IBEW LOCAL 353

Training Course Catalogue

Spring 2024

EDUCATION AND TRAINING

LOCAL 353 INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS TORONTO

SPRING 2024 COURSE CALENDAR

REGISTRATION OPENS

Monday January 8, 2024 at 7:30am

COURSE REGISTRATION POLICY

To register for an Education and Training course, please follow the instructions below:

1. Register online at https://tinyurl.com/yvj8eg54 or;
2. Use the QR Code to take you to the online registration form, or;
3. Fill out the registration form and use the **self-addressed stamped envelope** to mail to:

   IBEW Local 353
   Spring 2024 Course Registration
   Toronto Training Centre
   1377 Lawrence Ave. East
   Toronto, ON M3A 3P8

4. Fill out the registration form in the middle of the book, and deposit in the drop boxes at any of our training centres.

*****Please note that registrations that are received PRIOR to January 8, 2024 are drawn lottery-style at the end of the day*****

WE DO NOT TAKE ANY PHONE REGISTRATIONS.

Registration opens Monday January 8, 2024 at 7:30am and are processed on a first-received-first-served basis.

Applications for second courses will ONLY be processed if space is available after January 19, 2024.

CANCELLATION POLICY

If you are unable to attend a course, or if you are going to be absent, please be courteous and contact the Education and Training department prior to the start date. This opens up space for other members to attend our programs.
If you don't notify the office prior to the start of the course, an administrative fee of $75.00 will be levied.

For cancellations or missed classes, please notify the Education and Training department.

416.510.5265
416.510.5285
learning@ibew353.org
http://lu353.com/CancelAbsence.html

