

COURSE – H
BASIC INDUSTRIAL ELECTRICAL THEORY IV
(Level 8)

- 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)
Course-G, Basic Industrial Electrical Theory III (Level 7)

General Sequence

- **Introduction**

- Chapter 13 Parallel Circuits**
Chapter 14 Series / Parallel Circuits

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

Chapter 13

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

Chapter 14

- Describe a series/parallel connection.
- Explain polarity in a series/parallel circuit.
- Describe the operation and function of switches in a series/parallel circuit.
- Calculate resistance, voltage, current, and power in a series/parallel circuit.
- Describe a common application of a series/parallel circuit.
- Describe the function of capacitors and inductance in a series/parallel circuit.
- Describe the function of batteries and solarcells in a series/parallel circuit.