

# EIMT 147 : Commercial Installation Lab

**Credits:** 6

**Class Hours:** 12 lecture/lab

**Prerequisites:** "C" or higher or concurrent enrollment in EIMT 145.

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

**Description:** This course is designed to advance the knowledge of commercial and industrial wiring techniques with emphasis on the National Electrical Code, energy efficiency, and the principles of advanced electrical blueprint reading.

**Semester Offered:** Fall, Spring

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

1. Make use of the electrical system rough-in of wire, boxes, and raceways according to the National Electrical Code requirements used in commercial installations.
2. Utilize the National Electrical Code in general requirements, wiring and protection, wiring methods and materials, and equipment for general use.
3. Select the proper materials, to provide an energy efficient electrical system that meets the required codes.
4. Apply the ability to read and comprehend electrical blueprints.
5. Demonstrate knowledge and application of technical math in commercial applications.
6. Determine the grounding and bonding of electrical systems according to the National Electrical Code.
7. Design the electrical system for a commercial building, including load calculations.
8. Identify special conditions such as special locations installations, transformers, overcurrent devices, and distribution equipment.