

# EIMT 131 : Residential Installation Theory

**Credits:** 4

**Class Hours:** 4 lecture

**Prerequisites:** "C" or higher or concurrent enrollment in in EIMT 135.

**Recommended:** "C" or higher in EIMT 121 or EIMT 123.

**Description:** This course is designed to develop knowledge of basic and advanced residential wiring with emphasis on the National Electrical Code, energy efficiency, and the principles of residential blueprint reading.

**Semester Offered:** Fall, Spring

**Course Student Learning Outcomes (CSLOs):**

1. Determine the service, feeder, overcurrent protection and the branch circuits in a dwelling unit.
2. Design the electrical system for a typical residence, including load calculations.
3. Apply the ability to read and comprehend electrical blueprints.
4. Interpret the electrical system rough-in of wire, boxes, and raceways according to the (National Electrical Code) requirements.
5. Identify the proper materials to provide an energy efficient electrical system that meets the required codes.
6. Demonstrate knowledge and application of technical math.
7. Evaluate the maintenance and troubleshooting problem and show skills required to ensure satisfied customers.
8. Define Green House techniques to create the most up-to-date and efficient sustainable home possible.
9. Explain the trim-out of switches, device receptacles, and luminaries throughout a house.