

Course Description**BCV0640 | Residential Electrician | 15.00 credits**

The Residential Electrician course delves into advanced electrical concepts, focusing on both theoretical knowledge and practical skills. Students will achieve proficiency in solving complex electrical math problems, laying a solid foundation for understanding Alternating Current (AC) circuit operations. Emphasizing career readiness, the course covers the importance of employability and entrepreneurship skills within the electrical industry. Participants will receive hands-on training in installing residential wiring and wiring systems, equipping them with the competencies needed to excel in residential electrical projects. This comprehensive approach ensures students are well-prepared for professional opportunities in the electrical field.

Course Competencies

Competency 1: The student will become proficient in advanced electrical concepts by:

1. Mastering complex electrical math problems enhances problem-solving skills and deepens understanding of electrical principles
2. Laying a solid foundation for understanding Alternating Current (AC) circuit operations through theoretical study and practical application
3. Analyzing advanced electrical concepts to apply them effectively in residential electrical projects

Competency 2: The student will develop career readiness and employability skills by:

1. Exploring the importance of employability skills within the electrical industry to prepare for successful job placement and career advancement
2. Developing entrepreneurship skills to empower students to consider self-employment opportunities within the electrical field
3. Participating in career readiness workshops to enhance networking, resume-building, and interview techniques

Competency 3: The student will gain expertise in residential wiring installation by:

1. Receiving hands-on training in installing residential wiring and wiring systems to ensure practical proficiency in electrical installations
2. Demonstrating how safe and effective installation techniques for various residential wiring applications comply with industry standards
3. Evaluating completed wiring projects for quality and safety, reinforcing best practices in residential electrical work

Learning Outcomes:

1. Use quantitative analytical skills to evaluate and process numerical data
2. Solve problems using critical and creative thinking and scientific reasoning
3. Formulate strategies to locate, evaluate, and apply information