2025-2026 ISU Civil Engineering (Environmental Focus) – 132 CR

Critical Path

Semester 1 – 17 CR

- MATH 1650 – 4 CR, Calculus I (C- or higher required)
- ENGR 1010 – R CR, Engineering Orientation, **Fall only**
- CE 1200 – 1 CR, CE Learning Community, **Fall only**
- CE 1600 – 3 CR, Engineering Problems; Co: MATH 1650
- CHEM 1770 – 4 CR, General Chemistry I; Co: CHEM 1770L
- CHEM 1770L – 1 CR, Lab in General Chemistry I; Co: CHEM 1770
- ENGL 1500 – 3 CR, Critical Thinking and Communication (C or higher required)
- LIB 1600 – 1 CR, Intro to College Level Research

Semester 2 – 18 CR

- MATH 1660 – 4 CR, Calculus II; Pre: C- or higher in MATH 1650
- PHYS 2310 – 4 CR, Intro to Classical Physics I; Pre: MATH 1650; Co: MATH 1660
- PHYS 2310L – 1 CR, Intro to Classical Physics I Lab; Pre: MATH 1650; Co: MATH 1660, PHYS 2310
- CE 2710 – 1 CR, Engineering Foundations of Statics; Pre: MATH 1650; Co: PHYS 2310, PHYS 2310L
- CE 1700 – 2 CR, Graphics for Civil Engineering; Co: MATH 1430 or MATH 1650
- ENGL 2500 – 3 CR, Written, Oral, Visual, and Electronic Comp (C or higher required); Pre: ENGL 1500; Co: LIB 1600
- BIOL 2510 – 3 CR, Biological Processes in the Environment, **Spring only**

Semester 3 – 16 CR

- CE 2720 – 2 CR, Applied Engineering Statics; Pre: CE 2710, PHYS 2310, PHYS 2310L; Co: C- or higher in MATH 1660
- GEOL 2010 – 3 CR, Geology for Engineers
- MATH 2650 – 4 CR, Calculus III; Pre: C- or higher in MATH 1660
- CHEM 1780 – 3 CR, General Chemistry II; Pre: CHEM 1670 or (CHEM 1770 and CHEM 1770L)
- CHEM 1780L – 1 CR, Lab in College Chemistry II; Pre: CHEM 1770L; Co: CHEM 1780
- * Social Science & Humanities Elective – 3 CR

KEY

Pre: prerequisite
Co: corequisite
CR: credit

Critical Path
Civil-Environmental Focus Core 2.0 GPA Required
Basic Program 2.0 GPA Required

Semester 4 – 18 CR

- EM 3240 – 3 CR, Mechanics of Materials; Pre: CE 2720
- CE 2060 – 3 CR, Engr Econ Analysis and Professional Issues in CE; Pre: CE 1200, ENGL 2500, MATH 1660
- CE 1110 – 3 CR, Geomatics; Pre: CE 1600, CE 1700, MATH 1650
- CE 3060 – 3 CR, Project Management for Civil Engineers; Pre: All Engineering Basic Program Courses
- MATH 2660 – 3 CR, Elem. Differential Equations; Pre: C- or higher in MATH 1660
- Engineering Statistics: STAT 2310 – 4 CR or STAT 3050 – 3 CR

Semester 5 – 18 CR

- CE 3320 – 3 CR, Structural Analysis I; Pre: EM 3240
- EM 3270 – 1 CR, Mechanics of Materials Lab; Pre: EM 3240
- CE 3550 – 3 CR, Principles of Transportation Engineering; Pre: CE 1110
- CE 3820 – 3 CR, Design of Concretes; Pre: CE 2720
- ABE 3780 – 3 CR, Mechanics of Fluids; Pre: CE 2720
- ABE 3780L – 1 CR, Mechanics of Fluids Lab; Co: ABE 3780
- CHEM 2310 – 3 CR, Elementary Organic Chemistry; Pre: CHEM 1770, CHEM 1770L; Co: CHEM 2310L
- CHEM 2310L – 1 CR, Lab in Elementary Organic Chemistry; Pre: CHEM 1770L; Co: CHEM 2310

Semester 6 – 17 CR

- CE 3340 – 3 CR, Reinforced Concrete Design I; Pre: CE 3320, EM 3270
- CE 3260 – 3 CR, Principles of Environmental Engineering; Pre: [CHEM 1670 or (CHEM 1770 and CHEM 1780)], MATH 1660; Co: ABE 3780
- MICRO 2010 – 2 CR, Intro to Microbiology; Pre: One BIOL course
- CE 3720 – 3 CR, Engr Hydrology and Hydraulics; Pre: ABE 3780, (STAT 2310 or STAT 3050)
- SPCM 2120 – 3 CR, Fundamentals of Public Speaking
- * Technical Communication Elective – 3 CR

Semester 7 – 16 CR

- CE 3600 – 4 CR, Geotechnical Engineering; Pre: EM 3240; Co: GEOL 2010

Must take 2 of the following:

- ENVE 4260 – 3 CR, Environmental Engineering Science, **Fall only**; Pre: ENVE 3260, CHEM 2310; Co: MICRO 2010
- ENVE 4300 – 3 CR, Solid and Hazardous Waste Management, **Fall only**; Pre: ENVE 3260; Co: ENVE 4260
- ENVE 4270 – 3 CR, Environmental Engineering Systems, **Spring only**; Pre: MATH 2650, MATH 2660, ENVE 3260, CE 3720
- ENVE 4290 – 3 CR, Air Pollution and Control, **Spring only**; Pre: MATH 2650, ENVE 3260

- * Civil Engineering Design Elective – 3 CR
- * International Perspective – 3 CR
- * US Cultures and Communities – 3 CR

Semester 8 – 12 CR

- CE 4850 – 3 CR, Civil Engineering Design; Pre: (CE 3330 or CE 3340), CE 2060, CE 3060, CE 3260, CE 3550, CE 3600, CE 3720, CE 3820, SPCM 2120
- CE 4280 - 3 CR, Water and Wastewater Treatment Plant Design, **Spring only**; Pre: CE 3260
- CE 4030** – R CR, Program and Outcome Assessment
- * Social Science & Humanities Elective – 3 CR

Notes

Although this program chart is provided for your guidance, the University Catalog contains the definitive list of requirements.
*Choose elective from Civil Engineering approved list.
**Must be taken in the final semester