Course Name	Course Start Dates						
	Pg #	Location	Mon.	Tue.	Wed.	Thu.	Sat.
309A Pre-Exam Course	10	Online		Feb. 6			
A.C. Motor Control – Level I	5	Oshawa	Feb. 26				
AutoCAD Essentials for Electricians – Level I	9	Mississauga	Feb. 26				
AutoCAD Essentials for Electricians – Level II	10	Mississauga		Feb. 27			
Basic Certification – Part I	14	Online			Feb. 14		
Certification – Refresher	15	Online		Mar. 5			
Certification Part II – Construction Sector Program	14	Online	Feb. 26				
Conduit Fabrication Level I 'A'	11	Toronto	Feb. 26				
Conduit Fabrication Level I 'B'	11	Oshawa		Feb. 27			
Electric Vehicle Infrastructure Training Program 'A'	13	Toronto			Feb. 7		
Electric Vehicle Infrastructure Training Program 'B'	13	Oshawa				Feb. 15	
Electric Vehicle Infrastructure Training Program 'C'	13	Barrie					Apr. 13
Electrical Code Review	10	Online		Feb. 13			
Electrical Estimating – Introduction 'A'	11	Toronto		Feb. 6			
Electrical Estimating – Introduction 'B'	11	Mississauga		Feb. 13			
Electrical Estimating – Introduction 'C'	11	Oshawa				Feb. 15	
Electronics - Introduction	5	Oshawa		Feb. 20			
Electronics – Advanced	5	Toronto		Feb. 20			
Fibre Optics - Level I	8	Oshawa	Feb. 26				
Fire Alarm – Level I 'A'	7	Mississauga			Feb. 14		
Fire Alarm – Level I 'B'	7	Toronto			Feb. 14		
Fire Alarm – Level I 'C'	7	Mississauga	Feb. 26				
Fire Alarm – Level II 'A'	7	Toronto			Jan. 31		
Fire Alarm – Level II 'B'	7	Mississauga		Feb. 6			
Fire Alarm – Level II 'C'	7	Oshawa		Feb. 6			
Fire Alarm – Level III 'A'	7	Mississauga	Feb. 5				
Fire Alarm – Level III 'B'	7	Toronto		Feb. 6			
Fire Alarm – Level IV 'A'	8	Toronto	Jan. 29				
Fire Alarm – Level IV 'B'	8	Mississauga			Jan. 31		
Fire Alarm Certificate Renewal	8	Online				Feb. 29	
First Aid and CPR 'A'	13	Toronto					Feb. 24
First Aid and CPR 'B'	13	Mississauga					Mar. 2
First Aid and CPR 'C'	13	Oshawa					Apr. 6
First Aid and CPR 'D'	13	Barrie					May 4
Fluke Networks Certified Cabling Test Technician	8	Mississauga			Feb. 14		
Grounding and Bonding for Network Cabling Specialist 'A'	9	Toronto			Feb. 21		
Grounding and Bonding for Network Cabling Specialist 'B'	9	Oshawa			Mar. 27		
Grounding and Bonding for Network Cabling Specialist 'C'	9	Mississauga			Apr. 17		
Introduction to Thermography	13	Mississauga				Feb. 22	
Masters License – Pre-Exam	11	Online	Jan. 22				
Mental Health First Aid – Standard	14	Online					Feb. 24
Mental Health First Aid – Supporting Youth	14	Online					Mar. 16
MicroLogix RSL500 Family of PLCs	6	Toronto	Feb. 5				
Networking Fundamentals	10	Oshawa				Feb. 29	
Overhead Catenary Systems – Level I 'A'	15	Oshawa		Feb. 20			
Overhead Catenary Systems – Level I 'B'	15	Oshawa		Apr. 2			
Programming Automation Systems – Level I	6	Oshawa		Mar. 5			
Programming Automation Systems – Level II	7	Oshawa				Mar. 7	
Solar Energy – Level I	12	Toronto	Feb. 26				
Solar Energy – Level II	12	Toronto	Feb. 26				
Trade Applications	11	Mississauga				Feb. 15	
Traffic Signals	5	Toronto		Feb. 13			
Understanding Malicious Cyber Threats and Building Defenses	9	Toronto		Feb. 6			
Variable Frequency Drives – Level I	6	Oshawa	Feb. 26				
Variable Frequency Drives – Level II	6	Oshawa				Feb. 29	
Welding – Level I 'A'	12	Mississauga			Mar. 13		
Welding – Level I 'B'	12	Oshawa			Mar. 27		
Welding – The Fundamentals 'A'	12	Mississauga	Jan. 22				
Welding – The Fundamentals 'B'	12	Oshawa	Jan. 22				

Course Eligibility

Courses are open to Journeypersons and Senior Apprentices who have successfully completed Advanced Trade School ***unless otherwise noted in the prerequisite of the course description.***

Courses marked with an asterisk (*) are open to all members.

Textbooks Available

The Education Committee has the following textbooks available for purchase at the Local Union office:

- Electricians Guide to AC Motor Control
- Electricians Guide to Conduit Bending
- Ugly's Electrical Reference Guide
- Occupational Health & Safety Act Regulations
- Canadian Electrical Safety Code
- The Illustrated Code Series Electrical

Course Amendments

Any requests for amendments to the final marks and standing shall be made no later than the end of the next semester.

Course Reimbursement

Members who enroll in trade related courses other than those offered by the Local may be eligible to have the course fee reimbursed under the following guidelines:

a) **The application form must be completed in FULL.**

b) Include a course outline, proof of payment and proof of successful completion and/or attendance.

c) The course must be trade related as determined by the Education Committee.

d) The applicant will be reimbursed when the following requirements are met:

   a. Attending 80% of the course program

   b. Successful completion

   c. Any pre-exam course applicant must write and pass that specific exam (and provide proof such as a copy of your license).

There is a ceiling of $250.00 per calendar year. Reimbursement applications are available at the Local Union Office reception or through the education department. **It takes approximately 4 – 8 weeks to process requests. They are approved on a monthly basis by the Education Committee.**

From the Director's Desk

Welcome from Susan Boorman, Director of Education and Training

WELCOME to Local 353's education and training Spring semester 2024. As we are committed to keep current with ever changing and evolving technologies directly and indirectly related to our industry, we are excited to offer five (5) new courses this semester. Check them out throughout the course calendar.

