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BACHELOR OF SCIENCE IN CIVIL ENGINEERING – WATER RESOURCES ENGINEERING

Code	Title	Credit Hours	
Wellness Requirement			
APPH 1040	Scientific Foundations of Health	2	
or APPH 10	The Science of Physical Activity and Health		
or APPH 10	Flourishing: Strategies for Well-being and Resilience	2	
Core IMPACTS			
Institutional P	riority		
CS 1371	Computing for Engineers	3	
Mathematics	and Quantitative Skills		
MATH 1552	Integral Calculus ³	4	
Political Scier	nce and U.S. History		
HIST 2111	The United States to 1877	3	
or HIST 21	The United States since 1877		
or INTA 1200American Government in Comparative Perspective			
or POL 110	1Government of the United States		
or PUBP 30	000 merican Constitutional Issues		
Communicati	ng in Writing		
ENGL 1101	English Composition I	3	
ENGL 1102	English Composition II	3	
Arts, Humanit	ies, and Ethics		
Any HUM		6	
Technology, N	lathematics, and Sciences		
PHYS 2211	Principles of Physics I ^{2,3}	4	
PHYS 2212	Principles of Physics II	4	
MATH 1551	Differential Calculus ³	2	
MATH 1553	Introduction to Linear Algebra ³	2	
or MATH 15Би́леаr Algebra			
or MATH 1554hear Algebra with Abstract Vector Spaces			
Social Sciences			
Any SS		9	
Field of Study			
COE 2001	Statics ³	2	
MATH 2551	Multivariable Calculus	4	
MATH 2552	Differential Equations ³	4	
CHEM 1310	Principles of General Chemistry for Engineers ³	4	
Select one of the following: 4			
BIOS 1107	Biological Principles		
&1107L	and Biological Principles Laboratory		
BIOS 1108 & 1108L	Organismal Biology and Organismal Biology Laboratory		
EAS 2600	Earth Processes		
Major Requirements			
Ethics Requirement ¹			
Economics Requirement ⁶			
CEE 1070	Engineering Graphics for Civil and Environmental Engineering	1	

CEE 1090	Exploring Civil and Environmental Engineering	2
CEE 2040	Dynamics	2
CEE 2090	Civil and Environmental Engineering Systems	3
CEE 2300	Environmental Engineering Principles	3
CEE 3020	Civil Engineering Materials	3
CEE 3040	Fluid Mechanics	3
CEE 3090	Data Analytics in Civil and Environmental Engineering	3
Select one of	the following:	3
CEE 3770	Statistics and Applications	
ISYE 3770	Statistics and Applications	
MATH 367	0Probability and Statistics with Applications	
CEE 4090	Capstone Design	3
College of Eng	gineering Requirements	
COE 3001	Mechanics of Deformable Bodies	3
Water Resour	ces Engineering Concentration	
CEE 4200	Hydraulic Engineering	3
Concentration	n Electives	
Select one of	the following (Water Resources)	3
CEE 4210	Hydrology	
CEE 4211	Water Resources Systems	
CEE 6271	Flow and Transport through Porous Media I	
CEE 8813	Special Topics (Eco-hydrology)	
CEE 4699	Undergraduate Research ⁷	
Select one of	the following (Costal Engineering)	3
CEE 4225	Introduction to Coastal Engineering	
or CEE 6	5225astal Engineering	
CEE 6210	Coastal Mechanics	
CEE 6215	Coastal Structures	
CEE 8813	Special Topics (Coastal Hazards)	
CEE 4699	Undergraduate Research ⁷	
Select one of	the following (Environmental Fluid Mechanics)	3
CEE 4310	Water Quality Engineering	
CEE 4803	Special Topics (Stom Water Design)	
CEE 6251	Intermediate Fluid Mechanics	
CEE 6261	Environmental Fluid Mechanics	
CEE 6281	Open Channel Hydraulics	
CEE 4699	Undergraduate Research ⁷	
CE Breadth El	ectives	
Select three o	of the following:	9
CEE 3051	Introduction to Structural Engineering	
CEE 4100	Construction Engineering and Management	
CEE 4300	Environmental Engineering Systems	
CEE 3400	Introduction to Geotechnical Engineering	
CEE 4600	Transportation Planning, Operations, and	
057 L . L	Design	
	Electives	^
CE Electives		g
Approved Elec	cuves	
		6
Iotal Credit H	iours	128

No pass-fail allowed, except for CS 1171.

CEE 4801 not allowed toward degree.

Students must earn a 2.0 average in all CEE courses.

- ¹ Students must complete one Ethics course during their program. For a complete list of Ethics courses, please see: Ethics
- ² If PHYS 2231 is taken, extra credit hour goes to Free Electives.
- ³ Minimum grade of C is required.
- ⁴ Any 3000-level or higher CEE course, with the exception of CEE 4801, CEE 8811, and CEE 8812. Maximum of 3 credit hours CEE 4699 and CEE 4900. Only one non-CEE course allowed: CHBE 2130, ME 3322, MSE 3001, COA 4010, CP 4010, CP 4020, CP 4310, and CP 4510.
- ⁵ Maximum 3 credit hours CEE 2699 allowed. MATH 1113, PHYS 2802, PHYS 2XXX (AP credit), are not allowed.
- ⁶ Students must complete one course from the following list that includes appropriate economic content relevant to the program: ECON 2100, ECON 2101, ECON 2105, or ECON 2106. Note that ECON 2100, 2101, 2105, 2106 may also be applied toward Core IMPACTS Social Science credit hours. You should discuss this with your academic advisor to ensure that you are taking the most efficient path to complete both areas.
- ⁷ Maximum of 3 credits of research towards major degree requirements. Research topic must be within the designated area and subject to approval.