

Four-Year Academic Plan



Courses in italics are prerequisites

Courses in bold are co-requisites

See course catalog for complete degree requirements and additional information at uidaho.edu/registrar/classes/catalogs.

Last updated 7/28/2021

| 4N FALL | | tion at <u>uidaho.edu</u> | SPRING | |
|--|---|---|--|--|
| Calculus I | 4 | | Calculus II | |
| C or better in MATH 143 and 144 or sufficient test scores | 4 | MATH 175 | MATH 170 | 4 |
| College Writing and Rhetoric English 101 or sufficient test scores | 3 | ENGR 210 | Engineering Statics MATH 170 | 3 |
| Introduction to Civil Engineering | 1 | CE 105 | Engineering Drafting | 3 |
| Fundamentals of Oral Communication | 2 | GEOL 111/ | | |
| Engineering Physics I with Lab MATH 170 | 4 | 111L | Physical Geology for Science Majors with Lab | 4 |
| Total Credits | 14 | | Total Credits | 14 |
| ORE FALL | | | SPRING | |
| Calculus III MATH 175 | 3 | MATH 310 | Ordinary Differential Equations MATH 175 (MATH 275 recommended) | 3 |
| Humanities/Social Science Elective | 3 | ENGR 335 | Engineering Fluid Mechanics | 3 |
| ENGR 210 | 3 | ENGR 350 | Engineering Mechanics of Materials | 3 |
| Engineering Surveying MATH 143 or 170 or 175, and ENGR 105 | 3 | CE 215 ^b | Civil Engineering Analysis and Design | 3 |
| General Chemistry I with Lab Grade C in MATH 170 or sufficient test scores | 4 | STAT 301 | Probability and Statistics | 3 |
| Total Credits | 16 | | · · · · · · · · · · · · · · · · · · · | 15 |
| FALL | | | | |
| | | FCON 201/ | | |
| CE 215, MATH 310, PHYS 211, ENGR 220 and 335 | 4 | 202 | Economics Course | 3 |
| Fundamentals of Environmental Engineering CHEM 111, CE 215 and MATH 310 | 3 | CE 325 ^b | Fundamentals of Hydrologic Engineering MATH 310, STAT 301, and ENGR 335 | 3 |
| Theory of Structures ENGR 350, MATH 275 and 310, and PHYS 211/211L | 3 | CE 360 ^b | Fundamentals of Geotechnical Engineering CE 215, ENGR 335, ENGR 350, and MATH 310 | 4 |
| Properties of Construction Materials CE 215, ENGR 350, MATH 310, STAT 301 | 4 | CE 372 ^b | Fundamentals of Transportation Engineering STAT 301 and CE 211 | 3 |
| Humanities/Social Science Elective | 3 | ELECTIVE | Civil Engineering Elective | 3 |
| Total Credits | 17 | | Total Credits | 16 |
| FALL | _ | | SPRING | |
| FALL | | | | |
| Introduction to Ethics | 3 | CE 1916 | Senior Design Project | 2 |
| | 3 | CE 494 ^b | Senior Design Project Senior standing and permission | 3 |
| Introduction to Ethics Science/Math Elective Engineering Economy | | ELECTIVE | Senior standing and permission Civil Engineering Elective | 3 |
| Introduction to Ethics Science/Math Elective Engineering Economy Junior standing CE Professional Seminar | 3 | ELECTIVE | Senior standing and permission Civil Engineering Elective Civil Engineering Elective | 3 |
| Introduction to Ethics Science/Math Elective Engineering Economy Junior standing CE Professional Seminar Senior standing | 3 2 1 | ELECTIVE | Senior standing and permission Civil Engineering Elective | 3 |
| Introduction to Ethics Science/Math Elective Engineering Economy Junior standing CE Professional Seminar | 2 | ELECTIVE | Senior standing and permission Civil Engineering Elective Civil Engineering Elective | 3 |
| | College Writing and Rhetoric English 101 or sufficient test scores Introduction to Civil Engineering Fundamentals of Oral Communication Engineering Physics I with Lab MATH 170 Total Credits FALL Calculus III MATH 175 Humanities/Social Science Elective Engineering Dynamics ENGR 210 Engineering Surveying MATH 143 or 170 or 175, and ENGR 105 General Chemistry I with Lab Grade C in MATH 170 or sufficient test scores Total Credits FALL Hydraulics CE 215, MATH 310, PHYS 211, ENGR 220 and 335 Fundamentals of Environmental Engineering CHEM 111, CE 215 and MATH 310 Theory of Structures ENGR 350, MATH 275 and 310, and PHYS 211/211L Properties of Construction Materials CE 215, ENGR 350, MATH 310, STAT 301 Humanities/Social Science Elective | College Writing and Rhetoric English 101 or sufficient test scores Introduction to Civil Engineering Fundamentals of Oral Communication Engineering Physics I with Lab MATH 170 Total Credits 14 FALL Calculus III MATH 175 Humanities/Social Science Elective 3 Engineering Dynamics ENGR 210 Engineering Surveying MATH 143 or 170 or 175, and ENGR 105 General Chemistry I with Lab Grade C in MATH 170 or sufficient test scores FALL Hydraulics CE 215, MATH 310, PHYS 211, ENGR 220 and 335 Fundamentals of Environmental Engineering CHEM 111, CE 215 and MATH 310 Theory of Structures ENGR 350, MATH 275 and 310, and PHYS 211/211L Properties of Construction Materials CE 215, ENGR 350, MATH 310, STAT 301 Humanities/Social Science Elective 3 Introduction to Civil Engineering A Total Credits A Total Credits 4 Properties of Construction Materials CE 215, ENGR 350, MATH 310, STAT 301 Humanities/Social Science Elective 3 | College Writing and Rhetoric | College Writing and Rhetoric English 101 or sufficient test scores 3 |

