OUR VISION
To offer the finest trades training possible, to support national standards and ensure a strong electrical industry.

ELECTRICAL JOINT TRAINING COMMITTEE

Journeyperson Upgrading Programs
MANAGING DIRECTOR’S NEWS

You made it! As you can see, the EJTC is finally transitioning to an online format. For the next year or so, we will continue to send out one page reminders about our online bulletin, but come Spring 2020, we will be paperless! Please make sure all your contact information is up to date with the union hall so you don’t miss out on our emails.

A few highlights to report on...

First, we would like to congratulate Darcy Biln on his recent retirement. Darcy, Administrator of Local 213 Electrical Wokers’ Welfare and Pension Plans, has contributed countless hours over many years to the Committee and for that we are grateful. Please join me in wishing Darcy a happy and healthy retirement. Replacing Darcy, we would like to welcome Mike Logan, IBEW Dispatcher. We look forward to working with you!

On July 4, 2019, the EJTC announced the start of our new digital recruitment campaign A QUEST FOR BALANCE geared towards promoting women and indigenous women in the trades. During this 3 year federally funded project, we will be using social media to broaden women’s awareness of the electrical trade, and educate and guide them towards quality training. Please feel free to follow and ‘like’ us on social media to help spread the word.

On Sunday, July 14, IBEW Local 213 held their annual Family Fun BBQ which was very successful! The EJTC was happy to take part and I was thrilled to see some familiar faces there.

As we gear up for our Fall upgrading session, we are thrilled to introduce a new pilot program – Heating, Ventilation and Air Conditioning (HVAC). As electricians, we are required to provide power for HVAC equipment. As a controls electrician, we need to be able to wire and troubleshoot HVAC equipment in order to make it work effectively. This course will educate electricians about the function of HVAC equipment in relation to air, temperature, pressurization, and humidity.

The EJTC wants to promote the advancement of green job-related strategies, and as promised, we are pleased to offer our Green Professional Building Skills (GPRO) training again this Fall. This 2 day course explains the essential role electricians play on sustainable construction projects. Taught by skilled instructors using real-life case studies, GPRO gives experienced electricians the critical tools to transition from conventional to sustainable construction practices.

Furthermore, we continue to offer our ever-popular NALCTP, EVITP, ESTS, and Code with the added benefit of these courses leading to Certification. Please note that Jack Ball will be teaching the 2015 CEC Code FSR course in both evening and fulltime day-school format.

We would like to remind everyone that the cost of these courses is subsidized by the training fund. To be eligible for the subsidy you need to have worked with a contractor in Local 213’s jurisdiction for at least 6 months in the past 2 years (non-consecutively). If you have any questions or concerns regarding this, please feel free to contact our office.

With summer in full swing, we won’t keep you any longer – submit your registration requests and we will see you this Fall. Enjoy the nice weather!

Phil Davis
Managing Director
The following courses will be held at the EJTC TRAINING CENTRE
1405 or 1424 Broadway Street, Port Coquitlam, BC

**Electrical Code – 23rd Ed. – 2015**

Cost: $78.75 [non-refundable](#) administration fee (includes GST)

*2015 Code Book is required.*

*Please note: the EJTC does not sell Code Books at this time.*

<table>
<thead>
<tr>
<th>Dates</th>
<th>Schedule</th>
<th>Time</th>
<th>Sessions/Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 9 – 14, 2019</td>
<td>Monday through Saturday</td>
<td>7:30am – 4:00pm</td>
<td>6 sessions/50 hours total</td>
</tr>
<tr>
<td>Sept. 10 – Nov. 14, 2019</td>
<td>Tuesdays &amp; Thursdays</td>
<td>5:00pm – 7:30pm</td>
<td>20 sessions/50 hours total</td>
</tr>
</tbody>
</table>

**Note!** The full-time, 6-day course is a condensed course that will be demanding during the day and in the evenings with substantial homework assignments.


This is an accredited course that is designed to meet the needs of those Electricians and Contractors wishing to upgrade their Code knowledge in a formal fashion. It will adequately prepare them to write their ‘A’, ‘B’, ‘C’ Contractors’ or Worker Qualification License.

**Conduit Bending**

Cost: $157.75 ($78.75 [non-refundable](#) administration fee + $79.00 books – includes GST)

<table>
<thead>
<tr>
<th>Dates</th>
<th>Schedule</th>
<th>Time</th>
<th>Sessions/Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 19 + 20, 2019</td>
<td>Saturday &amp; Sunday</td>
<td>8:30am – 4:30pm</td>
<td>2 sessions/16 hours total</td>
</tr>
</tbody>
</table>

This course is for those electricians who would like to increase their conduit fabrication skill level. You will learn how to fabricate Offsets, Kicks, Three Bend Saddles Four Bend Saddles, Goosenecks and Rolling Offsets. You will learn the Traditional method, Push Through method and the Multiplier method for bending conduit. We will be using ½” and ¾” emt conduit. Please note that this is not a ‘power bender’ course.

