

ELECTRONICS 3

Course Description

The third in a sequence of courses that prepares individuals to apply technical knowledge and skills to assemble and operate electrical/electronic equipment used in business, industry, and manufacturing. Instruction includes training in safety and passive AC circuits with topics addressing waveforms, transformers, capacitors, inductors, reactions, impedance, and resonance.

Strands

1. Students will follow safety practices.
2. Students will understand AC waveforms versus DC and the advantages of using AC power for distribution.
3. Students will understand how to change AC voltage and current levels using transformers.
4. Students will know how to calculate capacitance when connecting multiple capacitors.
5. Students will know how to calculate inductance with connecting multiple inductors.
6. Students will know how to calculate capacitive and inductive reactance.
7. Students will understand circuit impedance.
8. Students will understand resonance and how it is used in circuits.