Don't forget, any member who successfully completes a course will receive an IBEW 353 Education and Training challenge coin which will be sent to them with their certificate of completion. Please note this is a one coin per member not one coin per course.

I look forward to seeing many new faces taking advantage of what we have to offer across our training centres.

Susan Boorman
Director of Education and Training
IBEW Local 353

IBEW 353 Education and Training Challenge Coin

Education Fund Trustees

Lee Caprio	**Business Manager/ Financial Secretary**
Jodi Hill	**President**

Local 353 Education & Training Centres

Susan Boorman	**Director of Education and Training**
Brent Morgan	**Education Coordinator**
Chris Borgia	**Assistant Education Coordinator**

Education & Training Information Line (416) 510-5284

Press	For:	
1	Course cancellations	
2	Notices	
3	Education Office	**Press 0**
7	Repeat menu	
8	Return to education menu	
9	Return to main menu	

SPRING 2024 COURSES

Controls

A.C. Motor Control – Level I

Prerequisite – Third term Apprentice.

This course is designed to introduce the students to the development of A.C. Motor Controls and give them an understanding of their function and uses. The course content includes an in-depth study of reading basic control circuits and sequences of operation, and designing a schematic control circuit including proper layout and wiring methods.

Hands-on wiring projects include start/stop/jog, hand/off/auto, interlocking and forward/reverse applications. The students will have the opportunity to draw control circuits used in conjunction with their assignments. These computerized circuits can then be put in a run mode and tested prior to wiring.

The course objectives are to strengthen the students logical thinking in reading and deciphering the information in control circuits.

Course No.:..... ACMC 1/24
Start Date:..... Monday February 26, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 11
Location:..... Oshawa Training Centre

NEW *Electronics - Introduction

In this course, students will learn about the fundamental concepts and components that make up the world of electronics. Covering both analog and digital signals students will build a foundational understanding that will increase their electronics knowledge.

The world is filled with devices that use electronics including computers, televisions, radios, sound amplifiers and smart home technology. In the electrical field, we use electronic devices all the time whether through installing fire alarm systems, dimmers, occupancy sensors, or motors. This course will help grow your understanding of the inner workings of these devices and how they operate. The format of the course will be one hour of lecture followed by two hours of lab. Whether for hobby or work this course will help get you started.

Course No.:..... BELEC 1/24
Start Date:..... Tuesday February 20, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 12
Location:..... Oshawa Training Centre

WORKING AT HEIGHTS (WAH) TRAINING

WAH is good for three (3) years from the date of training. If you need training [available at all four (4) halls], please contact Raquel at Ext. 5203 to register.

*Electronics – Advanced

Prerequisite – Electronics experience recommended.

Could you repair a switch-mode power supply beyond replacing ruptured capacitors? Could you troubleshoot an industrial control circuit beyond Go/No-Go testing of power module devices? Go beyond by learning how to analyze manufacturers equipment schematics for consumer and industrial applications.

This hands-on experiment oriented course begins with basic components and progresses to advanced coverage of commercial equipment with minimal math emphasis. Students will learn about multistage power amplifiers, voltage controlled oscillators, MOSFET power switching circuits, Pulse Width Modulation motor control and more, by constructing discrete device and mixed IC circuits from scratch. While observing circuit behaviour on analog and digital oscilloscopes, students will develop practical troubleshooting ability investigating malfunctions to the component level.

Many equipment faults are power supply related. Switch-mode supply repair techniques will be taught to enable individuals to safely diagnose and repair a broad variety of equipment. Hardware assembly and construction methods will be practice, in addition to developing soldering repair skills working with Surface Mount printed circuit boards.

Course No.:..... ELEC 1/24
Start Date:..... Tuesday February 20, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 12
Location:..... Toronto Training Centre

Traffic Signals

Prerequisite – Third term Apprentice with successful completion of Intermediate trade school.