**NEW!** Must have basic computer skills and ability to access a computer with Windows 7 (or later) and internet for homework assignments as required.

*Note! Safety footwear and hand tools required.*

**ESTS – CSA Z462 Compliant Arc Flash & Shock Electrical Safety eLearning**

Cost: $78.75 [non-refundable](#) administration fee (includes GST)

**Online**

*30 days to complete the course from the day you log on.*

*Must log on and complete before next quarter.*

Approx. 4 hours

As this course is an online eLearning course, The ESTS is a compliant and highly-effective eLearning training experience for Electrical Workers, Supervisors, Electrical Engineers, Electrical Technologists, Instrumentation Mechanics, HVAC Technicians, Cathodic Protection Technicians, Overhead Door & Crane Mechanics, Fire Alarm Technicians and other workers who need to manage or may be exposed to the electrical hazards of arc flash and shock.

1. Introduction
2. Regulations, Consensus-based Standards and Best Practices
3. Understanding Electricity in the Workplace
4. Electrical Hazards: Understanding the Potential for Harm
5. Risk Assessment Procedure
6. Establishing an Electrically Safe Work Condition
7. Engineering and Administrative Controls
8. Electrical Specific PPE, Tools and Equipment
9. Emergency Response, Incident Reporting and Program Maintenance
10. Final Assessment & Work Task Scenarios
The following courses will be held at the EJTC TRAINING CENTRE
1405 or 1424 Broadway Street, Port Coquitlam, BC

Electric Vehicle Infrastructure Training Program (EVITP)

Cost: $142.50 ($78.75 non-refundable administration fee + $63.75 EVITP Certification Exam fee - includes GST)

October 19 - 20, 2019   Saturday & Sunday   Time: 8:00am – 4:30pm   4 sessions total (24 hours + 3 hour exam during last session)
-and-
October 26 - 27, 2019   Saturday & Sunday   Time: 8:00am – 4:30pm

► Prerequisite: Must be a Journeyperson Electrician (a copy of your Certificate of Qualification will be required!)
► Note! Full attendance is required to write the EVITP certification exam.

This course is an Industry driven collaborative effort. The Electric Vehicle Infrastructure Training Program (EVITP) delivers the highest standard in training and certification for the installation of Electrical Vehicle Supply Equipment (EVSE). To be included in the course:

- Automobile Manufacturer’s charging specifications
- EV battery types, charging characteristics
- Customer service/relations
- Utility interconnect policies and requirements
- Utility grid stress precautions
- Installing, commission and maintaining electrical storage devices
- Charging station fundamentals
- Service level assessments and upgrade implementation
- Canadian Electrical Code requirements
- First Responder safety and fire hazard measures
- Site Surveys

*You will require a 2018 Code Book and calculator.*
Please note: the EJTC does not sell Code Books at this time*

NALCTP

Cost: $199.50 ($78.75 non-refundable administration fee (includes GST) + $120.75 NALCTP Examination fee (includes GST))

November 18 - 24, 2019   Monday - Sunday   Time: 8:00am – 4:30pm   7 sessions/60 hours total

► Prerequisite: Must be a Journeyperson Electrician – This is a CSA Exam Preparatory Course. Full attendance is required to write the exam.

In the North American construction and building maintenance sector, there is increasing demand for detailed knowledge of advanced lighting controls. The highest certification in this field is available through the National Advanced Lighting Control Training Program (NALCTP).

With proper installation, advanced lighting controls improve energy efficiency in commercial facilities and save significant dollars. The NALCTP Program trains and certifies Red Seal Electricians in the proper programming, testing, installation, commissioning and maintenance of advanced lighting control systems in commercial and industrial facilities.

This is a full-time, intensive course and will require additional homework some evenings. The NALCTP exam will be given on day 7.

Note – There is also approximately 10 hours of preparatory online work that must be completed before the start of in-class training.
Details and login information will be provided to course registrants upon confirmation of enrolment.

Successful completion of this course will secure an internationally recognized certification for the successful candidate.

For more information on NALCTP, visit www.nalctp.org.
The following courses will be held at the EJTC TRAINING CENTRE

1405 or 1424 Broadway Street, Port Coquitlam, BC

**GPRO**

Cost: $103.75 ($78.75 non-refundable administration fee + $25.00 Certification fee - includes GST)

**December 7 & 8, 2019**
Saturday & Sunday
Time: 8:00am – 4:00pm
2 sessions/16 hours total

This course is a comprehensive green building training and certificate program. Developed by trades for the trades, GPRO teaches people who build, renovate and maintain buildings, the principles of sustainability combined with the trade-specific green construction knowledge.

