
SECTION HEADING

ELCO 1110: AC/DC I

Description

AC/DC I introduces students to electrical theory and practical experiences starting with DC electric circuits, electrical safety practices, and familiarization with training equipment using Ohm's law and power.

Credits

3

Prerequisite

MATH 0092 or placement by multiple measures

Topics to be Covered

1. Safety
2. Introduction to electricity
3. Metric notation
4. Multimeter measurements
5. Resistors and color coding
6. Ohms law and power
7. Relays and meters
8. Basic AC/DC circuits
9. Series, parallel, and combination circuits
10. Electromagnetic principles
11. Pre-algebraic formulas

Learning Outcomes

1. Apply the use of a meter with electricity and Ohm's
2. Apply safe tactics on the job with electricity
3. Calculate and use electrical terms
4. How to troubleshoot series, parallel, and combination circuits
5. Measure voltage and current with a meter
6. Understand how to color code resistors
7. Understanding and respecting electricity
8. Understand the difference between an insulator and conductor
9. Work on series, parallel, and combination circuits
10. When to apply complex circuits

Credit Details

Lecture: 2

Lab: 1

OJT: 0