

## ELEC1110 - Electric Motors and Generators

Credits:	4 (2/2/0)
Description:	This course provides a fundamental understanding of electric motor and generator theory and basic skills. This course includes types, construction, operation, installation and maintenance of electric motors and generators.
Prerequisites:	<ul style="list-style-type: none"><li>• ELEC1102</li></ul>
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"><li>1. Demonstrate safe work practices.</li><li>2. Describe the operational theory of a direct current machine.</li><li>3. Demonstrate the ability to properly wire a direct current machine.</li><li>4. Analyze the characteristics of various direct current machines.</li><li>5. Describe the theory of a rotating magnetic field in an alternating current machine.</li><li>6. Demonstrate the ability to properly wire an alternating current machine.</li><li>7. Describe the theory of electro-magnetic induction.</li><li>8. Analyze the various alternating current machine characteristics.</li><li>9. Describe the theory of single-phase alternating current machines.</li><li>10. Demonstrate the ability to disassemble and reassemble alternating current and direct current machines.</li><li>11. Describe the characteristics of three-phase alternating current machines.</li><li>12. Analyze the characteristics of three-phase alternating current machines.</li></ol>
MnTC goal areas:	None

\*Can be taken as a Prerequisite or Corequisite.