This course will consist of two parts and will take the participants through the Fundamentals of Building Green and the Electrical Systems modules.

**Fiber Optics**

Cost: $189.00 ($78.75 non-refundable administration fee + $110.25 Certification fee – includes GST)

**Oct. 28 – Nov. 1, 2019**
Monday – Friday
Time: 9:00am – 4:00pm
5 sessions/35 hours total

In this 5 day course, you will study basic theory and practical aspects of using fiber optic cable in different types of communications and data transmissions. Students will increase their knowledge and gain hands-on skills in fiber optics technology in preparation for earning their designation as Certified Fiber Optics Technician (CFOT). This course involves a combination of theory and hands-on training. Students will focus on the practical aspects of working with fiber optics cables, incl. connectorization, fusion splicing and testing. A wide range of topics will be covered, such as the different types of fiber and cables, how to specify fiber optic cable and sources of loss in fiber.

**HVAC (Pilot Project)**

Cost: $78.75 non-refundable administration fee (includes GST)

**December 7, 2019**
Saturday only
Time: TBA
1 session/8 hours total

As electricians, we are required to provide power for HVAC equipment, and as a Controls electrician, we need to be able to wire and troubleshoot HVAC equipment in order to make it work effectively. This course will educate electricians about the function of HVAC equipment in relation to air, temperature, pressurization, humidity, etc.

In the two-hour seminar, we will go through slides and review the functionality of:

- Air-Handling units
- Variable-Air-Volume terminal boxes
- Hydronic HVAC Systems
- Heat Exchangers
- Chillers
- Air Conditioning Units
- Boiler loops
- Etc.

**ALL REGISTRATION BALLOTS ARE DUE BY AUGUST 23, 2019.**

Registration ballots are a separate PDF. Please fill in all required information and email it directly to: info@ejtc.org.
The following courses will be held at **BCIT – BURNABY CAMPUS (SE-1)**

**3700 Willingdon Avenue, Burnaby, BC**

---

**TELC 0130 – Motor Control**

Cost: $78.75 non-refundable administration fee (includes GST)

**October 19 – November 16, 2019**

**Time:** 8:00am – 4:00pm

**4 sessions/45 hours total**

Upon successful completion of this 30-hour course, participants will be able to:

- Describe the features of AC magnetic motor starters including contractor types, overload relays, and starter ratings.
- Describe the operation of across-the-line magnetic starters including power circuit components, control circuit components, two-wire control circuits, and three-wire control circuits.
- Develop schematic and wiring diagrams for three-phase magnetic starters including comparison of schematic and wiring diagrams, wire numbering systems, and converting between schematic and wiring diagrams.
- Develop control circuits involving automatic and sequence control including definite and timed sequence control, anti-plugging using timing relays, pump motor control, reversing starter control and other applications.
- Describe basic troubleshooting procedures including analyzing diagrams, use of test equipment and common faults.

» No class on Saturday, November 9, 2019 (Remembrance Day Weekend)

---

**ACIM 5020 – Elements of Drafting and Renewable Energy Systems**

Cost: $78.75 non-refundable administration fee (includes GST)

**September 7 – October 19, 2019**

**Time:** 8:00am – 4:00pm

**6 sessions/45 hours total**

This course is an introduction to the drafting and renewable energy systems concepts. Half of the course will be interpreting and creating electrical drawings. The drafting tools used will be AutoCad and Visio. The second half of the course will examine power monitoring and protective relaying. A review of work, power, and energy concepts will allow students to convert between units for mechanical, electrical, and thermal systems. To encourage the use of online resources and teamwork a power system monitoring lab is completed. The practical activities done by the student in the course reinforce the theory studied.

» No class on Saturday, October 12, 2019 (Thanksgiving Weekend)

---

**ACIM 5030 – Advanced PLC and Human Machine Interfaces in Manufacturing**

Cost: $78.75 non-refundable administration fee (includes GST)

**September 9 – October 28, 2019**

**Mondays & Wednesdays**

**Time:** 5:00pm – 8:15pm

**14 sessions/45 hours total**

**Prerequisites: ACIM 5010**

The programmable logic controllers (PLCs) course will build on principles that were introduced in the Introduction to programmable logic controllers course (ACIM 5010). PLCs are most commonly encountered in a wide variety of automated control systems in manufacturing, conveying, transportation, and process control. Human-machine interfaces (touchscreen panels) as PLC system peripherals provide system status and operator control capabilities. Topics covered include installation, interfacing, communications, monitoring, troubleshooting and testing, and safety. Students will make power, signal, and communication connections for the PLC and HMI, and interpret and write programs for controlling manufacturing processes and displaying the status of automated systems.

» No class on Monday, October 14, 2019 (Thanksgiving Day)