ELE 142 - INDUSTRIAL ELECTRICAL

Course Description

Through structured classroom and hands-on skill building, the student will learn plans and sitework, the unit substation, feeder bus system, panelboards, trolley busways, using wire tables, signaling systems, basic motor controls, motors and controllers, and motor installation. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

ELE 105

Course Learning Outcomes

Knowledge:

- Identify power substations.
- Explain feeder bus Distribution.
- Describe signaling systems.

Application:

- Calculate the distribution of power/subsystems.
- Verify the size of the bus duct, feeders, and panelboards.
- Design the layout of power distribution.

Integration:

- Contrast the differences of increased demand and coordination in developing an industrial layout.
- Distinguish the varied loads to determine layout and distribution of power.

Human Dimension:

- Manage coordination between multiple individuals.

Caring - Civic Learning:

- Defend proper sizing and circuit calculations.
- Recognize the importance of layout and print reading.

Learning How to Learn:

- Summarize considerations required for electrical power distribution in an industrial setting.