

## ELEC2225 - Transformers

Credits:	2 (0/2/0)
Description:	This course covers the concepts of transformer operation. Single-phase and three-phase (polyphase) transformer operation and installation methods are explored. Included in the course are the following topics: transformer operation, transformation relationships, transformer losses, transformer types, transformer testing, series and parallel operation, connections, instrument transformers and maintenance procedures. National Electrical Code requirements for transformer installations are developed and utilized.
Prerequisites:	<ul style="list-style-type: none"> <li>• ELEC1108</li> </ul>
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"> <li>1. Exhibit safe work habits.</li> <li>2. Identify transformer types.</li> <li>3. Calculate transformer turns ratio.</li> <li>4. Design step-up/step-down circuits.</li> <li>5. Connect transformer circuits.</li> <li>6. Demonstrate transformer circuit operation.</li> <li>7. Calculate transformer values.</li> <li>8. Troubleshoot transformer circuits.</li> <li>9. Interpret transformer protection.</li> </ol>
MnTC goal areas:	None

\*Can be taking as a Prerequisite or Corequisite.