This program is designed to give the participant a general overview of the components that make up a signalized intersection, and how those components are put together to form a fully functional traffic signal installation. Safety while working in close proximity to vehicular traffic, conductors, signals, hardware and the traffic controller are just some of the topics that will be discussed. In-class instruction and demonstrations as well as practical lab assignments will give the participant a greater understanding of this unique area of our electrical industry.

Course No:..... TS1 1/24
Start Date:..... Tuesday February 13, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 12
Location:..... Toronto Training Centre

MicroLogix RSL500 Family of PLCs

Prerequisite – Fourth term Apprentice or Journeyperson Electrician and working knowledge of Windows Word and Excel. Some knowledge of Ladder Logic Programming is useful but not required.

This course consists of the following topics:

- Understanding and identifying SLC 500 or MicroLogix systems and system components
- Identifying project structure and execution in SLC 500 or MicroLogix software
- Configure local I/O and communication in a SLC 500 or Micrologix controller
- Storing and organizing data in SLC500 or MicroLogix systems
- Introduction to program editing
- Interpreting and developing ladder logic with bit instructions in SLC500 or MicroLogix systems
- Interpreting timer and counter instructions in ladder logic using RSLogix for SLC500 and MicroLogix software
- Peripheral operations
  - Program loading
  - Program printing
  - Searching
- Troubleshooting basics:
  - Hardware
  - Software

Integrated practice exercises will provide an opportunity to practice the skills obtained during the class discussion.

Members who successfully complete this course will be able to:

- Identify hardware components of a SLC500 and MicoLogix family programmable controller system
- Configure and install a basic SLC500 or MicroLogix programmable controller system
- Use a programming terminal for:
  - Entering, editing and troubleshooting programs
  - Storing, coping and printing programs
- Isolate processor and I/O faults to the module level
- Troubleshoot simple programs using ladder instructions of a SLC500 or MicroLogix controller
- Connect and establish communications.

Course No:..... MLX 1/24
Start Date:..... Monday February 5, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 11
Location:..... Toronto Training Centre

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Education is not the filling of a pail, but the lighting of a fire.

W.B. KEATS

Variable Frequency Drives – Level I

Prerequisite – Fourth term Apprentice with successful completion of intermediate trade school.

This course introduces the student to variable frequency drives (VFDs), with an emphasis on the basic theory of VFDs and an understanding of their uses. Discussions will include simulated voltages, insulation class of motors, slip range, wiring methods, line and load reactors, and harmonics. We will also review troubleshooting, what effect ground faults have on VFDs, human interface modules (HIMs), and auxiliary motor fans and why they are used.

Students will learn proper installation and control methods and then have the opportunity to wire and program a VFD to perform commands such as controlled acceleration and deceleration of a motor.

Course No:..... VFD 1/24
Start Date:..... Monday February 26, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 10
Location:..... Oshawa Training Centre

Variable Frequency Drives – Level II

Prerequisite – Successful completion of Variable Frequency Drives – Level I.

This course expands on the information you learned in Level I.

You will learn to configure a Variable Frequency Drive through PC Programming Software and an Advanced Graphic Keypad and get to know the advantages and disadvantages of both.

Students will be able to start up, configure main functions, troubleshoot and commission VFDs using these tools for various applications.

Course No:..... VFD2 1/24
Start Date:..... Thursday February 29, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 10
Location:..... Oshawa Training Centre

Programming Automation Systems – Level I

Siemens PLC

In the beginning, the student will be graded on several assignments that focus on how to interface, program, and troubleshoot a Programmable Logic Controller (PLC). The concept of program languages and structures, reading and addressing I/O, tags, logic and functions are introduced and explained, as well as more advanced signals such as analog I/O. The in-person lab will give the student a chance to program a fully functional Siemens S71200 PLC with simulated inputs and outputs.

