### ELECTRICAL THEORY I

| Course Number Course Name | ELEC 140  
<table>
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<tbody>
<tr>
<td>Credit Value (Breakdown of theory and lab credits)</td>
<td>3, 3T+0S</td>
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<tr>
<td>Catalog Course Description</td>
<td>Basic electrical theory, OHM’s Law, series and parallel circuits, electrical symbols, AC and DC circuits. (3, 3T+0S)</td>
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#### Student Learning Outcomes/Objectives/Competencies of the Course

**Outcomes**
- Explain the concept of electron movement and the nature of electricity.
- Apply Ohm’s law as it pertains to direct current circuits.
- Calculate and solve direct current series circuit problems.
- Calculate and solve direct current parallel circuit problems.
- Calculate and solve direct current series-parallel circuit problems.

**Topics**
- Matter and Atomic theory
- Electron theory
- Electricity and Electric current flow
- Electrical circuits
- Math
- Electrical formulas
- Series circuits
- Parallel circuits
- Series-parallel circuits

#### College-Wide Student Learning Outcomes

Critical Thought