

# EIMT 135 : Residential Installation Lab

**Credits:** 6

**Class Hours:** 12 lecture/lab

**Prerequisites:** "C" or higher or concurrent enrollment in EIMT 131.

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

**Description:** This course is designed to provide the basic and advanced knowledge in residential wiring techniques. Laboratory exercises are designed to give students practical experience in different wiring techniques and methods.

**Semester Offered:** Fall, Spring

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

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