### BACHELOR OF SCIENCE

#### CIVIL ENGINEERING TECHNOLOGY

**2014-2015**

<table>
<thead>
<tr>
<th>THEMATIC CORE COURSES (42)</th>
<th>33</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explore the World - Choice 1</td>
<td>3</td>
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<tr>
<td>2. Explore the World - Choice 2</td>
<td>3</td>
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<tr>
<td>3. Investigate Science (CHEM 101)</td>
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<tr>
<td>4. Investigate Mathematics</td>
<td>3</td>
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<tr>
<td>5. Become a Storyteller</td>
<td>3</td>
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<td>6. Understand People - Choice 1</td>
<td>3</td>
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<tr>
<td>7. Understand People - Choice 2</td>
<td>3</td>
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<tr>
<td>8. Succeed in Business</td>
<td>3</td>
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<tr>
<td>9. Appreciate &amp; Apply the Arts</td>
<td>3</td>
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<tr>
<td>10. Discover Technology</td>
<td>3</td>
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<td>11. Capstone</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>CORE</th>
<th>9</th>
</tr>
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<tbody>
<tr>
<td>COMM 101 Oral Communication &amp; Present.</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 College Composition</td>
<td>3</td>
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<tr>
<td>UNIV 101 City-University Life</td>
<td>3</td>
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</tbody>
</table>

*Math course level dependent on results of placement exam.

** One Writing Intensive course in addition to ENGL 101 is required for graduation

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**DEPARTMENT GENERAL REQUIREMENTS**

<table>
<thead>
<tr>
<th>CORE</th>
<th>26</th>
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</thead>
<tbody>
<tr>
<td>CHEM 103 General Chemistry Lab. I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 104 General Chemistry Lab. II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 175 Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 185 Trigonometry</td>
<td>2</td>
</tr>
<tr>
<td>MATH 190 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 210 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 230 Linear Algebra I OR MATH 310 Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101 Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 102 Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 103 Physics Lab I</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 104 Physics Lab II</td>
<td>1</td>
</tr>
</tbody>
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**DEPARTMENT MAJOR REQUIREMENTS**

| CET 101 Statics | 3 |
| CET 205 Intro to Surveying | 3 |
| CET 206 Environ. Eng. Tech. I | 3 |
| CET 209 Engineering Geology | 3 |
| CET 212 Properties of Materials | 3 |
| CET 213 Strength of Materials | 3 |
| CET 214 Strength of Materials 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 Design Lab | 1 |
| CET 319 Soil Mechanics Lab | 1 |
| CET 405 Software Tools for CET | 2 |
| CET 411 Fluid Mechanics | 3 |
| CET 412 Fluid Mechanics Lab | 1 |
| ET 204 Programming for Eng. Tech. | 3 |
| ET 405 Fund. of Engr. Examination I | 0 |
| ET 406 Fund. of Engr. Examination II | 0 |
| ET 407 Prof. Prob. In Engr. Tech. | 3 |
| ETGR 205 Engineering Tech Graphics | 3 |
| MET 102 Dynamics | 3 |

Choose 3 from the following 4 courses:

| CET 321 Environ. Eng. Tech. II | 3 |
| CET 409 Foundations Design | 3 |
| CET 410 Highway/Bridge Design | 3 |
| CET 418 Hydraulics | 3 |

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Student's Name: __________________________

Entrance Date: __________________________

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**MINIMUM CREDITS FOR B.S. DEGREE**

128
Student Learning Outcomes

B.S. in Civil Engineering Technology

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.