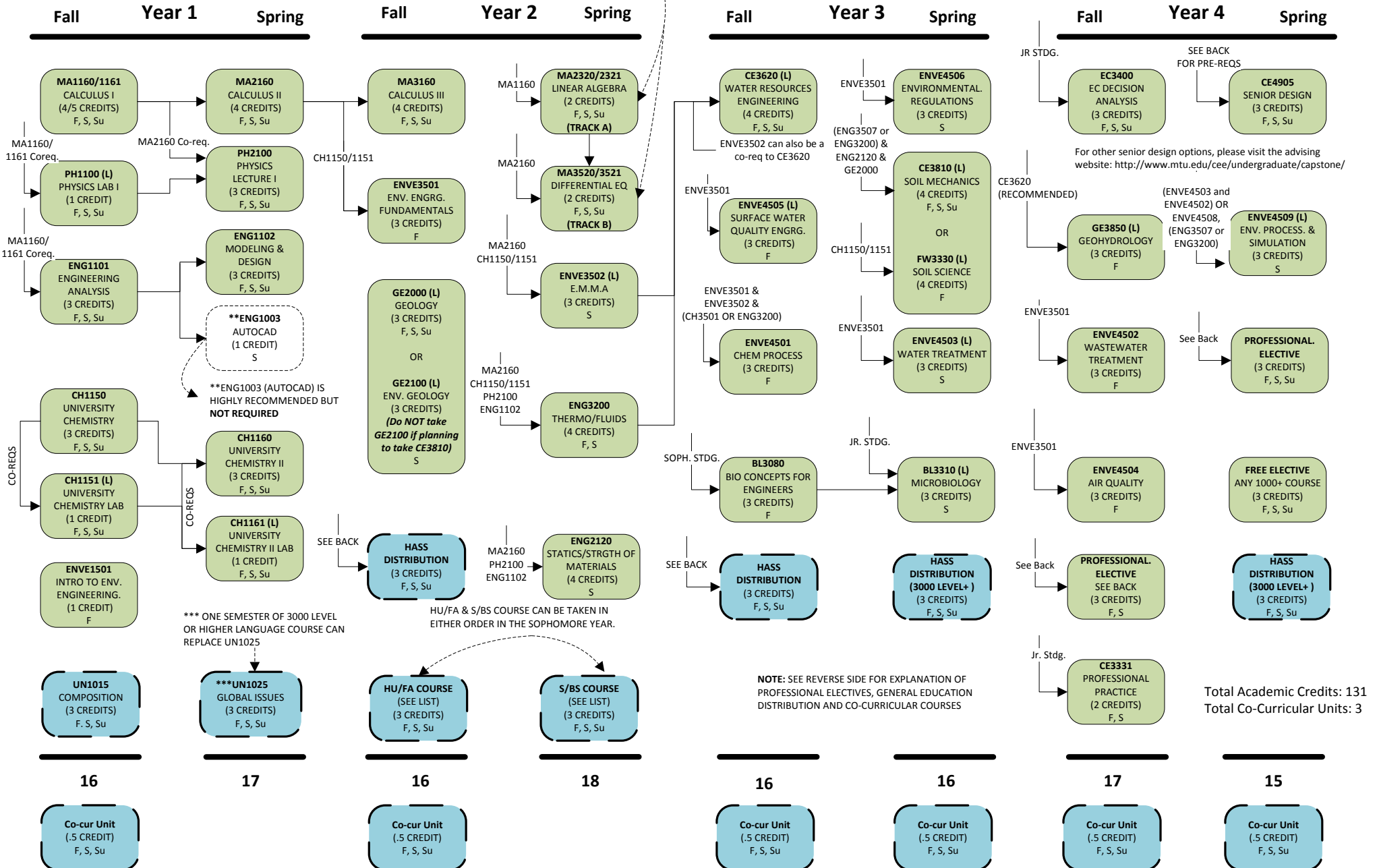
(L) INDICATES A COURSE WHICH INCLUDES A LAB MUST BE SCHEDULED IN ADDITION TO THE LECTURE

SAMPLE

= General Education Requirement

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	BL4450	Limnology	4	Fall	CH1160, Junior Standing
	ENVE5504	Surface Water Quality Modeling	3	Spring	ENVE4505
	FW4220	Wetlands	4	Fall	UN2002
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	Spring, Su	CE3620
	CE5664	Water Resources Modeling	3	On Demand	CE3620
	ENVE4507	Distribution and Collection	3	Spring	CE3620 and ENVE3501
	FW3540*	An Intro to GIS for Natural Resource Mgmt	4	Spring	MA3710**
	FW4220	Wetlands	4	Fall	---
Math/Physical Science	UN4000	Remote Sensing Seminar	1	Fall, Spring	Sophomore Standing
	ENVE4518	Aquatic Biogeochemistry	3	Fall	ENVE4501 (C), ENVE4505 (C)
	ENVE4528	Global Biogeochemistry	3	Fall	ENVE4501 (C)
	MA4630	Numerical Methods	3	Fall	MA3530***
Computer Science	PH1200/2200	Physics II	4	Fall, S, Su	PH2100, MA2160 (co-req)
	CS1121	Introduction to Computer Science I	3	Fall, S, Su	MA1032 (Co-req)
Business & Construction	CS1122	Introduction to Computer Science II	3	Fall, S, Su	CS1121
	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
Environmental Policy	EC3300	Industrial Organization	3	Fall, S, Su	EC2001
	SS3520	U.S. Environmental History	3	Spring - alt yrs	Cannot be a Freshman
SS3630	Environmental Policy and Politics	3	Fall		
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

**ENVE3502 SHOULD SUBSTITUTE FOR MA3710. CONTACT THE SFRES DEPARTMENT TO GET IT WAIVED.

***MA3520 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 GEN ED COURSES (13 CREDITS)

- | | |
|---|--|
| <input type="checkbox"/> UN1015 (COMPOSITION) | <input type="checkbox"/> HU/FA (HUMANITIES/FINE ARTS) |
| <input type="checkbox"/> UN1025 (GLOBAL ISSUES) | <input type="checkbox"/> S/BS (SOCIAL/BEHAVIORAL SCIENCES) |

HU/FA LIST

FA2330
FA2520
FA2720
FA2820
HU2130
HU2501
HU2538
HU2700
HU2820
HU2910

S/BS LIST

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

B. HASS DISTRIBUTION COURSES (12 CREDITS)

(<http://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/>)

- _____
- _____
- _____ (3000+)
- _____ (3000+)

Restrictions:

* Maximum of six (6) credits may be 2000-level

* Maximum of three (3) credits from HASS Creative Endeavors list

* Maximum of three (3) credits from HASS Supplemental List

C. CO-CURRICULAR ACTIVITIES (3 UNITS)

(<http://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/>)

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

RECOMMENDED GEN ED DISTRIBUTION COURSES:

ED3510+3511	COMMUNICATING SCIENCE
FA2600	THE TECHNIQUE OF ACTING
HU2830	INTRO TO SPEECH COMMUNICATION
HU3120	TECHNICAL & PROFESSIONAL COMM.
HU3151	THE RHETORIC OF EVERYDAY TEXTS
HU3820	INTERPERSONAL COMMUNICATION
HU4625	RISK COMMUNICATION
EC2001	PRINCIPLES OF ECONOMICS
EC3002	MICROECONOMIC THEORY
EC3003	MACROECONOMIC THEORY
SS3520	U.S. ENVIRONMENTAL HISTORY
SS3630	ENV. POLICY AND POLITICS