2025-2026 ISU Civil Engineering (General) – 129 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 1670 – 4 CR, General Chemistry for Engineering
- CHEM 1670L – 1 CR, Lab in General Chemistry for Engr; Co: CHEM 1670
- 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
- SPCM 2120 – 3 CR, Fundamentals of Public Speaking

Semester 3 – 14 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
- PHYS 2320 – 4 CR, Intro to Classical Physics II; Pre: MATH 1660, PHYS 2310
- PHYS 2320L – 1 CR, Intro to Classical Physics II Lab; Pre: MATH 1660; Co: PHYS 2320
- **OR** →
- 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

Semester 4 – 18 CR

- EM 3240 – 3 CR, Mechanics of Materials; Pre: CE 2720
- ABE 3780 – 3 CR, Mechanics of Fluids; Pre: CE 2720
- 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 – 17 CR

- CE 3320 – 3 CR, Structural Analysis I; Pre: EM 3240
- EM 3270 – 1 CR, Mechanics of Materials Lab; Pre: EM 3240
- CE 2060 – 3 CR, Engr Econ Analysis and Professional Issues in CE; Pre: CE 1200, ENGL 2500, MATH 1660
- CE 3600 – 4 CR, Geotechnical Engineering; Pre: EM 3240; Co: GEOL 2010
- ME 3450 – 3 CR, Engr Dynamics; Pre: CE 2720; Co: MATH 2660 or MATH 2670
- * Technical Communication Elective – 3 CR

Semester 6 – 18 CR

Must take 2 of the following:

- CE 3330 – 3 CR, Structural Steel Design I; Pre: CE 3320, EM 3270
- CE 3340 – 3 CR, Reinforced Concrete Design I; Pre: CE 3320, EM 3270
- CE 4600 – 3 CR, Foundation Engineering; Pre: CE 3600
- CE 3550 – 3 CR, Principles of Transportation Engineering; Pre: CE 1110
- CE 3720 – 3 CR, Engr Hydrology and Hydraulics; Pre: ABE 3780, (STAT 2310 or STAT 3050)
- CE 3820 – 3 CR, Design of Concretes; Pre: CE 2720
- * Engineering Topics Elective – 3 CR
- * Social Science & Humanities Elective – 3 CR

Semester 7 – 15 CR

- CE 3260 – 3 CR, Principles of Environmental Engineering; Pre: [CHEM 1670 or (CHEM 1770 and CHEM 1780)], MATH 1660; Co: ABE 3780
- * Engineering Topics Elective – 3 CR (CCEE)
- * 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 4030** – R CR, Program and Outcome Assessment
- * Civil Engineering Design Elective – 3 CR
- * Engineering Topics Elective – 3 CR (CCEE)
- * Social Science & Humanities Elective – 3 CR

KEY

Pre: prerequisite
Co: corequisite
CR: credit

Critical Path
Civil Core 2.0 GPA Required
Basic Program 2.0 GPA Required

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.