



EGR 151: Electrical Machinery

This course studies the principles of AC and DC circuits including electromagnetic induction and power factor, AC motor principles including inductive and synchronous type machines and DC series, shunt, and compound wound devices. Motor starting and speed control are also covered from an operational point of view. Prerequisite(s): Intermediate Algebra competency or concurrent enrollment in MTH 152. Three class hours a week. Instructional Support Fee applies.

Course Student Learning Outcomes

1. Demonstrate the fundamentals of simple AC&DC circuit analysis and troubleshooting. 2. Apply system analysis in industrial applications. 3. Explain the function and use of various industrial transformers, voltage regulators, switches, resistors, capacitors, inductors and AC& DC motors. 4. Demonstrate safe electrical practices, such as lock out tag out, per OSHA and Industrial standards.

Credits: 3

Program: Engineering