

# ELECTRICAL SYSTEMS FOR HVAC/R, PROFICIENCY AWARD

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The Electrical Systems for HVAC/R Program is an award to recognize proficiency in electrical systems for HVAC/R, concepts and practices. The program prepares students to become environmental control technology/HVAC/R technicians to maintain and repair heating, cooling, and refrigeration equipment in residential, commercial, and industrial buildings. Technicians can specialize in either installation or maintenance and repair.

| Course ID                    | Title                     | Units/<br>Hours |
|------------------------------|---------------------------|-----------------|
| <b>Required Core Courses</b> |                           |                 |
| AC R020                      | Electrical Systems I      | 3               |
| AC R020L                     | Electrical Systems I Lab  | 2               |
| AC R021L                     | Electrical Systems II Lab | 2               |
| <b>Total Units</b>           |                           | <b>7</b>        |

Upon successful completion of this program, students will be able to:

- Identify the electrical components used in air conditioning and refrigeration systems, and state the function of each.
- State how each of the electrical components in a wiring diagram contributes to the sequence of operation.
- Research and apply various electrical codes published in the National Electric Code book (NEC) and mandated by local authorities.