

Below are the minimum required courses as defined by the department. All students **must** complete the below courses in order to be eligible for a Master's degree from the Department of Civil and Environmental Engineering. These courses commonly need to be completed if the student's prior area of study is from an academic field, that is not civil engineering.

- Many of these courses can be taken at another institution (Salt Lake Community College included). To learn about the course equivalencies please review the [Articulation Guide](#). If applying to take these courses at the U of U, please apply as a non-matriculated student (also called a non-degree seeking student). Navigate to admissions.utah.edu/apply.
- Students do not need to have all of the required courses completed at the time of application to the Graduate Program.

KEY

MATH 1310 ↓ = Prerequisite course
 PHYS 2210 ↓ = Corequisite course

Common Pre-Req

Required

* = Can be taken concurrently

❖ MATH. Two required courses. MATH 2250 & a statistics course.

MATH 1080 ↓	MATH 1210 ↓	MATH 1220 ↓	MATH 2210 & PHYS2210 ↓
MATH 1210 Calculus I F Sp Su	MATH 1220 Calculus II F Sp Su	MATH 2210 Calculus III F Sp Su	MATH 2250 Diff. Eq. & Linear Alg. F Sp Su

Another option to get to MATH 2250 is as follows.

MATH 1080 ↓	MATH 1310 ↓	MATH 1320 & PHYS 2210 ↓
MATH 1310 Engineering Calculus I F Sp Su	MATH 1320 Engineering Calculus II F Sp Su	MATH 2250 Diff. Eq. & Linear Alg. F Sp Su

❖ SCIENCE. Two required courses. CHEM 1210 & PHYS 2210

MATH 1050 ↓	MATH 1210/ MATH 1310 ↓
CHEM 1210 General Chemistry I F Sp Su	PHYS 2210 * Phys. for Sci & Engin. F Sp Su

❖ BASIC ENGINEERING. Three required courses & 1 required lab.

MATH 1210 & PHYS 2210 ↓	CVEEN 2010 ↓	CVEEN 2140 & Statistics ↓
CVEEN 2010 * Statics F Sp	CVEEN 2140 Strength of Materials F Sp	CVEEN 3410/ 3415 Hydraulics + Lab F Sp

*Ph.D. students are not **required** to complete all of the above courses. Remedial courses can be determined by the Faculty Advisor, and/ or the supervisory committee. This stems from the understanding that an individual completing a Ph.D. will be completing very different work, than someone with an MS. However, if a Ph.D. student chooses to separate from the research group prior to the awarding of the Ph.D. all above courses **must** be completed for the MS to be awarded.*

The courses listed below are required by the department for the specified area of study. Remedial courses, of waivers of remedial courses, are determined by the Faculty Advisor, and/ or the supervisory committee.

ENVIRO. & WATER RESOURCES: One required course. CVEEN3610	TRANSPORTATION ENGINEERING: One required course. CVEEN3520.	MATERIALS / PAVEMENTS: One required course. CVEEN3510
CHEM1210 & CVEEN2140 ↓ CVEEN 3610 Intro to Environ. Eng. F Sp	CVEEN 2140 & Statistics ↓ CVEEN 3520 Transportation Eng. F Sp	CVEEN 2140 & Statistics ↓ CVEEN 3510 Civil Eng. Materials F Sp
STRUCTURAL / GEOTECHNICAL ENGINEERING: Three required courses. CVEEN 3210, CVEEN 3310/ 3315, CVEEN 4221 or 4222		
CVEEN 2140 ↓ CVEEN 3210 Struct'l Load Analysis F Sp	CVEEN 3210 ↓ CVEEN 4221 Concrete I F	CVEEN 3210 ↓ CVEEN 422 Steel I Sp
CVEEN 2140 & Statistics ↓ CVEEN 3310 /3315 Geotechl Eng. + Lab F Sp		

Developing a Plan for Semesters Ahead

Fall	Spring	Summer	Notes:
<ul style="list-style-type: none"> • _____ • _____ • _____ 	<ul style="list-style-type: none"> • _____ • _____ • _____ 	<ul style="list-style-type: none"> • _____ • _____ • _____ 	
Fall	Spring	Summer	Notes:
<ul style="list-style-type: none"> • _____ • _____ • _____ 	<ul style="list-style-type: none"> • _____ • _____ • _____ 	<ul style="list-style-type: none"> • _____ • _____ • _____ 	
Fall	Spring	Summer	Notes:
<ul style="list-style-type: none"> • _____ • _____ • _____ 	<ul style="list-style-type: none"> • _____ • _____ • _____ 	<ul style="list-style-type: none"> • _____ • _____ • _____ 	