



ELCC399 – Construction Electrician Apprenticeship Program Gap C Training

Trades

Effective Term & Year: Fall 2022
Program Outline Review Date:

Program Area: Trades Apprenticeship Training

Description:

Gap Training refers to missing or re-sequenced content of the Construction Electrician Apprenticeship program as a result of the Harmonization Initiative by SkilledTradesBC and applies to apprentices that are transitioning from the current* Level 3 of the Electrician Common Core Apprenticeship program to the harmonized** Level 4 of the Construction Electrician Apprenticeship program. Apprentices who have not completed a harmonized Level 3 Electrician Common Core Apprenticeship program MUST complete Gap Training in order to receive credit for Level 3 Electrician Common Core Apprenticeship program.

*Current refers to the program stream for apprentices who have completed Level 3 training before April 2019.

**Harmonized refers to the program stream with re-aligned content effective April 2020.

Credentials Granted:

Delivery Methods: On-Campus (Face-to-Face)

Program Duration: 23 hours

Instructional Activity and Hours:

Activity	Hours
Instructional Hours (hrs/wk)	

Directed Studies (hrs/wk)	
Total (hrs/wk)	23 hrs/wk
Total Program Hours	23 hours

Content Weighting:

Activity	Percentage
Classroom, Directed Studies or Online Instruction	90%
Seminar/Tutorials	10%

Admission Requirements:

Completed Level 3 Construction Electrician Apprenticeship (non-harmonized program).

In order to take this program you must be a sponsored electrician apprentice.

Flexible Assessment:

Credit cannot be awarded for this program through Flexible Assessment.

Program Transfer Credit:

For information about block transfer agreements between programs in British Columbia, Alberta, and elsewhere, please visit <http://www.cotr.bc.ca/transfer>.

To minimize transfer issues, check with an academic advisor at the institution that will receive the transfer credits.

Textbooks and Required Resources:

Textbook selection varies by instructor and may change from year to year. At the Program Outline Effective Date the following textbooks were in use (most current edition):

Complete Modules Level 3

Canadian Electrical Code; BC Amendments, BC Bulletins, Others as requested (available through BCSA)

BCIT Workbook

Recommended:

Delmar's Direct Current Fundamentals and Alternating Current Fundamentals, 8th Ed.

Electrical Wiring: Industrial

Delmar's Standard Textbook of Electricity, 3rd Ed. (Supplemental)

Electronics for Electricians, 6th Ed.

*Please see the instructor's syllabus or check COTR's online text calculator
<https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.*

Program Competencies and Technical Training Content:

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

- identify hazardous locations and wiring methods for hazardous locations;
- install high voltage transformers;
- calculate voltage, current, kVA, non-destructive testing;
- describe installation of high voltage transformers;
- install lighting standards and describe types and installation of lighting standards;
- install renewable energy;
- install ground fault detection systems and high capacity installations;
- install and identify conductors and cables and determine conductor and cable requirements;
- install raceways, boxes and fittings determine requirements for raceways, boxes and fittings;
- install and maintain HVAC systems and environmental heating controls;
- describe, install, maintain and test exit and emergency lighting systems; and
- describe, install and maintain cathodic protection systems.

See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.

Evaluation and Assessment:

Assignments	% Of Total Grade
Theory	90%
Practical	<u>10%</u>
Total	100%

Pass Requirements:

Successful completion of the in-school training for each level is defined as a final score of 70% or greater. (SkilledTradesBC website)

Students must provide their own:

- linesman pliers
- diagonal cutters
- hacksaw
- wire strippers
- Phillips screwdriver
- slotted screwdriver
- Robertson screwdriver
- torpedo level
- knife
- tape measure
- channel lock pliers
- 6" crescent wrench
- personal digital multimeter minimum 10m?/v

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
- Policy 2.5.8 Academic Performance
- Policy 2.5.3 Grade Appeal
- Policy 2.4.9 Student Concerns Re Faculty

Program Grade

COM	NCG
Completed to the defined standard – 70% or greater	No Credit Granted – less than 70%

Program Changes:

Information contained in program outlines is correct at the time of publication. Content of the program is revised on an ongoing basis to ensure relevance to changing educational, employment, and marketing needs. The instructor endeavours to provide notice of changes to

students as soon as possible. The instructor reserves the right to add material to programs.

Industry Training:

The program competencies and technical training content delivered in this program follow the SkilledTradesBC Program Outline for this trade.

Safety Catalog:

WorkSafeBC regulations apply to all trades programs. Students are expected to follow all safe work practices and have high regard for the safety of others as well as of themselves. Students are responsible to wear personal protective equipment (PPE) as directed. At a minimum, students must provide and wear approved safety footwear and eyewear at all times in the shop. Additional PPE may be required for specific tasks. Students are expected to wear clothing suitable for working safely in the shop.

Course Descriptions: Refer to Course Outlines – <https://outlines.cotr.bc.ca/course/>