

# ILT 107: Concepts of Alternating Current

This course provides an advanced study of alternating current (AC) concepts and application principles. Specific topics include safety, terms and symbols, AC electrical theory, components, circuits, electrical measurement instruments, laws of AC, and methods for constructing and measuring various types of AC circuits. Students gain hands-on experience through laboratory exercises designed to analyze complex circuits, power requirements, faults, phase relationships, and power factors. Emphasis is placed on the use of scientific calculators and the operation of various types of test equipment used to analyze and troubleshoot AC circuits. This course may serve as a substitute core for AC Fundamentals.

**Credits:** 5

**Transfer Code:** Code C

**Lab Hours:** 4

**Lecture Hours:** 3

**Prerequisites:**

As required by program

**Program:** [Industrial Electronic Technology](#)