The final gradable assignment will be on bit logic, timers, counters, data types, and watch tables for commissioning and troubleshooting a PLC system.

This is a BLENDED program where the first five (5) sessions are online, followed by a full day in-person lab [schedule agreed upon within the class].

Course No:..... SPLC1 1/24
Start Date:..... Tuesday March 5, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 7
Location:..... Oshawa Training Centre -- BLENDED

NEW Programming Automation Systems – Level II

Siemens PLC

Prerequisite – Successful completion of Programming Automation Systems – Level I.

This course will challenge the student who wishes to tackle complex instructions for Programmable Logic Controllers (PLC) and Human Machine Interfaces (HMI). The lessons will teach how to work with analog and PWM for controlling frequency drives. The student will learn how to program an HMI and share data with a PLC connected over Ethernet.

The in-person lab will give the student a chance to create their own fully functional automation system consisting of a PLC, HMI, Variable Speed Drive, and motor.

This is a BLENDED program where the first five (5) sessions are online, followed by a full day in-person lab [schedule agreed upon within the class].

Course No:..... PAS2 1/24
Start Date:..... Thursday March 7, 2024
Time:..... 6:30pm - 9:30pm
Sessions: 7
Location:..... Oshawa Training Centre -- BLENDED

Fire Alarm

Members successfully completing the Fire Alarm & Protection Systems four-level program will receive a certification card. This card is recognized by the Fire Marshall's office for performing annual tests, inspections, repairs and alterations to existing Fire Alarm Systems as outlined in the Ontario Fire Code Reg. 213/07.

Fire Alarm – Level I

Installation of Fire Alarm Control Panels and Input & Output Devices

Prerequisite – Third term Apprentice with successful completion of intermediate trade school.

This course is designed to develop your fire alarm knowledge and practice with basic fire alarm components and their function in conventional electro/mechanical systems. You will design complete systems with layout, schematic and riser diagrams from basic systems for a commercial complex – complete with related hydro, ULC and building codes that are based on CAN/ULC-S524 "Standard for Installation of Fire Alarm Systems." This program is an introduction to the fire alarm industry, classes of wiring, codes, and installation of conventional fire alarm panels and devices.

Course A:..... FAI 1/24
Start Date:..... Wednesday February 14, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 12
Location:..... Mississauga Training Centre

Course B:..... FAI 2/24
Start Date:..... Wednesday February 14, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 12
Location:..... Toronto Training Centre

Course C:..... FAI 3/24
Start Date:..... Monday February 26, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 12
Location:..... Mississauga Training Centre

Fire Alarm – Level II

Integrated Fire Alarm Controls EVAC Systems & Fire Alarm Extinguishing Control Panels

Prerequisite – Successful completion of Fire Alarm – Level I.

This course is designed to give students a complete and accurate look at the installation of a modern fire alarm system. Upon completion of this course the journeyperson electrician should be capable of installing a complete fire alarm system and all aspects related to such systems. The course references the CAN/ULC-S537 "Standard for the Verification of Fire Alarm Systems." Level II continues from the first course with the installation of EVAC panels, extinguishing systems, and fire pumps.

Course A:..... FAII 1/24
Start Date:..... Wednesday January 31, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 14
Location:..... Toronto Training Centre

Course B:..... FAII 2/24
Start Date:..... Tuesday February 6, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 14
Location:..... Mississauga Training Centre

Course C:..... FAII 3/24
Start Date:..... Tuesday February 6, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 14
Location:..... Oshawa Training Centre

Fire Alarm – Level III

Troubleshooting Complete Fire Alarm Systems

Prerequisites – Journeyperson electrician and successful completion of Fire Alarm – Level II.

Previous fire alarm courses have dealt with external wiring methods. Fire Alarm Level III will take the Journeyperson step-by-step into the internal workings of the fire alarm panels. This course is concerned primarily with troubleshooting techniques applied in a logical sequence and the student will be taught to identify and diagnose faults occurring on a variety of systems.

