

BACHELOR OF SCIENCE IN CIVIL ENGINEERING TECHNOLOGY

2018-2019 Degree Requirements

TOTAL CREDITS FOR DEGREE: 130

UNIVERSITY CORE CURRICULUM 43 credits

Required Courses:

COMM 101	Oral Comm. & Pres.	3 credits
ENGL 101	College Composition	3 credits
UNIV 101	City-University Life	3 credits
Senior Capstone		3 credits

Choose thematic core courses in the following:

Explore the World - Choice 1	3 credits
Explore the World - Choice 2	3 credits
Investigate Science	3 credits
Investigate Mathematics	4 credits
Interpret Creative Works	3 credits
Understand People - Choice 1	3 credits
Understand People - Choice 2	3 credits
Succeed in Business	3 credits
Appreciate & Apply the Arts	3 credits
Discover Technology	3 credits

MAJOR REQUIREMENTS:

87 credits

(C = taken in the Core)

CET 205	Intro to Surveying	3	CHEM 103	General Chemistry Lab I	1	
CET 206	Environ. Eng. Tech. I	3	CHEM 104	General Chemistry Lab II	1	
CET 209	Engineering Geology	3	ET 405	Fund. of Engr. Exam I	0	
CET 212	Properties of Materials	3	ET 406	Fund. of Engr. Exam II	0	
CET 213	Strength of Materials	3	ET 407	Prof. Prob. in Eng. Tech. (Senior Capstone)	C	
CET 214	Strength of Materials Lab	1	ETGR 205	Engineering Tech. Graphics	3	
CET 309	Soil Mechanics	3	MATH 181	Pre-Calculus	4	
CET 310	Structural Analysis	3	MATH 190	Calculus I (Investigate Math)	C	
CET 315	Structural Design I	3	MATH 210	Calculus II	4	
CET 316	Structural Design II	3	MATH 230	Linear Algebra	OR	3
CET 317	Concrete Mix Design Lab	1	MATH 310	Differential Equations		
CET 319	Soil Mechanics Lab	1	MATH 330	Mathematical Statistics		3
CET 321	Environ. Eng. Tech. II	3	ME 101	Statics		3
CET 405	Software Tools for CET	2	ME 102	Dynamics		3
CET 409	Foundations Design	3	NSET 101	Intro to NSET (Discover Technology)		C
CET 410	Highway/Bridge Design	3	NSET 218	Technical Communications		3
CET 411	Fluid Mechanics	3	PHYS 103	Physics Lab I		1
CET 412	Fluid Mechanics Lab	1	PHYS 104	Physics Lab II		1
CET 418	Hydraulics	3	PHYS 201	Fundamentals of Physics I		3
CHEM 101	General Chem. I (Investigate Science)	C	PHYS 202	Fundamentals of Physics II		3
CHEM 102	General Chemistry II	3				

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STUDENT LEARNING OUTCOMES

Upon successful completion of this program, a student will be able to:

1. Analyze and design components and systems from each of four civil engineering technology specialties using hand calculations or computer applications.
2. Conduct laboratory and field measurements, process the resulting data, and interpret and present the results.
3. Determine materials properties and apply those properties to civil engineering problem solution.
4. Solve engineering technology problems by using computational methods, analytical techniques, or software.
5. Solve engineering technology problems by applying principles of mathematics, science, and engineering.
6. Collaborate in laboratory and classroom settings to fulfill technical requirements in a timely manner.
7. Produce clear, precise, and effective technical documents and oral presentations.
8. Plan and manage technical projects.
9. Be prepared to grow professionally through independent learning, continuing education, and participation in technical societies.
10. Take the Fundamentals of Engineering examination as the first step toward professional licensure.
11. Be familiar with the laws and codes governing professional practice.
12. Understand their personal and professional roles in society.