



**COGNITIVE DOMAIN:** Knowledge; what graduates will know.

*Knowledge and Comprehension*

- ◆ Exhibit an understanding of AC/DC circuits and the components that are present in the system
- ◆ The ability to understand and comprehend diagrams and blueprints for electrical systems
- ◆ Accurately identify methodologies involving the multiple circuits and explain the purpose and logic of each

*Application*

- ◆ Be able to construct an electrical system for everyday living facilities
- ◆ Solve basic mathematical calculations to solve for wire sizing and power consumption
- ◆ Troubleshoot and diagnose electrical and electronic problems effectively using testing equipment
- ◆ Be able to demonstrate the ability to research and apply the National Electric Code for a safe and acceptable installation of electrical systems
- ◆ Communicate effectively with customers and members of multiple teams from various fields to determine points of failures so proper repair and/or modifications, repair can be performed

*Analysis, Synthesis & Evaluation*

- ◆ Access the electrical system to determine logic of design for customer needs
- ◆ Access system faults to determine the fastest and most accurate way to solve the problem
- ◆ Use critical thinking that will help install, troubleshoot, repair or modify a system
- ◆ Use modules and lab exercises that will assist the students to build and test their circuits

**AFFECTIVE DOMAIN:** Attitude; growth in feelings or emotional areas

- ◆ Ability to be on time
- ◆ Ability to meet deadlines
- ◆ Ability to make decisions without constant supervision
- ◆ Self-motivated
- ◆ Be a life-long learner (to keep up with changing technology)

**PSYCHOMOTOR DOMAIN:** Skills; manual or physical

- ◆ Produce hand drawings of Electrical schematics and wiring diagrams for residential, commercial and industrial electrical systems
- ◆ Assemble models of electrical circuits for live situations
- ◆ Use of various test equipment (VOM) for diagnose and repair