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VISION STATEMENT: Pursuit of excellence in preparing engineers to provide innovative solutions to the world’s challenges in sustaining the environment and the infrastructure.

MISSION STATEMENT: Provide high quality education in engineering and leadership, life-long learning opportunities, and innovation for the benefit of the State of Utah and the world.

The Bachelor of Science Degree in Civil Engineering at the University of Utah is accredited by the Engineering Accreditation Commission of ABET (www.abet.org).
### FRESHMAN

**Fall (17 hrs)**
- CVEEN 1000 Intro to Civil & Environmental Engineering
- MATH 1310 Engineering Calculus I (QR)
- FRESHMAN General Ed. Requirement

**Spring (16 hrs)**
- CVEEN 1400 Computer-Aided Design
- PHYS 2210 Physics for Sci & Engineers I
- WRTG 1010 Intermediate Writing

### SOPHOMORE

**Fall (15.5 hrs)**
- CVEEN 2000 Seminar
- CHEM 1215 General Ed. Requirement Lab
- MATH 1320 Engineering Calculus II

**Spring (14 hrs)**
- CVEEN 2140 Strength of Materials
- MATH 2250 Diff Equations & Linear Algebra
- CHEM 1210 Gen Chemistry II Lab

### JUNIOR

**Fall (17 hrs)**
- CVEEN 2400 Surveying
- CHEM 1210 Gen Chemistry II Lab
- MATH 1060

**Spring (17 hrs)**
- CVEEN 2750 Computer Tools
- MATH 1310 & PHYS 2210
- WRTG 2010

### SENIOR

**Fall (15 hrs)**
- CVEEN 3100 Professional Practice
- CHEM 1225 General Ed. Requirement

**Spring (15 hrs)**
- CVEEN 4910 Design Capstone
- CHEM 1225 General Ed. Requirement
- WRTG 2010

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

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**KEY**
- Full Major Status Required
- Prerequisite
- Corequisite
- Required
- Additional Science Requirement

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**Total Required Credit Hours: 126.5**

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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!**
Congratulations on reaching the Technical Electives! These delve deeper into the various areas covered in the 3000-level courses. A total of 6 Technical Electives, with the exception of Fastrax students, are required. While you are able to take courses in your areas of interest, further specialization is achieved by pursuing Graduate School.

### Primary Technical Electives

To graduate with a Bachelor of Science Degree in Civil & Environmental Engineering you must:

1. Take at least one course from 3 of the 5 emphasis areas in the Primary section. Three different checkboxes must be marked to fulfill this requirement.
2. Complete at least two Design courses from different emphasis areas. These are designated by a shaded box. Example: CVEEN 4221 and CVEEN 5420

As long as these requirements are satisfied, you may take the remaining 3 technical electives in either section.

#### Environmental
- CVEEN 5605: Water and Wastewater Treatment
- CVEEN 4221: Concrete I
- CVEEN 4222: Steel I
- CVEEN 5305: Introduction to Foundations
- CVEEN 5500: Sustainable Materials

#### Structures
- CVEEN 3610 & 3615: Water and Wastewater Treatment
- CVEEN 4221: Concrete I
- CVEEN 3510 & 3515: Sustainable Materials
- CVEEN 5560: Transportation Planning

#### Geotech & Materials
- CVEEN 5610: Water Chemistry
- CVEEN 5210: Structural Analysis II
- CVEEN 5230: Steel II
- CVEEN 5570: Pavement Design
- CVEEN 5610: Water Chemistry

#### Transportation
- CVEEN 5510: Highway Design
- CVEEN 5560: Transportation Planning
- CVEEN 5420: Open-Channel

#### Water Resources
- CVEEN 5410: Engineering Hydrology
- CVEEN 3100: Cost Estimation & Proposal Writing
- CVEEN 5820: Project Scheduling
- CVEEN 5850: Engineering Law & Contracts

### Secondary Technical Electives

With the exception of Construction, where only one course may be taken, you may take multiple courses in a single emphasis area — up to a total of 3 courses.

