

**Prerequisite Requirements for Graduate Study  
in  
Hydrologic, Environmental and Sustainability Engineering (HESE)**

11 November 2020

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Suggested course numbers are provided, but prerequisites may be fulfilled with equivalent courses taken at the undergraduate *or graduate* levels, either at CU Denver or at an equivalent institution.
2. Applicants with more than 5 deficiencies will not be admitted except for rare instances.
3. After admission, a student may file a petition to the department to have a prerequisite waived.
4. A student may complete no more than 9 credit hours of graduate work before completing all prerequisites.
5. Fulfillment of prerequisites, which requires a grade of C- or better, will be checked by the student's research advisor when the student applies for admission to candidacy prior to graduation.

*Checklist for master of science (M.S.) and doctor of philosophy (Ph.D.):*

- \_\_\_\_\_ Calculus I (MATH-1401 or equivalent)
- \_\_\_\_\_ Calculus II (MATH-2411 or equivalent)
- \_\_\_\_\_ Calculus III (MATH-2421 or equivalent)
- \_\_\_\_\_ Linear Algebra and Differential Equations (MATH-3195 or equivalent)
- \_\_\_\_\_ Probability and Statistics (CVEN-3611 or equivalent)
- \_\_\_\_\_ Physics I (PHYS-2311 or equivalent)
- \_\_\_\_\_ General Chemistry (CHEM-1130 or equivalent)
- \_\_\_\_\_ Computer Programming (ENGR-1100 or equivalent)
- \_\_\_\_\_ Fluid Mechanics (CVEN-3313 or equivalent)
- \_\_\_\_\_ Environmental Engineering (CVEN-3401 or equivalent)

*Checklist for master of engineering (M.Eng.)\* or Ph.D. in Civil Engineering Systems:*

- \_\_\_\_\_ Calculus I (MATH-1401 or equivalent)
- \_\_\_\_\_ Calculus II (MATH-2411 or equivalent)
- \_\_\_\_\_ Probability and Statistics (CVEN-3611 or equivalent)
- \_\_\_\_\_ Physics I (PHYS-2311 or equivalent)
- \_\_\_\_\_ Chemistry or Biology or Ecology
- \_\_\_\_\_ Computer Programming (ENGR-1100 or equivalent)

\* Also applies to the M.Eng in Sustainability Engineering

**Reviewed and signed by:**

**Advisor** \_\_\_\_\_

**Student** \_\_\_\_\_