CIVIL ENGINEERING FLOWCHART
2012-13

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 & MA3521) OR SEPARATE SEMESTERS (MA2320 & MA3520)

**ENG1003 (AUTOCAD) IS HIGHLY RECOMMENDED BUT NOT REQUIRED

** TWO SEMESTERS OF A FOREIGN LANGUAGE ALONG WITH THE WORLD CULTURES ACTIVITIES LAB (UN1003) MAY SUBSTITUTE FOR UN2002.

NOTE: ENV3503 (ENVIRONMENTAL ENGINEERING) CAN BE TAKEN IN THE SOPHOMORE YEAR. CE3332 OR CE3401 CAN BE MOVED TO A LATER SEMESTER.

For other senior design options, please visit the advising website: http://www.mtu.edu/cee/undergraduate/capstone/

Total Academic Credits: 131
Total Co-Curricular Units: 3
## SENIOR DESIGN PREREQUISITES:
**REQUIRED:**
- CE3202, CE3620, AND CE3101
- PLUS 4 OF THE FOLLOWING:
  - (CE4213 or CE4223), (CE3331 OR CE3332), CE3401, (ENVE3503 OR ENVE3501), CE3810

## GENERAL EDUCATION REQUIREMENTS

**A. CORE "UN" COURSES (13 CREDITS)**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Semester</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1001 (PERSPECTIVES)</td>
<td>3</td>
<td>FALL</td>
<td></td>
</tr>
<tr>
<td>UN2001 (REVISIONS)</td>
<td>3</td>
<td>FALL</td>
<td></td>
</tr>
<tr>
<td>UN1002 (WORLD CULTURES)</td>
<td>3</td>
<td>FALL</td>
<td></td>
</tr>
<tr>
<td>UN2002 (INSTITUTIONS)</td>
<td>3</td>
<td>FALL</td>
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</tbody>
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**Restrictions:**
- Maximum of nine (9) credits may be 2000-level
- Maximum of three (3) credits from HASS Creative Endeavors list
- Maximum of three (3) credits from HASS Supplemental List

**B. DISTRIBUTIONS COURSES (15 CREDITS)**

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Semester</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC4000</td>
<td>3</td>
<td>FALL</td>
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**C. CO-CURRICULAR ACTIVITIES (3 UNITS)**

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Credits</th>
<th>Semester</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE/FA/AR/AF</td>
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<tr>
<td>PE/FA/AR/AF</td>
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**ADDITIONAL PROFESSIONAL ELECTIVES:**

- ANY 4000 OR 5000 LEVEL COURSE IN CIVIL AND ENVIRONMENTAL ENGINEERING. COULD BE ADDITIONAL COURSES IN A CHOSEN CONCENTRATION AREA.
- 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 BSCE degree*
- ANY 3000 OR HIGHER LEVEL COURSE IN BIOLOGY, CHEMISTRY, COMPUTER SCIENCE, GEOLOGY, OR PHYSICS.
- ANY 3000 OR HIGHER LEVEL COURSE IN AN ENGINEERING DEPARTMENT OTHER THAN THE DEPARTMENT OF CIVIL AND ENV. ENGINEERING.
- ANY 4000 OR HIGHER LEVEL COURSE IN MATHEMATICS.
- ANY 3000 OR HIGHER LEVEL COURSE IN BUSINESS OR ECONOMICS. (ACC, BUS, EC, FIN, MGT, MIS, MKT)
- ANY 2000 OR HIGHER LEVEL COURSE IN SURVEYING

**RECOMMENDED GEN ED DISTRIBUTION COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Semester</th>
<th>Prerequisites</th>
</tr>
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<tbody>
<tr>
<td>ED3510+3511</td>
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<td></td>
<td>COMMUNICATING SCIENCE</td>
</tr>
<tr>
<td>FA2600</td>
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<td></td>
<td>THE TECHNIQUE OF ACTING</td>
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<tr>
<td>HU2830</td>
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<td>INTRO TO SPEECH COMMUNICATION</td>
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<tr>
<td>HU3120</td>
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<td>TECHNICAL &amp; SCIENTIFIC COMM.</td>
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<td>HU3151</td>
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<td>THE RHETORIC OF EVERYDAY TEXTS</td>
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<tr>
<td>HU3820</td>
<td></td>
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<td>INTERPERSONAL COMMUNICATION</td>
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**NOTE:** OTHER COURSES MAY BE USED TO SATISFY THE PROFESSIONAL ELECTIVES REQUIREMENT IF APPROVED BY THE DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING ACADEMIC ADVISOR.