#### Environmental
- CVEEN 5210: Structural Analysis II
- CVEEN 5230: Steel II
- CVEEN 5810: Cost Estimation & Proposal Writing
- CVEEN 5820: Project Scheduling
- CVEEN 5830: Project Management & Contract Administration
- CHEM 1220, PHYS 2220, MATH 1220: Water Chemistry

#### Structures
- CVEEN 3610 & 3615: Water and Wastewater Treatment
- CVEEN 4221: Concrete I
- CVEEN 4240: Reinforced Timber/Masonry
- CVEEN 5810: Cost Estimation & Proposal Writing
- CVEEN 5820: Project Scheduling
- CHEM 1220, PHYS 2220, MATH 1220: Water Chemistry

#### Construction Management (Max 1)
- CVEEN 3100: Cost Estimation & Proposal Writing
- CVEEN 5810: Cost Estimation & Proposal Writing
- CVEEN 5820: Project Scheduling
- CHEM 1220, PHYS 2220, MATH 1220: Water Chemistry

#### Nuclear Engineering
- CHEM 1220, PHYS 2220, MATH 1220: Water Chemistry
- NUCL 3000: Nuclear Principles in Engineering & Science
- NUCL 3100: Neutron Based Engineering

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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.
Math and Science Accreditation Hour Requirements
All students must complete a minimum of 32 credit hours of math and science courses. If students do not meet this requirement, they will need to take additional math and science courses to meet the required hours.

Courses Outside the University of Utah
Upper division courses used to fulfill the Department requirements for graduation must be taken at the University of Utah. Variances to this policy must be approved prior to enrolling in the course.

Course Grade Requirements
In order to progress within the program and graduate, the Department requires the following grades:

A grade of “C” or higher must be met for the following courses:

- All Mathematics (MATH 1210/1310, 1220/1320, 2210, 2250)
- All Chemistry (CHEM 1210, 1215, 1220, 1225)
- All Physics (PHYS 2210, 2215, 2220, 2225)
- CVEEN 2010, 2140, 2300, and 2310

For all other CVEEN courses, a grade of “C-“ or higher is required.

GPA and Engineering GPA
The University requires all students to maintain a cumulative GPA of 2.00 or higher. The Department requires all students to maintain an engineering GPA (EGPA) of 2.50 or higher. Engineering GPA is defined as courses counted towards the major with the exception of the following:

- All general education courses (e.g., LEAP 1500/1501)
- All seminars (e.g., CVEEN 1000/2000)

For repeated EGPA courses, the second letter grade received will be counted as the official grade for the EGPA calculation. Please see the policy on repeated courses.

Repeat Policy
A student can take an engineering GPA (EGPA) course for grade only twice at the University. Students withdrawing from an EGPA course are allowed three attempts, including the withdrawal. Any student who takes a required class twice and does not have a satisfactory grade the second time will be removed from major status and will not be allowed to take any
new CVEEN classes until they meet with an academic advisor, develop a plan, and petition the Undergraduate Committee requesting that a third attempt at the class be allowed. Transfer students who have failed a class twice or more at another institution must meet with their academic advisor before registering for classes and file a petition to the Undergraduate Committee. In all cases, the Undergraduate Committee, after reviewing the petition and other relevant facts, shall make the final decision to allow or not allow the further attempt and shall communicate that decision to the student in writing.

When retaking an EGPA course, if the course was taken at the University of Utah, it must be retaken at the University of Utah. For example, students cannot count a grade obtained in a class taken at another institution to replace a low grade obtained in a class previously taken at the University of Utah.

**Academic Probation**

A student who fails to maintain an engineering grade point average (EGPA) of 2.50 or higher will be removed from major status and will be placed on academic probation. While on probation, students will not be allowed to take any new CVEEN classes and will have three consecutive semesters to retake courses or take additional non-CVEEN courses to bring their EGPA to 2.50 or higher. While on academic probation, the student will meet with an academic advisor at the end of every semester to review their progress. If after the three semesters (e.g., fall, spring, summer), the student fails to raise their EGPA to 2.50 or higher, their progress will be evaluated by the Undergraduate Committee and, if no progress is shown, the student will be dismissed from the program. Students that have been placed on probation for more than 3 semesters, even if non-consecutive, will also be evaluated by the Undergraduate Committee to determine if they should be allowed to remain in the program.

A student who fails to maintain a cumulative grade point average of 2.00 or higher will also be on probation with the Department.