Upon completion, the student will have had the opportunity to develop proven troubleshooting and repair methods of fire alarm systems. The course references CAN/ULC-S536 "Standards for the Inspection and Testing of Fire Alarm Systems." This level deals with the operation of the fire alarm panel and focuses on system troubleshooting.

Course A:..... FAIII 1/24
Start Date:..... Monday February 5, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 14
Location:..... Mississauga Training Centre

Course B:..... FAIII 2/24
Start Date:..... Tuesday February 6, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 14
Location:..... Toronto Training Centre

Fire Alarm – Level IV

Advanced Fire Alarm Control Panels: Addressable Digital Analog Devices

Prerequisite –Successful completion of Fire Alarm - Level III.

This course takes the student into the world of the microprocessor-based fire alarm systems. Along with this advanced technology comes the need to change the way we think of a fire alarm as well as the way we wire, install and maintain these life safety systems. Even the classifications of field wiring have had to change.

Topics covered include:

- Binary and hexadecimal counting
- Programming of smart detection devices
- How data is transmitted
- Use of fibre optics in computerized fire alarm systems
- How to install and set up these systems

Combining all this with the hands-on learning and shop work on these new systems, the student should be able to compliantly install these state-of-the-art pieces of equipment. The course references CAN/ULC-S527 "Standards for Control Units for Fire Alarm Systems".

Course A:..... FAIV 1/24
Start Date:..... Monday January 29, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 14
Location:..... Toronto Training Centre

Course B:..... FAIV 2/24
Start Date:..... Wednesday January 31, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 14
Location:..... Mississauga Training Centre

Fire Alarm Certificate Renewal

Prerequisite – Successful completion of Fire Alarm Level 4 or Certificate Renewal, and current CERTI-FIRE license holder.

Under the agreement with the Ontario Fire Marshall's Office, Fire Alarm Certificates must be renewed every five years. This program reviews the requirements of the ULC standards, the Ontario Building Codes, OHESC and the Ontario Fire Code – with emphasis on changes to the codes and installation methods and technology. Students will receive updated code information and upon successful completion have their certification renewed for five years.

Course No:..... FA REN 1/24
Start Date:..... Thursday February 29, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 12
Location:..... Online

TELECOMMUNICATIONS

Fluke Networks Certified Cabling Test Technician

Copper and Fibre Modules

Prerequisite – Junior Network Cabling Specialist Journeyperson or above or successful completion of Network Cabling – Level I

The cooper module section of this program will explore the DSX-5000 CableAnalyzer™ testing, introduction and common setting of Versiv™, exporting configuration and results, and copper test limits/standards. We will also look at adapter types and configuring for a twisted pair test, as well as making a measurement and reviewing the result. Students will review new test parameters, DC resistance unbalance, TCL, ELTCTL DSX diagnostics, HDTDX and HDTDR, single test, patch cord certification and Alien Crosstalk.

The fibre module section of this program will examine the CertiFiber™Pro testing, basic fibre theory, encircled flux, configuring the CertiFiber™Pro, Fibre inspection and automated analysis. Students will also learn how to set a reference for a duplex link, LC-to-LC duplex and how to create a custom test limit. Students will review ISO/IEC 14763-3, which specifies systems and methods for the inspection and testing of installed optical fibre cabling, understanding how the connector losses differ from other standards and setting a reference for a simplex link.

Course No:..... FLK 1/24
Start Date:..... Wednesday February 14, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 12
Location:..... Mississauga Training Centre

*Fibre Optics - Level I

In this updated program, students will learn about the world of Fibre Optics including:

- The basics of light transmission
- Safe handling procedures
- How to install connectors
- The basics of testing fibre cables

Students will also be preparing and terminating a variety of fibre connectors from top tier manufacturers. Connector styles include ST, SC, and LC used in current installations.

LSER Optimized fibre and its unique performance properties is also covered in this program. Also discussed is the important how's and why's of preparing a light budget.

