CIVIL ENGINEERING FLOWCHART

General Year 2020-21

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

SD = Senior Design Pre-requisite

Adjusted due to curriculum changes.

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

Updated 06/18/20
**Engineering Science Elective List (3 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BE2700</td>
<td>BIOMEDICAL SIGNALS &amp; SYSTEMS</td>
</tr>
<tr>
<td>CM2110</td>
<td>FUND. OF CHEM ENGRG 1</td>
</tr>
<tr>
<td>CM2200</td>
<td>INTRO TO MINERALS &amp; MATERIALS</td>
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<tr>
<td>EE3010</td>
<td>CIRCUITS AND INSTRUMENTATION</td>
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<tr>
<td>MSE2100</td>
<td>INTRO TO MATERIALS SCI &amp; ENGRG</td>
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<tr>
<td>MEEM2201</td>
<td>THERMODYNAMICS</td>
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<tr>
<td>MEEM2700</td>
<td>DYNAMICS</td>
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**Senior Design (SD) Pre-reqs (complete 7 of the following)**

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<tr>
<td>CEE3101</td>
<td>CEE3202, CEE3331, CEE3332, CEE3401, CEE3503, CEE3620, CEE3810, CEE4213 or CEE4223</td>
</tr>
</tbody>
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**UNDERGRADUATE CATALOG:**
http://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:** [http://www.mtu.edu/catalog/courses](http://www.mtu.edu/catalog/courses)

- Any 1000 or higher level course in **Computer Science, Fine Arts or Forestry** (CS, FA, FW)
- 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 AND ENVIRONMENTAL ENGINEERING ACADEMIC ADVISOR.

**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**
   - FA2330, FA2520, FA2720, FA2820, HU2130, HU2324, HU2501, HU2503, HU2538, HU2700, HU2820, HU2910, SS2300
4. **SOCIAL RESP. & ETHICAL REASONING**
   - EC2001, PSY2000, SS2100, SS2200, SS2400, SS2500, SS2501, SS2502, SS2503, SS2504, SS2505, SS2600, SS2610, SS2700

**B. HASS COURSES (12 CREDITS)**

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)**

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