NOTE: This plan Is provided as an example only. A student's specific plan may vary and is designed in consultation with a faculty advisor.

A minimum grade of "C" must be earned in all engineering, mathematics, and science courses used to satisfy the curriculum. See course catalog for all degree requirements and additional information.

A "C" or better is required in all Math, Science and Engineering courses used to fulfill degree requirements. Students majoring in civil engineering may accumulate no more than 14 credit hours of D or F in math, science or engineering courses. Included in this number are multiple repeats of a single class or single repeats of multiple classes, as well as courses transferred from other institutions. Students who exceed 14 credits of D or F will be permanently disqualified from pursuing the B.S. degree in Civil Engineering at the University of Idaho.

^a Offered Fall only

^b Offered Spring only



CIVIL ENGINEERING

Create sustainable connections between natural and built environments and make life safer for all by improving society's infrastructure.

ABOUT YOUR DEGREE PATH

Civil engineering majors are exposed early and often to design concepts as well as to the practical side of tackling society's infrastructure challenges.

Beginning courses include basic sciences, mathematics and engineering. Junior level courses introduce the subject matter of the civil engineering sub-disciplines, while senior-level courses add depth in elective areas. Your senior year study will conclude with a team-based senior design project sponsored by a real client.

Our graduates can be found in virtually all of the major organizations hiring civil engineers in the Pacific and Inland Northwest and in many other locations throughout the U.S. and the world. Many of these graduates are partners or officers of their organizations. They work for consulting engineering firms, state and federal agencies, and construction contractors. They design and build highways, bridges, water and wastewater conveyance systems, water and wastewater treatment plants, dams, airports, structures and foundations for buildings, and other constructed facilities. They develop plans for managing traffic, preventing landslides on mountain roadways, and managing the quantity and quality of water in streams, lakes and reservoirs.

MATCH YOUR INTERESTS

- Safe and Sustainable Water Resources
- Environmental Engineering
- Mass Transit Systems
- Structures, Bridges and Highways
- Wastewater Treatment and Water Reuse
- Hydrology and Ecohydraulics
- Pavement and Construction Materials

YOUR DEGREE IS ACCREDITED

Our undergraduate Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET,www.abet.org.