### B.S. CONSTRUCTION ENGINEERING – ENGINEERING MATH 2019

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall (17 hrs)</td>
<td>Spring (16 hrs)</td>
<td>Fall (14 hrs)</td>
<td>Spring (15 hrs)</td>
</tr>
<tr>
<td>CVEEN 1000 Intro to Civil &amp; Environmental Engineering</td>
<td>CVEEN 1400 Computer-Aided Design</td>
<td>CVEEN 2000 Seminar</td>
<td>CVEEN 2140 Structural Loads &amp; Analysis (QI)</td>
</tr>
<tr>
<td>MATH (1050 &amp; 1060) or MATH 1080</td>
<td>CHEM 1210 Engineering Calculus I (QR)</td>
<td>CHEM 1220 Gen Chemistry II</td>
<td>CHEM 1225 Gen Chemistry II Lab</td>
</tr>
<tr>
<td>CHEM 1215 Lab</td>
<td>PHYS 2210 Physics for Sci &amp; Engineers I</td>
<td>PHYS 2220 Physics for Sci &amp; Engineers II</td>
<td>PHYS 2250 Physics for Sci &amp; Engineers II Lab</td>
</tr>
<tr>
<td>MATH 1050 ↓</td>
<td>MATH 1310 ↓</td>
<td>CHEM 2040 Surveying</td>
<td>CHEM 2000 Lab</td>
</tr>
<tr>
<td>CHEM 1210 ↓</td>
<td>CHEM 1220 Gen Chemistry II</td>
<td>CHEM 2250 Diff Equations &amp; Linear Algebra</td>
<td>ARCH 1615 Intro to Architecture (FF)</td>
</tr>
<tr>
<td>MATH 1060 ↓</td>
<td>MATH 1320 ↓</td>
<td>MATH 1310 ↓</td>
<td>MATH 1310 ↓</td>
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<tr>
<td>GEO 1115 Lab</td>
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### Fall (17 hrs) & Spring (16 hrs)

**FRESHMAN**

- **CVEEN 1000 Intro to Civil & Environmental Engineering**
- **CVEEN 1400 Computer-Aided Design**
- **CHEM 1210 Engineering Calculus I (QR)**
- **PHYS 2210 Physics for Sci & Engineers I**
- **WRTG 1010 Intermediate Writing**
- **CHEM 1215 Lab**
- **ECON 2010 Microeconomics (BF)**
- **GEO 1110 Intro Earth Systems**

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

^ **GEO 1110 & 1115** can be substituted with **GEO 1100 - Evolving Earth (3)**

### Fall (14 hrs) & Spring (15 hrs)

**SOPHOMORE**

- **CVEEN 2000 Seminar**
- **CHEM 2300 Engineering Economics**
- **MATH 1310 & PHYS 2210 ↓**
- **MG EN 2400 Surveying**
- **CHEM 2250 Principles of Construction Eng.**
- **ARCH 1615 Intro to Architecture (FF)**
- **GEO 1110 Intro Earth Systems**
- **GEO 1115 Intro Earth Systems**
- **WRTG 2010 ↓**

### Fall (15 hrs) & Spring (15 hrs)

**JUNIOR**

- **CVEEN 2100 ↓**
- **CVEEN 2140 Structural Loads & Analysis (QI)**
- **CHEM 2310 Geotech I (QI)**
- **CHEM 3315 Transportation**
- **CVEEN 3100 Technical Communication (CW)**
- **CVEEN 3210 Concrete I**
- **CVEEN 3510 Materials**
- **CVEEN 3515 Materials Lab**
- **CVEEN 3710 Contract Specifications**

### Fall (15 hrs) & Spring (15 hrs)

**SENIOR**

- **CVEEN 2010 ↓**
- **CVEEN 2140 Structural Loads & Analysis (QI)**
- **CHEM 3310 Geotech I (QI)**
- **CHEM 3315 Transportation**
- **CVEEN 3100 Technical Communication (CW)**
- **CVEEN 4221 Concrete I**
- **CVEEN 4920 Design Capstone**
- **CVEEN 5720 Project Scheduling**
- **CVEEN 5780 Vertical Construction**
- **CVEEN 5790 Vertical Construction**

### Have you completed 3 of the 4 shaded courses? Is your EGPA ≥2.50?

If yes, apply for Full Major Status!
TECHNICAL ELECTIVE COURSES

Students must complete three technical elective courses.

To graduate with a Bachelor of Science Degree in Construction Engineering you must:

1. Complete at least one course from the Primary section.
2. Complete at least one Design course from the Secondary Section. These are designated by a shaded box. Example: CVEEN 5510

As long as these requirements are satisfied, you may take the remaining one technical elective from either section.

PRIMARY TECHNICAL ELECTIVES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVEEN 5710</td>
<td>Cost Estimation &amp; Proposal Writing</td>
<td>F 20/22</td>
<td>3</td>
</tr>
<tr>
<td>CVEEN 5730</td>
<td>Project Management &amp; Contract Admin.</td>
<td>SP 20/22</td>
<td>3</td>
</tr>
<tr>
<td>CVEEN 5750</td>
<td>Engineering Law &amp; Contracts</td>
<td>SU 20/22</td>
<td>3</td>
</tr>
</tbody>
</table>

SECONDARY TECHNICAL ELECTIVES

<table>
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<tr>
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<th>Course Title</th>
<th>Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVEEN 4222</td>
<td>Steel I</td>
<td>SP</td>
<td>3</td>
</tr>
<tr>
<td>CVEEN 5510</td>
<td>Highway Design</td>
<td>SP</td>
<td>3</td>
</tr>
<tr>
<td>CVEEN 5305</td>
<td>Introduction to Foundations</td>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 6371</td>
<td>Intensive Materials &amp; Construction</td>
<td>F</td>
<td>3</td>
</tr>
</tbody>
</table>

To graduate, you must:

1. Complete at least one course from the Primary section.
2. Complete at least one Design course from the Secondary Section. These are designated by a shaded box. Example: CVEEN 5510

As long as these requirements are satisfied, you may take the remaining technical elective from either section.

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.