



MOTOR CONTROLS LAB

Course Number Course Name	ELEC 160L MOTOR CONTROLS LAB
Credit Value (Breakdown of theory and lab credits)	3, 0T+3S
Catalog Course Description	Co-requisite: ELEC 160. (3, 0T+3S)
Student Learning Outcomes/Objectives /Competencies of the Course	<p>Outcomes</p> <ul style="list-style-type: none"> • Understand ratings and specifications of controls and devices • Read, understand and interpret schematic, ladder, and pictorial diagrams • Able to wire start/Stop stations • Able to wire forward reversing start with interlocks • Identify parts of a motor to its leads • Identify types of three-phase motors • Identify types of single-phase motors <p>Topics</p> <ul style="list-style-type: none"> • Electrical tools • Electrical Safety • Electrical symbols • Control logic • Solenoids and motors Generators and transformers Power distribution • AC and DC drives Control Devices Reversing Motors • Relays and starters Sensing controls • Reduced voltage starters • Preventive maintenance systems
College-Wide Student Learning Outcomes	Communication