

BACHELOR OF SCIENCE IN CIVIL ENGINEERING TECHNOLOGY

2020-2021 Degree Requirements

TOTAL CREDITS FOR DEGREE: 130

Name: _____

ID Number: _____

UNIVERSITY CORE CURRICULUM: 43 cr.

Required Fundamental Course

COMM 101 Oral Comm. & Pres. 3 credits

ENGL 101 College Composition 3 credits

UNIV 101 City-University Life 3 credits

Senior Capstone **ET 407** 3 credits

(Professional Problems in Engineering Technology)

Choose Thematic Core courses in the following:

Explore the World - Choice 1 3 credits

Explore the World - Choice 2 3 credits

Investigate Science **CHEM 101** 3 credits

(General Chemistry I)

Investigate Mathematics **MATH 190** 4 credits

(Calculus I)

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 **NSET 101** 3 credits

(Introduction to the Nat. Sciences and Engineering Technology)

MAJOR REQUIREMENTS: 87 cr.

CET 205 Intro to Surveying (3)

CET 206 Environ Eng Tech I (3)

CET 209 Eng Geo (3)

CET 213 Strength of Materials (3)

CET 214 Strength of Mt Lab (1)

CET 309 Soil Mechanics (3)

CET 310 Structural Analysis (3)

CET 315 Structural Design I (3)

CET 316 Structural Design II (3)

CET 317 Concrete Mix Des Lab (1)

CET 319 Soil Mech Lab (1)

CET 321 Environ Eng Tech II (3)

CET 405 Software Tools CET (2)

CET 409 Foundations Des (3)

CET 410 Highway/Bridge Des (3)

CET 411 Fluid Mech (3)

CET 412 Fluid Mech Lab (1)

CET 418 Hydraulics (3)

CHEM 102 Gen Chem II (3)

CHEM 103 Gen Chem Lab I (1)

CHEM 104 Gen Chem Lab II (1)

ET 405 Fund of Engr Exam I (0)

ET 406 Fund of Engr Exam II (0)

ETGR 205 Eng Tech Graphics (3)

MATH 181 Pre-Calc (4)

MATH 210 Calculus II (4)

MATH 230 Linear Algebra **OR**

MATH 310 Differential Eq (3)

MATH 330 Mathematical Stats (3)

ME 101 Statics (3)

ME 102 Dynamics (3)

NSET 218 Tech Comm (3)

PHYS 103 Physics Lab I (1)

PHYS 104 Physics Lab II (1)

PHYS 201 Fund of Phys I (3)

PHYS 202 Fund of Phys II (3)

ME 212 Prop of Materials (3)

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STUDENT OUTCOMES

Upon successful completion of this program:

- 1) An ability to identify, formulate and solve complex engineering problems by applying principles of engineering, science and mathematics;
- 2) 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) An ability to communicate effectively with a range of audiences
- 4) An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental and societal factors;
- 5) An ability 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) An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions; and
- 7) An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.