

Civil Engineering, BS



University of Wyoming, 2015-16

Freshman Fall Semester			Hrs	Min	Grade	Notes
		USP First-Year Seminar	3		C	FY
CE	1000	VISTA Studio I	2		C	
CHEM	1020	General Chemistry I *	4		C	PN
ENGL	1010	College Composition and Rhetoric	3		C	C1
MATH	2200	Calculus I **	4		C	Q
Credit hours subtotal:			16			

Freshman Spring Semester			Hrs	Min	Grade	Notes
		USP US & Wyoming Constitutions	3			V
CE	1010	Civil Engineering Tools	3		C	
COJO	2010	Public Speaking	3		C	C2
ES	2110	Statics	3		C	
MATH	2205	Calculus II	4		C	
Credit hours subtotal:			16			

Sophomore Fall Semester			Hrs	Min	Grade	Notes
CE	2000	VISTA Studio II	3		C	
CE	2070	Engineering Surveying	3		C	
ES	2120	Dynamics	3		C	
ES	2410	Mechanics of Materials	3		C	
MATH	2210	Calculus III	4		C	
Credit hours subtotal:			16			

Sophomore Spring Semester			Hrs	Min	Grade	Notes
ES	2310	Thermodynamics I	3			
ES	2330	Fluid Dynamics	3		C	
MATH	2310	Applied Differential Equations I	3			
PHYS	1220	Engineering Physics II	4			PN
STAT	2050	Fundamentals of Statistics	4		C	
Credit hours subtotal:			17			

This is a guide for course work in the major; actual course sequence may vary by student. Please refer to the online student degree evaluation, and consult with an academic advisor. • Not all courses are offered every semester and some electives may have prerequisites. Students should review the course descriptions in the *University Catalog* and consult with their academic advisor to plan accordingly.

University of Wyoming requirements:

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. • University Studies Program (USP) Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major.

College of Engineering and Applied Science requirements:

Students must have a minimum cumulative GPA of 2.0 in all Engineering courses for graduation. • A grade of C or higher is required for all prerequisite courses. Students must also achieve a grade of C or better in all required mathematics courses.

Civil Engineering Program Notes:

Civil engineering degree candidates must have an average grade point average of 2.0 (C) in civil and architectural engineering courses attempted at UW.

* Requires MATH ACT \geq 23, MATH SAT \geq 600, Math Placement Exam \geq 3, or concurrent enrollment in MATH 1400, 1405, or 1450. (University standard)

** Requires MATH ACT \geq 27, MATH SAT \geq 600, Math Placement Exam \geq 5, or \geq C in MATH 1405 or 1450. (University standard)

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Junior Fall Semester			Hrs	Min Grade	Notes
		USP Human Culture	3		H
CE	3000	VISTA Studio III	3	C	C3
CE	3200	Structural Analysis I	3		
CE	3210	Civil Engineering Materials	3		
CE	3300	Hydraulic Engineering	3		
		Science Elective ***	3		
Credit hours subtotal:			18		

Junior Spring Semester			Hrs	Min Grade	Notes
		USP Human Culture	3		H
CE	3010	Civil Engineering Design	3		
CE	3400	Introduction to Environmental Engineering	3		
CE	3500	Transportation Engineering	3		
CE	3600	Soil Mechanics I	3		
Credit hours subtotal:			15		

Senior Fall Semester			Hrs	Min Grade	Notes
CE	40x0	Studio IV	4	C	Tied to a Professional Development area.
		Math/Science/Tech/Prof Elective *****	3		
		Prof Develop Elective *****	6		
		Prof Develop Elective (Structural) *****	3		
Credit hours subtotal:			16		

Senior Spring Semester			Hrs	Min Grade	Notes
		Math/Science/Tech/Prof Electives *****	9		
		Prof Develop Electives *****	6		
Credit hours subtotal:			15		

TOTAL CREDIT HOURS: 129

Civil Engineering Program Notes con't:

*** **Science Elective.** Choose from: AECL/SOIL 2010 (Intro to Soil Science), AECL 3030 (Ecological Web) ASTR 2310 (General Astronomy I), ATSC 2000 (Intro to Meteorology), ATSC 2100 (Atmospheric Change), ATSC 4001 (Modeling the Earth System), , ATSC 4010 (Atmospheric Processes I), ATSC 4031 (Atmospheric Dynamics), ATSC 4033 (Atmospheric Remote Sensing), ATSC 4035 (Atmospheric Processes II), ATSC 4320 (The Ocean Environment), ATSC 4400 (The Physical Basis of Climate), ATSC 4410 (Introduction to Micrometeorology), LIFE 1010 (General Biology I), CHEM 1030 (General Chemistry II), CHEM 1060 (Advanced General Chemistry II), GEOL 1100 (Physical Geology), GEOL 1500 (Water, Dirt, & Earth's Environment), GEOL 1600 (Global Sustainability), GEOL 2000 (Geochemical Cycles & the Earth System), GEOL 4113 (Geological Remote Sensing), GEOL 4444 (Geohydrology), MOLB 2021 (General Microbiology), PHYS 1210 (Engineering Physics I), PHYS 2310 (Physics III), SOIL 4100 (Soil Physics), SOIL 4130 (Chemistry of Soil Environment). NOTE: Some courses have prerequisites not listed in the curriculum. Discuss with an academic advisor.

**** **Studio IV** course selection is tied to a Professional Development area. Consult with an academic advisor.

***** **Math/Science/Technical/Professional Elective.** At least two (2) hours must be math and science so that the total hours of math and science credits is at least 32. Courses to be selected from appropriate departmental approved elective lists; consult with an academic advisor.

***** **Professional Development Electives.** One area of emphasis and corresponding course/s must be in structural design. Others courses must cover at least three (3) of the following areas: environmental, geotechnical, transportation, or water resources. Courses to be selected from appropriate departmental approved elective lists; consult with an academic advisor.