



# Professional Electives

(UNDERGRADUATE CATALOG: <http://www.mtu.edu/catalog/courses/>)

## ANY 3000 OR HIGHER LEVEL COURSE IN CIVIL AND ENVIRONMENTAL ENGINEERING OR IN ANY OTHER ENGINEERING DEPARTMENT.

FOR EXAMPLE:

CEE3332 Fundamentals of Construction Engineering (F, S)  
CEE4507 Distribution and Collection (S)  
CEE4511 Solid and Hazardous Waste Engineering (S)  
CEE4515 Atmospheric Chemistry (S)  
CEE4518 Aquatic Biogeochemistry (F)  
CEE4528 Global Biogeochemistry (F)  
CEE4620 River and Floodplain Hydraulics (F)  
CEE4640 Stormwater Management and LID (Su - ONLINE)  
CEE4820 Foundation Engineering (F)  
CEE4830 Geosynthetics Engineering (S)  
CEE4990 Special Topics (Varies by semester) (F, S, Su)  
GE 3040 Fund. of Applied and Environ. Geophysics (S)  
GE4800 Groundwater Engineering (ON DEMAND)  
MEEM4685 Env. Resp. Design and Manuf. (S – ALT YEARS)

## ANY 1000 OR HIGHER LEVEL COURSE IN BIOLOGY, CHEMISTRY, COMPUTER SCIENCE, CONSTRUCTION MANAGEMENT, GEOLOGY, FORESTRY, OR PHYSICS.

FOR EXAMPLE:

CS1121 Intro to Programming I (F, S, Su)  
CS1122 Intro to Programming II (F, S, Su)  
FW3540 Intro to GIS for Natural Resource Management (S)  
FW4220 Wetlands (F)  
FW4540 Remote Sensing of the Environment (F)  
PH1200/2200 Physics II (F, S, Su)

## ANY 4000 OR HIGHER LEVEL COURSE IN MATHEMATICS

FOR EXAMPLE:

MA4610 Numerical Linear Algebra (S)  
MA4620 Numerical Methods for PDEs (F)  
MA4720 Design and Analysis of Experiments (S)

## ANY 2000 OR HIGHER LEVEL COURSE IN BUSINESS OR ECONOMICS. (ACC, BUS, EC, FIN, MGT, MIS, MKT).

FOR EXAMPLE:

ACC2000 Accounting Principles I (F, S, Su)  
EC3300 Industrial Organization (F, S, Su)  
MKT3000 Principles of Marketing (F, S, Su)  
EC4640 Natural Resources Economics (F)  
EC4650 Environmental Economics (F)

## ANY 2000 OR HIGHER LEVEL COURSE IN SURVEYING

FOR EXAMPLE:

SU2000 Surveying & GIS Fundamentals (F, S)

## ANY 3000 OR HIGHER LEVEL COURSE IN HUMANITIES, SOCIAL SCIENCES, OR UNIVERSITY WIDE. (HU, SS, UN).

FOR EXAMPLE:

HU3120 Technical and Professional Communication (F, S, Su)  
SS3520 U.S. Environmental History (F)  
SS3801 Science, Technology and Society (F)  
SS3811 Energy Security and Justice (S – ALT YEARS)  
SS3630 Environmental Policy and Politics (F – ALT YEARS)  
SS4200 Environmental Anthropology (F – ALT YEARS)  
UN4000 Seminar Series in Earth, Planetary & Space Sciences (F, S)

## NOTES:

- AN OVERALL GPA OF 3.00 IS REQUIRED TO TAKE GRADUATE LEVEL COURSES (5000 LEVEL).
- A MAXIMUM OF TWO (2) GRADUATE LEVEL COURSES MAY BE USED TOWARD YOUR BS ENVE DEGREE.
- OTHER COURSES MAY BE USED TO SATISFY THE PROFESSIONAL ELECTIVES REQUIREMENT IF APPROVED BY THE DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING ACADEMIC ADVISOR.

## SENIOR DESIGN PREREQUISITES:

REQUIRED

CEE3501 OR CEE3503, CEE3502, AND CEE3620

PLUS 4 OF THE FOLLOWING:

CEE3810/FW3330, CEE4502, CEE4504, CEE4506, GE3850

## UNDERGRADUATE CATALOG:

<http://www.mtu.edu/catalog/courses/>

## GENERAL EDUCATION (CO-CURRICULAR & HASS LIST):

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

## 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  
HU2324  
HU2501  
HU2503  
HU2538  
HU2700  
HU2820  
HU2910  
SS2300

#### \*\*GOAL 8 LIST

EC2001  
ED2000  
PSY2000  
SS2100  
SS2200  
SS2400  
SS2500  
SS2501  
SS2502  
SS2503  
SS2504  
SS2505  
SS2600  
SS2610  
SS2700

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

1. COMMUNICATION/COMP (HASS LIST)  
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2. HU OR FA COURSE (HASS LIST)  
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3. SS OR EC OR PSY COURSE (HASS LIST)  
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4. ANY HASS OR HASS RESTRICTED COURSE (HASS LIST)  
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- 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)

(Co-curricular Website, left)

PE/FA/AR/AF \_\_\_\_\_  
PE/FA/AR/AF \_\_\_\_\_  
PE/FA/AR/AF \_\_\_\_\_

PE/FA/AR/AF \_\_\_\_\_  
PE/FA/AR/AF \_\_\_\_\_  
PE/FA/AR/AF \_\_\_\_\_