

Construction Electrician: Apprenticeship

Faculty of Trades and Technology	kpu.ca/trades
Electrical (Construction)	kpu.ca/trades/electrical
Program Type	Vocational
Credential Granted	No Credential
Offered At	Cloverdale
Start Date(s)	Varies
Intake Type	Apprenticeship
Format	Full-time
Instructional Cycle	Fixed-term
Curriculum Effective Date	01-Sep-2016
How to Register	www.kpu.ca/apprentice

DESCRIPTION

Get the skills that pay the bills!

In BC, an individual can become certified as a Construction Electrician by completing the Electrical apprentice program. Apprenticeship programs are designed to provide students the full scope of knowledge and applied skills necessary to perform the occupation. Apprentices have an employer to sponsor them and are registered with the Industry Training Authority (ITA).

KPU delivers in-school technical training for Electrical apprenticeship levels 1, 2, 3 and 4. The in-school technical training for each level is 10 weeks in duration and includes an end of level examination. Additional information is available at: kpu.ca/trades/electrical.

The pathway to becoming a certified Construction Electrician generally takes 4 years to complete the in-school technical training and work-based training hours. Electrical apprentices will be eligible to write the Red Seal Inter-provincial Examination upon completion of all in-school technical training. Red Seal endorsement will be awarded upon completion of 6000 work-based training hours and is recognized in all jurisdictions across Canada; additional information is at: red-seal.ca.

Training Schedules

KPU apprentice training schedules and waitlists are published on Kwantlen Course Search. Additional apprenticeship training opportunities are listed on Trades Training BC; this is the hub for BC's Public Trades Training Programs & Services.

Financial Supports for Apprentices

Apprentices may be eligible for financial support for the in-class portion of their training through the EPBC Apprentice Program Financial Supports. Application to this program must be made four to six weeks prior to the start of technical training. Information is available through WorkBC.

Apprentices must apply separately for Employment Insurance (EI) Benefits no later than the last week of work, or during the first week of training, or they will not be eligible to receive EPBC Apprentice Program Financial Supports. EI information can be obtained by visiting Service Canada.

The Canada Apprentice Loan is an initiative of the Government of Canada. As of January 2015, apprentices can apply for up to \$4,000 in interest-free loans per period of in-school technical training. Information is available at the Canada Apprentice Loan Service Centre.

GENERAL PREREQUISITES

The following requirements apply:

- Completed KPU Apprentice Registration
- Active apprentice registration in the BC Apprenticeship system.
- Valid Trade Worker Identification number from the Industry Training Authority (ITA-ID). If you do not have an ITA-ID, you will need to complete an apprenticeship registration form through the ITA (www.itabc.ca) prior to enrolling (Level 1 through to 4). To determine your eligibility please consult with the Industry Training Authority.

Note: International student enrolment requires approval of the Dean.

CURRICULAR REQUIREMENTS

Note: KPU Tech does not permit students to register in Apprenticeship Levels out of sequence.

Electrical Level 1 (AELC 1010)

- Electrical Safety Fundamentals
- DC Circuits
- Electromagnetism & Applications
- Meters & Test Equipment
- Electrical Prints & Drawings
- AC Motor Controls
- Electric Code & Wiring
- Industrial Power Electronics

Electrical Level 2 (AELC 1020)

- AC Fundamentals
- Meters & Test Equipment
- Single-phase AC Circuits
- Circuit Protector Devices
- Single-phase Transformers
- AC Motor Controls
- Lighting
- Industrial Power Electronics
- Electric Codes & Wiring

Electrical Level 3 (AELC 1030)

- Three-phase Circuits
- Electronic Circuits
- Power Quality Analyzers
- Applying the CEC to Installations
- Installing Service Equipment
- Grounding and Bonding
- Distribution Centres
- Conductors and Cables
- Installing Devices
- Three-phase Transformers
- DC Motors and Generators
- AC Motors and Alternators
- Magnetic Motor Controls
- Electronic Motor Controls

Electrical Level 4 (AELC 1040)

- Trades Concepts (Review of Levels 1 - 3)

- Industrial Electronics
- Structured Cabling Installation / Testing
- Drawings, Specifications & Manuals
- HVAC Systems
- Emergency Power Systems
- Protective Devices
- Programmable Logic Controllers (PLCs)
- Fire Alarm Systems
- Intrusion Alarm Systems
- High-voltage Systems
- Canadian Electrical Code
- Preparation for Inter-Provincial Exam

OTHER INFORMATION

Special Equipment

Students will require appropriate tools and safety wear in conformance with WorkSafeBC regulations that includes safety glasses, hard hat and steel toed boots.

CREDENTIAL AWARDED

KPU will report your in-school technical training completion information to the Industry Training Authority (ITA) in order for the ITA to determine credit towards your designated apprenticeship.