CIVIL ENGINEERING (B.S.C.E.)

To graduate in this program, a grade of 'C' or better is required in all math, science, and engineering courses used to fulfill degree requirements. Students 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. To complete this degree, all students must show proof of registering for the Fundamentals of Engineering (FE) Exam.

Required course work includes the university requirements (see regulation J-3 (https://catalog.uidaho.edu/general-requirements-academic-procedures/j-general-requirements-baccalaureate-degrees/)) and:

Code	Title	Hours
CE 105	Civil Engineering Drafting	3
CE 115	Introduction to Civil Engineering	1
CE 211	Engineering Surveying	3
CE 215	Civil Engineering Analysis and Design	3
CE 322	Hydraulics	4
CE 325	Fundamentals of Hydrologic Engineering	3
CE 330	Fundamentals of Environmental Engineering	3
CE 342	Theory of Structures	3
CE 357	Properties of Construction Materials	4
CE 360	Fundamentals of Geotechnical Engineering	4
CE 372	Fundamentals of Transportation Engineering	3
CE 491	Civil Engineering Professional Seminar	2
CE 494	Senior Design Project	3
CHEM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
ENGL 317	Technical Writing	3
ENGR 210	Engineering Statics	3
ENGR 220	Engineering Dynamics	3
ENGR 335	Engineering Fluid Mechanics	3
ENGR 350	Engineering Mechanics of Materials	3
ENGR 360	Engineering Economy	2
GEOL 111	Physical Geology for Science Majors	3
GEOL 111L	Physical Geology for Science Majors Lab	1
or GEOL 101L	Physical Geology Lab	
MATH 170	Calculus I	4
MATH 175	Calculus II	4
MATH 275	Calculus III	3
MATH 310	Ordinary Differential Equations	3
PHIL 103	Introduction to Ethics	3
or AMST 301	Studies in American Culture	
PHYS 211 & 211L	Engineering Physics I and Laboratory Physics I	4
STAT 301	Probability and Statistics	3
Select one of the following:		3-4
ECON 201	Principles of Macroeconomics	
ECON 202	Principles of Microeconomics	
ECON 272	Foundations of Economic Analysis	
Select one of the following:		3-4
BIOL 114	Organisms and Environments	
BIOL 115	Cells and the Evolution of Life	
CHEM 112	General Chemistry II	
EPPN 154	Microbiology and the World Around Us	
PHYS 212	Engineering Physics II	
PHYS 213	Engineering Physics III	
MATH 330	Linear Algebra	
STAT 431	Statistical Analysis	
Civil Engineering Electives		
A total of 18 credits are required from:		18
CE-prefix 400-level courses [1]		
GEOE-prefix 400-level courses [2]		
Total Hours		112-114

[1] Except CE 400, CE 403, CE 411, CE 491, CE 494, CE 498, and CE 499.

[2] Except GEOE 403 and GEOE 499.

Courses to total at least 121 credits for this degree, not counting Math below 170 and English below 102.

1. By graduation, students will be able to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. By graduation, students will demonstrate an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. By graduation, students will be able to communicate effectively with a range of audiences.
4. By graduation, students will be able to recognize ethical and professional responsibilities in engineering situations and make informed judgments.
5. By graduation, students will be able to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. By graduation, students will be able to develop and conduct appropriate testing or experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. By graduation, students will have the ability to acquire and apply new knowledge as needed, without formal instruction or detailed guidance.