## B.S. CONSTRUCTION ENGINEERING + B.S. CIVIL ENGINEERING – ENGINEERING MATH 2020

### FRESHMAN

<table>
<thead>
<tr>
<th>Fall (17 hrs)</th>
<th>Spring (16 hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVEEN 1000</td>
<td>Intro to Civil &amp; Environmental Engineering</td>
</tr>
<tr>
<td>CVEEN 1400</td>
<td>Computer-Aided Design</td>
</tr>
<tr>
<td>CVEEN 2000</td>
<td>Seminar</td>
</tr>
<tr>
<td>CVEEN 2140</td>
<td>Strength of Materials</td>
</tr>
<tr>
<td>MATH 1310</td>
<td>Calculus I (QR)</td>
</tr>
<tr>
<td>MATH 1310</td>
<td>Calculus II (QR)</td>
</tr>
<tr>
<td>PHYS 2210</td>
<td>Physics for Sci &amp; Engineers I</td>
</tr>
<tr>
<td>CHEM 1210</td>
<td>Gen Chemistry I</td>
</tr>
<tr>
<td>CHEM 1215</td>
<td>Lab</td>
</tr>
<tr>
<td>MG EN 2400</td>
<td>Surveying</td>
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<tr>
<td>ECON 2105</td>
<td>Microeconomics</td>
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### SOPHOMORE

<table>
<thead>
<tr>
<th>Fall (16 hrs)</th>
<th>Spring (16 hrs)</th>
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<tbody>
<tr>
<td>CVEEN 2010</td>
<td>Engineering Calculus II</td>
</tr>
<tr>
<td>CVEEN 2300</td>
<td>Engineering Economics</td>
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<tr>
<td>CVEEN 2750</td>
<td>Computer Tools</td>
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<tr>
<td>CVEEN 2900</td>
<td>Engineering Seminar</td>
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<tr>
<td>CHEM 1220</td>
<td>Gen Chemistry II</td>
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<tr>
<td>CHEM 1225</td>
<td>Gen Chemistry II Lab</td>
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<tr>
<td>MATH 2250</td>
<td>Differential Equations &amp; Linear Algebra</td>
</tr>
<tr>
<td>ARCH 1615</td>
<td>Intro to Architecture (FF)</td>
</tr>
<tr>
<td>GEO 1000</td>
<td>Evolving Earth</td>
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<tr>
<td>WRTG 2010</td>
<td>Technical Writing</td>
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### JUNIOR

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<thead>
<tr>
<th>Fall (16 hrs)</th>
<th>Spring (15 hrs)</th>
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<tbody>
<tr>
<td>CVEEN 3310</td>
<td>Geotech I (Qi)</td>
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<tr>
<td>CVEEN 3315</td>
<td>Lab</td>
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<tr>
<td>CVEEN 3210</td>
<td>Structural Loads &amp; Analysis (Qi)</td>
</tr>
<tr>
<td>CVEEN 3510</td>
<td>Materials</td>
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<tr>
<td>CVEEN 3515</td>
<td>Lab</td>
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<tr>
<td>MATH 2210</td>
<td>Calculus III (QR)</td>
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<tr>
<td>MATH 2220</td>
<td>Calculus IV (QR)</td>
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<tr>
<td>CHEM 1220</td>
<td>Gen Chemistry II</td>
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<tr>
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<td>Gen Chemistry II Lab</td>
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<tr>
<td>MATH 2250</td>
<td>Differential Equations &amp; Linear Algebra</td>
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<tr>
<td>ARCH 1615</td>
<td>Intro to Architecture (FF)</td>
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<td>GEO 1000</td>
<td>Evolving Earth</td>
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<td>WRTG 2010</td>
<td>Technical Writing</td>
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### SENIOR

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<th>Fall (15 hrs)</th>
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<tr>
<td>CVEEN 4221</td>
<td>Concrete I (Qi)</td>
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<tr>
<td>CVEEN 4900</td>
<td>Professional Practice</td>
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<tr>
<td>CVEEN 4910</td>
<td>Civil Design Capstone</td>
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<tr>
<td>CVEEN 5305</td>
<td>Intro to Foundations</td>
</tr>
<tr>
<td>CVEEN 5500</td>
<td>Sust. Materials</td>
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### General Ed. Requirement

- WRTG 1010
- CHEM 1220
- CHEM 1225
- MATH 1050
- MG EN 2400
- ECON 2105

### Technical Elective

- CVEEN 4910
- CVEEN 5305
- CVEEN 5500

### Total Required Credit Hours: 139.5

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Recommended General Education Courses:
- LEAP 1501 Social & Ethical Engineering (BF) - Fall only
- LEAP 1500 Humanities for Engineers (HDV) - Spring only

^ GEO 1000 can be substituted with GEO 1310 & 1115—Earth Systems & Lab (4)

Have you completed 3 of the 4 shaded courses? Is your EGPA ≥2.50? If yes, apply for Full Major Status!

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**KEY**
- Full Major Status Required
- Prerequisite
- Corequisite
TECHNICAL ELECTIVES (choose 3)

**Water Resources**
- CVEEN 3410 Hydraulics (Q) 3
- CVEEN 3415 Lab 3
- CVEEN 5420 Open–Channel 3

**Environmental**
- CVEEN 3610 Environmental 3
- CVEEN 3615 Lab 3
- CVEEN 5610 Water Chemistry 3

**Geotech & Materials**
- CVEEN 5570 Pavement Design 3

**Structures**
- CVEEN 4222 Steel I 3
- CVEEN 5210 Structural Analysis II 3
- CVEEN 5240 Reinforced Timber/Masonry 3

**Transportation**
- CVEEN 3520 & 2140 3
- CVEEN 5560 Transportation Planning 3

**Nuclear Engineering**
- CHEM 1220, MATH 1220 & PHYS 2220 3
- NUCL 3000 Nuclear Principals in Engineering & Science 3
- NUCL 3100 Neutron Based Engineering 3

**Other** (Max 1)
- Any 3000+ level course form the College of Engineering or an ABET accredited program 3

*Caveat: Semester availability is subject to change at the discretion of the department and does not create a binding contractual nexus or obligation between the student and the University of Utah

^ Courses cannot be used to satisfy two requirements