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

#### FRESHMAN

- **Fall (17 hrs)**
  - CVEEN 1000 Intro to Civil & Environmental Engineering (2)
  - MATH 1310 or MATH 1050 or MATH 1060 (2)
  - CHEM 1210 Gen Chemistry I (4)
  - CHEM 1215 Gen Chemistry I Lab (1)
  - PHYS 2210 Physics for Sci & Engineers I (4)
  - PHYS 2215 Physics for Sci & Engineers I Lab (4)
  - WRTG 1010 Intermediate Writing (1)
  - General Ed. Requirement (3)
- **Spring (16 hrs)**
  - CVEEN 1400 Computer-Aided Design (3)
  - CVEEN 2000 Seminar (1)
  - MG EN 2400 Surveying (3)
  - CHEM 1225 Gen Chemistry II Lab (4)
  - CHEM 2225 Physics for Sci & Engineers II Lab (4)
  - ECON 2010 Microeconomics (BF) (3)
  - GEO 1100 Evolving Earth (3)
  - WRTG 2010 Technical Communication (CW) (3)

#### SOPHOMORE

- **Fall (16.5 hrs)**
  - CVEEN 2010 Strength of Materials (3)
  - CVEEN 2140 Concrete I (3)
  - MATH 1060 & PHYS 2210 (4)
  - PHYS 2220 Physics for Sci & Engineers II (4)
  - CHEM 2300 Engineering Economics (3)
  - EVOL 1500 Social & Ethical Engineering (BF) (3)
  - Reactive General Education (3)
- **Spring (16 hrs)**
  - CVEEN 2020 Geochem I (QI) (3)
  - CVEEN 2310 Probability & Statistics (3)
  - MATH 1050 & PHYS 2210 (4)
  - PHYS 2225 Physics for Sci & Engineers II Lab (4)
  - ECON 2010 Microeconomics (BF) (3)
  - GEO 1100 Evolving Earth (3)
  - WRTG 2010 Technical Communication (CW) (3)

#### JUNIOR

- **Fall (14 hrs)**
  - CVEEN 3210 Structures Analysis (QI) (3)
  - CVEEN 3300 Geotechnical Engineering I (QI) (3)
  - CHEM 1220 Gen Chemistry II Lab (4)
  - CHEM 2220 Physics for Sci & Engineers II Lab (4)
  - MG EN 3200 Surveying (3)
  - MG EN 3200 Surveying (3)
  - GEO 1100 Evolving Earth (3)
  - WRTG 2010 Technical Communication (CW) (3)
- **Spring (15 hrs)**
  - CVEEN 3310 Materials (3)
  - CVEEN 3315 Contract Specifications (3)
  - MATH 1050 & MATH 1060 (10)
  - PHYS 2210 Physics for Sci & Engineers I (4)
  - CHEM 2300 Economics I (3)
  - CHEM 2300 Economics I (3)
  - GEO 1100 Evolving Earth (3)
  - WRTG 2010 Technical Communication (CW) (3)

#### SENIOR

- **Fall (15 hrs)**
  - CVEEN 3100 Design Tech Elec (3)
  - CVEEN 3210 Computer Tools (3)
  - MATH 1050 (2)
  - PHYS 2210 Physics for Sci & Engineers I (4)
  - CHEM 2300 Economics I (3)
  - CHEM 2300 Economics I (3)
  - GEO 1100 Evolving Earth (3)
  - WRTG 2010 Technical Communication (CW) (3)
- **Spring (15 hrs)**
  - CVEEN 3100 Design Tech Elec (3)
  - CVEEN 3210 Computer Tools (3)
  - MATH 1050 (2)
  - PHYS 2210 Physics for Sci & Engineers I (4)
  - CHEM 2300 Economics I (3)
  - CHEM 2300 Economics I (3)
  - GEO 1100 Evolving Earth (3)
  - WRTG 2010 Technical Communication (CW) (3)

**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? If yes, apply for Full Major Status!**

**Total Required Credit Hours: 124.5**
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>
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</thead>
<tbody>
<tr>
<td>CVEEN 5710</td>
<td>Cost Estimation &amp; Proposal Writing</td>
<td>F 20/22</td>
<td>3</td>
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<tr>
<td>CVEEN 5730</td>
<td>Project Management &amp; Contract Admin.</td>
<td>SP 20/22</td>
<td>3</td>
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<tr>
<td>CVEEN 5750</td>
<td>Engineering Law &amp; Contracts</td>
<td>SU 20/22</td>
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### SECONDARY TECHNICAL ELECTIVES

#### Structures

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<tr>
<td>CVEEN 4222</td>
<td>Steel I</td>
<td>SP</td>
<td>3</td>
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<tr>
<td>CVEEN 5240</td>
<td>Reinforced Timber/Masonry</td>
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#### Transportation

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<tr>
<td>CVEEN 5510</td>
<td>Highway Design</td>
<td>SP</td>
<td>3</td>
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<tr>
<td>CVEEN 5305</td>
<td>Introduction to Foundations</td>
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#### Geotech & Materials

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<tr>
<td>CVEEN 5500</td>
<td>Sustainable Materials</td>
<td>SP</td>
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#### Architecture

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<tr>
<td>ARCH 6371</td>
<td>Intensive Materials &amp; Construction</td>
<td>F</td>
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#### Other (Max 1)

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<th>Credits</th>
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<tbody>
<tr>
<td>CVEEN 5305</td>
<td>Sustainable Materials</td>
<td>SP</td>
<td>3</td>
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<tr>
<td>CVEEN 5500</td>
<td>Sustainable Materials</td>
<td>SP</td>
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**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.