

B.S. CONSTRUCTION ENGINEERING + B.S. CIVIL ENGINEERING – ENGINEERING MATH 2020

FRESHMAN		SOPHOMORE		JUNIOR		SENIOR		
Fall (17 hrs)	Spring (16 hrs)	Fall (16.5 hrs)	Spring (16 hrs)	Fall (14 hrs)	Spring (15 hrs)	Fall (15 hrs)	Spring (15 hrs)	Fall (15 hrs)
CVEEN 1000 Intro to Civil & Environmental Engineering F2 MATH (1050 & 1060) or MATH 1080 ↓ MATH 1310 Engineering Calculus I (QR) F/SP4 General Ed. Requirement WRTG 1010 ↓ CHEM 1210 Gen Chemistry I 4 CHEM 1215 Lab F/SP/SU1	CVEEN 1400 Computer-Aided Design SP3 MATH 1310 ↓ MATH 1320 Engineering Calculus II F/SP/SU4 MATH 1310 ↓ PHYS 2210 Physics for Sci & Engineers I F/SP/SU4 See catalog for individual prerequisites ↓ CHEM 1220 Gen Chemistry II or PHYS 2220 Physics for Sci & Engineers II F/SP/SU4 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/SU1	CVEEN 2000 Seminar F0.5 MATH 1310 & PHYS 2210 ↓ CVEEN 2010 Statics F/SP3 MATH 1310 ↓ CVEEN 2310 Probability & Statistics F/SP3 MATH 1060 ↓ MG EN 2400 Surveying F/SU3 MATH 1320 & PHYS 2210 ↓ MATH 2250 Differential Equations & Linear Algebra F/SP/SU4 ECON 2010 Microeconomics (BF) F/SP/SU3	CVEEN 2140 Strength of Materials F/SP3 CVEEN 2010 ↓ CVEEN 2300 Engineering Economics F/SP2 MATH 1310 ↓ CVEEN 2750 Computer Tools SP2 General Ed. Requirement/DV ARCH 1615 Intro to Architecture (FF) F/SP3 ^ GEO 1100 Evolving Earth F/SP3	CVEEN 3310 Geotech I (QI) 3 CVEEN 3315 Lab F/SP1 CVEEN 2140 & 2310 ↓ CVEEN 3510 Materials 3 CVEEN 3515 Lab F/SP1 CVEEN 2140 & 2310 ↓ CVEEN 3520 Transportation F/SP3 CVEEN 2750 ↓ CVEEN 3700 Principles of Construction Eng. F3 General Ed. Requirement F/SP/SU3	CVEEN 3100 Technical Communication (CW) F/SP3 WRTG 2010 ↓ CVEEN 3210 Structural Loads & Analysis (QI) F/SP3 CVEEN 2140 ↓ CVEEN 3710 Contract Specifications SP3 CVEEN 3520 ↓ CVEEN 5510 Highway Design (D) SP3	CVEEN 4221 Concrete I (D) F3 CVEEN 3210 ↓ CVEEN 5720 Project Scheduling F3 CVEEN 3310 & 3315 ↓ CVEEN 5740 Horizontal Construction F3 CVEEN 3100 ↓ CVEEN 5710 Cost Estimation or CVEEN 5730 Project Management or CVEEN 5750 Engineering Law F3	CVEEN 4900 Professional Practice F/SP3 CVEEN 3100, 3700, 4221, 5510 & 5720 ↓ CVEEN 4920 Construction Design Capstone SP3 CVEEN 3210 ↓ CVEEN 5780 Facade I SP3 CVEEN 3210 ↓ CVEEN 5790 Vertical Construction SP3 Technical Elective F/SP3	CVEEN 4910 Civil Design Capstone F/SP3 CVEEN 4900, 4221 & 5510 ↓ CVEEN 5305 Intro to Foundations or CVEEN 5500 Sust. Materials 3 See catalog for individual prerequisites ↓ Technical Elective F/SP3 Technical Elective F/SP3 General Ed. Requirement/IR F/SP/SU3

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)

KEY
Full Major Status Required
Prerequisite
Corequisite


↓

TECHNICAL ELECTIVES (choose 3)

Water Resources

CVEEN 2140 & 2310 ↓

CVEEN 3410

Hydraulics (QI)

3

CVEEN 3415

Lab

1

CVEEN 3410 & 3415 ↓

CVEEN 5410

Engineering Hydrology

3

CHEM 1210 & CVEEN 2140 ↓

CVEEN 3610

Environmental

3

CVEEN 3615

Lab

1

CVEEN 3610 & 3615 ↓

CVEEN 5605

Water & Wastewater Treatment

3

CVEEN 3310 & 3315 ↓

CVEEN 5305 ^

Intro to Foundations

3

CVEEN 3510 & 3515 ↓

CVEEN 5500 ^

Sustainable Materials

3

CVEEN 3210 ↓

CVEEN 4222

Steel I

3

CVEEN 3210 ↓

CVEEN 5210

Structural Analysis II

3

CVEEN 3410 & 3415 ↓

CVEEN 5420

Open-Channel

3

CVEEN 3610 & 3615 ↓

CVEEN 5610

Water Chemistry

3

CVEEN 3510, 3515, 3520 ↓

CVEEN 5570

Pavement Design

3

CVEEN 4221 ↓

CVEEN 5220

Concrete II

3

CVEEN 4222 ↓

CVEEN 5230

Steel II

3

CVEEN 3210 ↓

CVEEN 5240

Reinforced Timber/Masonry

4

Transportation

CVEEN 3520 ↓

CVEEN 5560

Transportation Planning

3

Nuclear Engineering

CHEM 1220, MATH 1220 & PHYS 2220 ↓

NUCL 3000

Nuclear Principals in Engineering & Science

3

NUCL 3000 ↓

NUCL 3100

Neutron Based Engineering

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