

## 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:	• ELEC1102
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 taking as a Prerequisite or Corequisite.