

ELECTRICAL - HARMONIZED- APPRENTICESHIP LEVELS 1-4

In 2020/2021 this trades program via Distributed Learning with a focus on blended delivery. Trades students must prepare for face-to face learning on campus where practical components of training take place in a regulated manner and meet all necessary health protocols. Learn more about Distributed Learning (<https://www.coastmountaincollege.ca/programs/discover/distributed-learning/>) at CMTN.

View on YouTube (<https://www.youtube.com/watch?v=qEdMuT2W-j0>)

Electrical work requires skill and knowledge to install, construct, alter, repair, maintain, commission, test, service, calibrate, and operate related electrical and electronic systems in any premise, place, building or structure. Electricians ensure that all electrical connections are safe and meet the electrical code. Indentured apprentices combine on-the-job training with formal classroom technical skills at CMTN to earn journey person classification.

Level 1-4 apprenticeship technical training is offered concurrently, with 10 weeks of instruction per level. Upon successful completion of all four levels and appropriate time in the trade, the student may be eligible to write the Inter-provincial exam in Electrical.

Apply to CMTN

Visit Apply to CMTN (<https://www.coastmountaincollege.ca/admissions/apply-to-cmntn/>) for an Admissions Checklist and to apply online.

Our Educational Advisors (<https://www.coastmountaincollege.ca/student-services/student-support/educational-advising/>) are here to help if you have any questions or need guidance along the way.

Dates and locations

Intake	Location
Harmonized Level 3: January 04, 2021 - March 12, 2021	Terrace Campus
Gap C training CL3-HL4 March 15, 2021 – March 18, 2021	Terrace Campus
Harmonized Level 1:: March 22, 2021 – May 28, 2021	Terrace Campus
Harmonized Level 4: March 22, 2021 – May 28, 2021	Terrace Campus
Future Intakes*	
Harmonized Level 1: August 23, 2021 - October 29, 2021	Terrace Campus
Harmonized Level 2: October 12, 2021 - December 17, 2021	Terrace Campus

Harmonized Level 3: January 04, 2022 - March 11, 2022 Terrace Campus

Harmonized Level 4: March, 14 2022 - May 20, 2022 Terrace Campus

¹ Future planned intakes may be subject to change. Please check back to confirm availability.

Faculty

Faculty Member	Campus Location
Cam Thiessen, Coordinator (https://coastmountaincollege.ca/about-cmntn/department-contacts/details/cam-thiessen/)	Terrace
Ray Hopkins (https://coastmountaincollege.ca/about-cmntn/department-contacts/details/ray-hopkins/)	Terrace
Melissa Robertson	Terrace

The following learning outcomes are covered throughout levels 1-4 of the apprenticeship program:

- Line A Apply Circuit Concepts
- Line B Perform Safety-Related Functions
- Line C Use Tools and Equipment
- Line D Organize Work
- Line G Use Communication and Mentoring Techniques
- Line H Install and Maintain Consumer/Supply Services and Metering Equipment
- Line I Install and Maintain Protection Device
- Line J Install and Maintain Low Voltage Distribution Systems
- Line K Install and Maintain Power Conditioning, Uninterruptable Power Supply (UPS) and Surge Suppression Systems
- Line L Install and Maintain Bonding, Grounding and Ground Fault Detection Systems
- Line M Install and Maintain Power Generation Systems
- Line N Install and Maintain Renewable Energy Generating and Storage systems
- Line O Install and Maintain High Voltage Systems
- Line P Install and Maintain Transformers



- Line Q Install and Maintain Raceways, Cables and Enclosures
- Line R Install and Maintain Branch Circuitry
- Line S Install and Maintain Heating, Ventilating and Air-conditioning (HVAC) Systems
- Line T Install and Maintain Exit and Emergency Lighting Systems
- Line U Install and Maintain Cathodic Protection Systems
- Line V Install and Maintain Motor Starters and Controls
- Line W Install and Maintain Drives
- Line X Install and Maintain Non-Rotating Equipment and Associated Controls
- Line Y Install and Maintain Motors
- Line Z Install and Maintain Signaling Systems
- Line AA Install and Maintain Communication Systems
- Line AB Install and Maintain Building Automation Systems
- Line AC Install, Program and Maintain Automated Control Systems
- Line AD Install and Maintain Pneumatic, Hydraulic Control and Pumping Systems

For more information on the scheduling of these topics see the course outline provided by the instructor. Please visit the Industry Training Authority's (ITA) website for more information on this program: www.itbc.ca/AssetFactory.aspx (<https://www.itabc.ca/discover-apprenticeship-programs/search-programs/>)

Students entering Electrical Apprenticeship classes must be registered as an apprentice and submit a Trades Worker Identification (TWID) # upon registration.

Learners should be aware that many employers require Grade 12 completion.

Complete a CMTN Bursary Application (<https://coastmountaincollege.ca/student-services/financial-aid/cmtn-awards-bursaries-scholarships/>) [PDF]

Electrical - Apprenticeship Level 1-4 *

Fees	Domestic	International
Full Time:	10 Weeks	10 Weeks
Tuition:	\$742.30	\$3,154.60
Student Union Fees: ¹	\$41.92	\$41.92
Mandatory Fees:	\$212.10	\$212.10
Health Insurance:	N/A	\$316.24
Total:	\$996.32	\$3,724.86

¹ These fees are term based and will not be charged twice if more than 1 apprenticeship level is taken in a term.

* Tuition and fees are charged for each apprenticeship level.

Fees are effective as of August 1, 2020 for the 2020/21 Academic Year.

Books & supplies

- Book Lists (<https://www.coastmountaincollege.ca/docs/default-source/program-forms/electrical/electrical-apprenticeship-1-4-booklist-2019.pdf>)
- Supply List (<https://www.coastmountaincollege.ca/docs/default-source/program-forms/electrical/electrical-student-supplies-list.pdf>) \$482.08 (tax included)

In addition to the fees outlined in the Program Fees section, the following additional costs apply:

- C.S.A. approved safety footwear (WorkSafeBC regulations)
- Classroom supplies
- Appropriate clothing

Career opportunities

Electricians typically find work in three industries:

Construction

Electricians work either as employees who are part of a contractor's team on both residential and commercial construction projects, or as independent electrical contractors on such projects

Industrial

Electricians are typically employed at large-scale industrial facilities such as pulp mills, hydroelectric dams, and mining and smelting operations

Institutional

Most large institutions such as hospitals, school boards, universities and other public facilities have at least one electrician working as part of their maintenance department

