## ELEC 2240 SYLLABUS

<table>
<thead>
<tr>
<th>Course Number Course Name</th>
<th>ELEC 2240 Transformers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Value (Breakdown of theory and lab credits)</td>
<td>1 (1 Theory)</td>
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<tr>
<td>Catalog Course Description</td>
<td>Students will learn the fundamentals of transformers operations including the basic physical laws of magnetism and electromagnetism that govern the operation of a transformer. Similarly, students will be exposed to the principles of power generation and distribution. Pre-requisites: ELEC 1150</td>
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</tbody>
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| Student Learning Outcomes/Objectives/Competencies of the Course | Outcomes  
- Explain how a transformer works  
- Explain how power is generated and distributed  

Topics  
- Magnetism and electromagnetism  
- Transformers operation  
- Transformer connections  
- Real world transformer connections  
- Harmonics  
- Power generation and distribution |
| College-Wide Student Learning Outcomes | College Wide Student Learning Outcomes:  
Communication  
Critical Thought |