B.S. CIVIL ENGINEERING + B.S. CONSTRUCTION ENGINEERING – ENGINEERING MATH 2019

FRESHMAN

Fall (17 hrs)

CVEEN 1000
Intro to Civil & Environmental Engineering
F 2

MATH (1050 & 1060) or MATH 1080 ↓
MATH 1310
Engineering Calculus I
(QR)
F/SP 4

General Ed. Requirement
F/SP/SU 3

WRTG 1010 ↓
WRTG 2010
Intermediate Writing
F/SP/SU 3

MATH 1050 ↓
CHEM 1210
Gen Chemistry I 4
CHEM 1215
Lab
F/SP/SU 1

Spring (16 hrs)

CVEEN 1400
Computer-Aided Design
SP 3

MATH 1310 ↓
MATH 1320
Engineering Calculus II
F/SP/SU 4

MATH 1310 ↓
PHYS 2210
Physics for Sci & Engineers I
F/SP/SU 4

See catalog for individual prerequisites ↓
CHEM 1220
Gen Chemistry II
or
PHYS 2220
Physics for Sci & Engineers II
F/SP/SU 4

See catalog for individual prerequisites ↓
CHEM 1225
Gen Chemistry II Lab
or
PHYS 2215
Physics for Sci & Engineers I Lab
or
PHYS 2225
Physics for Sci & Engineers II Lab
F/SP/SU 1

SOPHOMORE

Fall (16.5 hrs)

CVEEN 2000
Seminar
F 0.5

MATH 1310 & PHYS 2210 ↓
CVEEN 2010
Statics
F/SP 3

MATH 1310 ↓
CVEEN 2310
Probability & Statistics
F/SP 3

MATH 1060 ↓
MG EN 2400
Surveying
F/SU 3

MATH 1320 ↓
MATH 2250
Differential Equations & Linear Algebra
F/SP/SU 4

ARCH 1615
Intro to Architecture
(FF)
F/SP 3

Spring (17 hrs)

CVEEN 2010 ↓
CVEEN 2140
Strength of Materials
F/SP 3

CVEEN 2300
Engineering Economics
F/SP 2

MATH 1310 ↓
CVEEN 2750
Computer Tools
SP 2

CVEEN 2010, PHYS 2210 & MATH 2250 ↓
ME EN 2030
Dynamics
F/SP/SU 3

General Ed. Requirement/DV
F/SP/SU 3

GEO 1110 ^
Intro Earth Systems 3
GEO 1115
Lab
SP 1

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

JUNIOR

Fall (17 hrs)

CVEEN 2140 ↓
CVEEN 3210
Structural Loads & Analysis
(QI)
F/SP 3

CVEEN 2140 & 2310 ↓
CVEEN 3410
Hydraulics **(QI)** 3
CVEEN 3415
Lab
F 1

CVEEN 2140 & 2310 ↓
CVEEN 3510
Materials 3
CVEEN 3515
Lab
F/SP 1

CVEEN 2140 & 2310 ↓
CVEEN 3520
Transportation
F/SP 3

CVEEN 2750 ↓
CVEEN 3700
Principles of Construction Eng.
F 3

Spring (14 hrs)

WRTG 2010 ↓
CVEEN 3100
Technical Communication
(CW)
F/SP 3

CVEEN 2140 & 2310 ↓
CVEEN 3310
Geotech I **(QI)** 3
CVEEN 3315
Lab
F/SP 1

CHEM 1210 & CVEEN 2140 ↓
CVEEN 3610
Environmental 3
CVEEN 3615
Lab
F/SP 1

CVEEN 3520 ↓
CVEEN 5510
Highway Design
(D)
SP 3

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)

SENIOR

Fall (15 hrs)

CVEEN 3210 ↓
CVEEN 4221
Concrete I
(D)
F 3

CVEEN 3100 ↓
CVEEN 5720
Project Scheduling
F 3

CVEEN 3310 & 3315 ↓
CVEEN 5740
Horizontal Construction
F 3

American Institutions
F/SP/SU 3

CVEEN 3100 ↓
CVEEN 5710
Cost Estimation
or
CVEEN 5730
Project Management
or
CVEEN 5750
Engineering Law
3

Spring (15 hrs)

CVEEN 3100 ↓
CVEEN 4900
Professional Practice
F/SP 3

CVEEN 3100, 3700, 4221, 5510 & 5720 ↓
CVEEN 4920
Construction Design Capstone
SP 3

CVEEN 3210 ↓
CVEEN 5790
Vertical Construction
SP 3

Technical Elective
F/SP 3

Technical Elective
F/SP 3

ECON 2010
Microeconomics
(BF)
F/SP/SU 3

Fall (15 hrs)

CVEEN 4900, 4221 & 5510 ↓
CVEEN 4910
Civil Design Capstone
F/SP 3

See catalog for individual prerequisites ↓
CVEEN 5305
Intro to Foundations
or
CVEEN 5500
Sust. Materials
3

General Ed. Requirement
F/SP/SU 3

General Ed. Requirement/IR
F/SP/SU 3

KEY
Full Major Status Required
Prerequisite
Corequisite

Department of Civil & Environmental Engineering
THE UNIVERSITY OF UTAH

Updated November 25, 2019

Total Required Credit Hours: 142.5

TECHNICAL ELECTIVES (choose 3)

Water Resources

CVEEN 3410 & 3415 ↓

CVEEN 5410
Engineering Hydrology
F 3

CVEEN 3410 & 3415 ↓

CVEEN 5420
Open–Channel
SP 3

Environmental

CVEEN 3610 & 3615 ↓

CVEEN 5605
Water & Wastewater Treatment
F 3

CVEEN 3610 & 3615 ↓

CVEEN 5610
Water Chemistry
F 3

Geotech & Materials

CVEEN 3310 & 3315 ↓

CVEEN 5305 ^
Intro to Foundations
F 3

CVEEN 3510 & 3515 ↓

CVEEN 5500 ^
Sustainable Materials
SP 3

CVEEN 3510, 3515, 3520 ↓

CVEEN 5570
Pavement Design
F 3

Structures

CVEEN 3210 ↓

CVEEN 4222
Steel I
SP 3

CVEEN 3210 ↓

CVEEN 5210
Structural Analysis II
SP 3

CVEEN 4221 ↓

CVEEN 5220
Concrete II
SP 3

CVEEN 4222 ↓

CVEEN 5230
Steel II
F 3

CVEEN 3210 ↓

CVEEN 5240
Reinforced Timber/Masonry
F 4

Transportation

CVEEN 3520 ↓

CVEEN 5560
Transportation Planning
SP 3

Nuclear Engineering

CHEM 1220, MATH 1220 & PHYS 2220 ↓

NUCL 3000
Nuclear Principals in Engineering & Science
F 3

NUCL 3000 ↓

NUCL 3100
Neutron Based Engineering
SP 3

Other (Max 1)

Any 3000+ level course form the College of Engineering or an ABET accredited program ^

3+

^ Courses cannot be used to satisfy two requirements

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