### B.S. CONSTRUCTION ENGINEERING – TRADITIONAL MATH 2022

#### FRESHMAN

**Fall** (17 hrs)  
- CVEEN 1000 Intro to Civil & Environmental Engineering  
- MATH 1050 & 1060 or MATH 1080  
- CHEM 1215 Gen Chemistry I (QF)  
- CHEM 1220 Gen Chemistry II Lab  
- CHEM 1225 Gen Chemistry II Lab  
- PHYS 2215 Physics for Sci & Engineers I Lab  
- PHYS 2225 Physics for Sci & Engineers II Lab  
- ARCH 1615 Intro to Architecture (FF)  
- WRTG 1010 Intermediate Writing  
- MATH 1060  
- MATH 1210 Calculus I (QR)  
- MATH 1220 Calculus II  
- PHYS 2210 Physics for Sci & Engineers I  
- PHYS 2220 Physics for Sci & Engineers II  

**Spring** (16 hrs)  
- CVEEN 1400 Computer-Aided Design  
- CVEEN 2310 Probability & Statistics  
- GENERAL EDUCATION REQUIREMENTS  
- WRTG 2010 Writing  
- CHEM 1210 Gen Chemistry I  
- CHEM 1220 Gen Chemistry II  
- CHEM 2210 Calculus III  
- MG EN 2400 Surveying  
- PHYS 2210 Diff Equations & Linear Algebra  
- ARCH 1615 Intro to Architecture (FF)  
- WRTG 2010 Intermediate Writing  
- MATH 1060  
- MATH 1210 Calculus I (QR)  
- MATH 1220 Calculus II  
- PHYS 2210 Physics for Sci & Engineers I  
- PHYS 2220 Physics for Sci & Engineers II  

#### SOPHOMORE

**Fall** (15.5 hrs)  
- CVEEN 2000 Seminar  
- CVEEN 2140 Strength of Materials  
- CVEEN 2200 Engineering Economics  
- CVEEN 2310 Probability & Statistics  
- GENERAL EDUCATION REQUIREMENTS  
- WRTG 2010 Writing  
- CHEM 1210 Gen Chemistry I  
- CHEM 1220 Gen Chemistry II  
- CHEM 2210 Calculus III  
- MG EN 2400 Surveying  
- PHYS 2210 Diff Equations & Linear Algebra  
- ARCH 1615 Intro to Architecture (FF)  
- WRTG 2010 Intermediate Writing  
- MATH 1060  
- MATH 1210 Calculus I (QR)  
- MATH 1220 Calculus II  
- PHYS 2210 Physics for Sci & Engineers I  
- PHYS 2220 Physics for Sci & Engineers II  

**Spring** (17 hrs)  
- CVEEN 2140 Structural Loads & Analysis (QF)  
- CVEEN 2320 Geotech I (QF)  
- CVEEN 2350 Computer Tools  
- CVEEN 2750 Principles of Construction Engineering  
- GENERAL EDUCATION REQUIREMENTS  
- CHEM 1210 Gen Chemistry I  
- CHEM 1220 Gen Chemistry II  
- CHEM 2210 Calculus III  
- MG EN 2400 Surveying  
- PHYS 2210 Diff Equations & Linear Algebra  
- PHYS 2220 Physics for Sci & Engineers II  
- ARCH 1615 Intro to Architecture (FF)  
- WRTG 2010 Intermediate Writing  
- MATH 1060  
- MATH 1210 Calculus I (QR)  
- MATH 1220 Calculus II  
- PHYS 2210 Physics for Sci & Engineers I  
- PHYS 2220 Physics for Sci & Engineers II  

#### JUNIOR

**Fall** (17 hrs)  
- CVEEN 3100 Technical Communication (CW)  
- CVEEN 3210 Concrete I  
- CVEEN 3510 Structural Loads & Analysis (QI)  
- CVEEN 3515 Contract Specifications  
- CVEEN 3700 Engineering Economics  
- CVEEN 3710 Principles of Construction Engineering  
- GENERAL EDUCATION REQUIREMENTS  
- CHEM 1210 Gen Chemistry I  
- CHEM 1220 Gen Chemistry II  
- CHEM 2210 Calculus III  
- MG EN 2400 Surveying  
- PHYS 2210 Diff Equations & Linear Algebra  
- PHYS 2220 Physics for Sci & Engineers II  
- ARCH 1615 Intro to Architecture (FF)  
- WRTG 2010 Intermediate Writing  
- MATH 1060  
- MATH 1210 Calculus I (QR)  
- MATH 1220 Calculus II  
- PHYS 2210 Physics for Sci & Engineers I  
- PHYS 2220 Physics for Sci & Engineers II  

