

COURSE – G
BASIC INDUSTRIAL ELECTRICAL THEORY III
(Level 7)

- TEXT BOOK:** Electrical Principles and Practices - Mazur/Zurlis
(supplied by Schaedler / YESCO Distribution)
- TOOLS/MATERIALS:** Students should bring the following to class:
- Calculator
- Textbook listed above
- Writing utensils and notepaper
- TIME FRAME:** Half-day session (4 Hours)
- PREREQUISITE(s):** Course-A, Basic Industrial Electrical Theory I (Level 1)
Course-B, Basic Industrial Electrical Theory II (Level 2)

General Sequence

- **Introduction**

Chapter 11 Circuit Conductors, Connections, and Protection
Chapter 12 Series Circuits

At the end of this training session, students should be able to.....

Chapter 11

- List and describe common types of conductors and conductor materials.
- Describe common methods for bending conduit.
- List and describe common types of cable.
- Describe common procedures for removing wire insulation.
- Identify common methods for connecting conductors.
- List and describe common types of overcurrent conditions.
- List and describe common types of overcurrent protection devices.

Chapter 12

- Describe a series connection.
- Explain polarity in a series circuit.
- Describe the operation and function of switches in a series circuit.
- Calculate resistance, voltage, current, and power in a series circuit.
- Describe a common application of a series circuit.
- Describe the function of capacitors in a series circuit and calculate capacitance.
- Describe the function of inductors in a series circuit.
- Describe the function of batteries, and cells in a series circuit.