



Electrical Apprenticeship Program – Areas of Study – Years 1 – 4

This program of study satisfies the state requirement for electricians' apprentice educational hours and is for students who are RI registered apprentices and employed by a sponsor at the start of your first year in the apprenticeship program (and in each additional year) to receive CCRI course credit. Students should register for the course that corresponds with their year of apprenticeship. Each course is designed to provide students with the necessary knowledge to progress through the four-year apprenticeship and help prepare students to pass the state licensing examination. Classes are to be taken one class choice per year. This is a Related Instruction Program and proof of apprenticeship is required at time of registration.

This program is approved by the R.I. Board of Electrical Examiners and the State Apprenticeship Council of the R.I. Department of Labor and Training. Classes include reading assignments, assessments and online activities.

Attendance is strictly enforced. Make-up classes are limited and could incur an additional cost.

PLEASE NOTE: Each semester consists of 75 hours: 25 meetings in the fall term and 25 meetings in spring term. All Electrical Apprenticeship Training classes will be held online, unless otherwise stated. All students must register prior to the start of class and by designated deadline. Areas of study include:

Electrical 1: \$1,370 + \$10 non-refundable registration fee (includes Textbook, 2020 Code hardcover handbook and *NCCERconnect E-book access)

- Core Curriculum • orientation to electrical trade • safety • circuits • theory • introduction to national electrical code
- device boxes • hand bending • raceways and fittings • conductors and cables • electrical construction drawings
- residential electrical services • electrical test equipment

It is the responsibility of the students in Years 2, 3 and 4 to purchase their own 2023 Code hardcover handbook. The ISBN# for the book is 978-1-45592-907-7.

Electrical 2: \$1,210 + \$10 non-refundable registration fee (includes Textbook and *NCCERconnect E-book access)

- Alternating current • motors: theory and application • lighting • conduit bending • pull and junction boxes • conduit installations • cable tray • conductor terminations and splices • grounding and bonding • circuit breakers and fuses
- control systems and fundamental concepts

Electrical 3: \$1,210 + \$10 non-refundable registration fee (includes Textbook and *NCCERconnect E-book access)

- Load calculations-branch and feeder circuits • conductor selection and calculations • practical applications of lighting
- hazardous locations • over current protection • distribution equipment • transformers • commercial electrical services
- motor calculations • voice, data, and video • motor controls

Electrical 4: \$1,210 + \$10 non-refundable registration fee (includes Textbook and *NCCERconnect E-book access)

- Load calculations-feeders and services • health care facilities • standby and emergency systems • basic electronic theory
- fire alarm systems • specialty transformers • advanced controls • HVAC controls • Heat tracing and freeze protection
- motor operation and maintenance • medium-voltage terminations/splices • special locations • fundamentals of crew leadership

Note: EasyPay is not available. Payment in full, is required, at time of registration.

***NCCERconnect E-book access information will be given to students at time of textbook pick up. Students will be emailed textbook pickup dates/times information when textbooks are available.**