**Spring** (15 hrs)  
- CVEEN 3140 Linear Algebra  
- CVEEN 3210 Concrete I  
- CVEEN 3250 Computer Tools  
- CVEEN 3310 Tech Comm (CW)  
- CVEEN 3515 Contract Specifications  
- CVEEN 3700 Engineering Economics  
- GENERAL EDUCATION REQUIREMENTS  
- CHEM 1210 Gen Chemistry I  
- CHEM 1220 Gen Chemistry II  
- CHEM 2210 Calculus III  
- MG EN 2400 Surveying  
- PHYS 2210 Diff Equations & Linear Algebra  
- PHYS 2220 Physics for Sci & Engineers II  
- ARCH 1615 Intro to Architecture (FF)  
- WRTG 2010 Intermediate Writing  
- MATH 1060  
- MATH 1210 Calculus I (QR)  
- MATH 1220 Calculus II  
- PHYS 2210 Physics for Sci & Engineers I  
- PHYS 2220 Physics for Sci & Engineers II  

#### SENIOR

**Fall** (15 hrs)  
- CVEEN 3140 Linear Algebra  
- CVEEN 3210 Concrete I  
- CVEEN 3250 Computer Tools  
- CVEEN 3310 Tech Comm (CW)  
- CVEEN 3515 Contract Specifications  
- CVEEN 3700 Engineering Economics  
- GENERAL EDUCATION REQUIREMENTS  
- CHEM 1210 Gen Chemistry I  
- CHEM 1220 Gen Chemistry II  
- CHEM 2210 Calculus III  
- MG EN 2400 Surveying  
- PHYS 2210 Diff Equations & Linear Algebra  
- PHYS 2220 Physics for Sci & Engineers II  
- ARCH 1615 Intro to Architecture (FF)  
- WRTG 2010 Intermediate Writing  
- MATH 1060  
- MATH 1210 Calculus I (QR)  
- MATH 1220 Calculus II  
- PHYS 2210 Physics for Sci & Engineers I  
- PHYS 2220 Physics for Sci & Engineers II  

**Spring** (15 hrs)  
- CVEEN 3140 Linear Algebra  
- CVEEN 3210 Concrete I  
- CVEEN 3250 Computer Tools  
- CVEEN 3310 Tech Comm (CW)  
- CVEEN 3515 Contract Specifications  
- CVEEN 3700 Engineering Economics  
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- CHEM 1210 Gen Chemistry I  
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- MATH 1220 Calculus II  
- PHYS 2210 Physics for Sci & Engineers I  
- PHYS 2220 Physics for Sci & Engineers II  

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**Recommended General Education Courses**

- LEAP 1501 Social & Ethical Engineering (BF) - Fall only
- LEAP 1500 Humanities for Engineers (HFDV) - Spring only
- GEO 1100 can be substituted with GEO 1110 & 1115—Earth Systems & Lab (4)

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**Have you completed 3 of the 4 shaded courses? Is your EGPA ≥2.50?**  
- Full Major Status Required
- Prerequisite Corequisite

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**Total Required Credit Hours: 127.5**

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**Construction Engineering**  
**College of Engineering | The University of Utah**

**Updated February 17, 2022**
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 22/24</td>
<td>3</td>
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<tr>
<td>CVEEN 5730</td>
<td>Project Management &amp; Contract Admin.</td>
<td>SP</td>
<td>3</td>
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<tr>
<td>CVEEN 5750</td>
<td>Engineering Law &amp; Contracts</td>
<td>SU 22/24</td>
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### SECONDARY TECHNICAL ELECTIVES

<table>
<thead>
<tr>
<th>Structures</th>
<th>Transportation</th>
<th>Geotech &amp; Materials</th>
<th>Architecture</th>
<th>Other (Max 1)</th>
</tr>
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<tbody>
<tr>
<td>CVEEN 4222</td>
<td>CVEEN 5510</td>
<td>CVEEN 5305</td>
<td>ARCH 6371</td>
<td>CVEEN 5920</td>
</tr>
<tr>
<td>Steel I</td>
<td>Highway Design</td>
<td>Introduction to Foundations</td>
<td>Intensive Materials &amp; Construction</td>
<td>Special Topics</td>
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<tr>
<td>SP 3</td>
<td>SP 3</td>
<td>F 3</td>
<td>SP 3</td>
<td>OR Any 3000+ level course from the College of Engineering or an ABET accredited program</td>
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<tr>
<td>CVEEN 5240</td>
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<td>CVEEN 5500</td>
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<tr>
<td>Reinforced</td>
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<td>Sustainable Materials</td>
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<tr>
<td>Timber/Masonry</td>
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<td>Materials</td>
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<td>F 4</td>
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<td>SP 3</td>
<td></td>
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</tbody>
</table>

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.