EIMT 145 : Commercial Installation Theory

Credits: 4
Class Hours: 4 lecture
Prerequisites: "C" or higher or concurrent enrollment in EIMT 147.
Recommended: "C" or higher in EIMT 121 or EIMT 123.
Description: This course is designed to develop 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. Interpret the National Electrical Code in general requirements, wiring and protection, wiring methods and materials, and equipment for general use.
2. Apply the ability to read and comprehend commercial and industrial electrical blueprints.
3. Evaluate special conditions such as special locations installations, transformers, overcurrent devices, and distribution equipment.
4. Identify the proper materials to provide an energy efficient electrical system that meets the required codes.
5. Interpret the electrical system rough-in of wire, boxes, and raceways according to the National Electrical Code requirements used in commercial installations.
6. Demonstrate knowledge and application of technical math in commercial applications.
7. Design the electrical system for a commercial building, including load calculations.
8. Summarize the grounding and bonding of electrical systems according to the National Electrical Code.