When completed, the students will be able to actually apply their newly learned skills on the job.

Course No.:..... FOI 1/24
Start Date:..... Monday February 26, 2024
Time: ..... 6:30pm - 9:30pm
Sessions: 12
Location:..... Oshawa Training Centre

Certi-Fire

*Grounding and Bonding for Network Cabling Specialist

Level I – Inside Construction

Students will learn about Grounding and Bonding for Telecommunications with regards to inside construction. This information is based on the ANSI/TIA-607-D Generic Telecommunications Bonding and Grounding (Earthing) for customer premises.

The purpose of this course is to:

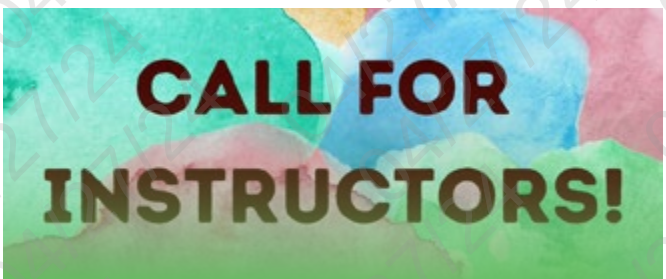
- Enable and encourage the planning, design and installation of telecommunications bonding and grounding
- Provide direction not just for new building designs, but also existing building renovations and retrofit treatments
- Understand the standards that provide designers with the information to make informed design decisions
- Acknowledge that standards are comprised of mandatory (shall) and advisory (should/may) requirements.

This course is a complete and authorized instruction of the Hubbell Grounding and Bonding Design – 607D. Upon successful completion of this course, students will receive an additional certification of completion from Hubbell International.

Course A:..... GB1 1/24
Start Date:..... Wednesday February 21, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 1
Location:..... Toronto Training Centre

Course B:..... GB1 2/24
Start Date:..... Wednesday March 27, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 1
Location:..... Oshawa Training Centre

Course C:..... GB1 1/24
Start Date:..... Wednesday April 17, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 1
Location:..... Mississauga Training Centre



We are looking for new instructors, especially for Fire Alarm and Variable Frequency Drives. Interested members should send a cover letter and resume to learning@ibew353.org outlining your trade experience and relevant training.

Please put CALL FOR INSTRUCTORS in the subject line.

Computer Studies

*Understanding Malicious Cyber Threats and Building Defenses

In today's interconnected world, the prevalence of malicious hackers and scammers poses a significant threat to personal and organizational security. Understanding their tactics, motives, and techniques is paramount in safeguarding your digital presence. This course aims to equip you with the knowledge and skills needed to navigate the online landscape securely. From identifying phishing attempts, fortifying your home network, to protecting yourself against "doxxing", we'll delve into comprehensive strategies for proactive defense.

Upon completion of this course, you will have acquired a thorough understanding of malicious cyber threats, including the tactics employed by hackers and scammers. You will possess essential skills to fortify both your personal digital presence and network. The hands-on experience gained from building a network deauthentication detector and the practical exercises in countering hacking devices will furnish you with invaluable insights into safeguarding your online environment. Additionally, you will be equipped with effective strategies to defend against doxxing, a critical aspect of protecting your online identity. Always remember vigilance and knowledge are our most potent weapons in the ongoing battle against cyber threats. Stay vigilant, stay informed, and above all, stay safe and secure.

Course No:..... CTD 1/24
Start Date:..... Tuesday February 6, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Toronto Training Centre

*AutoCAD Essentials for Electricians – Level I

The AutoCAD Essentials course is designed for the beginner AutoCAD user. It covers just about all of the 2D AutoCAD commands. Even students with no previous CAD experience can progress quickly in this course that is arranged in a natural sequence that is easy to understand. Students immediately apply what they have learned from brief theory presentations in hands-on exercises.

This comprehensive course designed for the electrical trade covers: viewing and creating accurate drawings, editing, managing object properties, creating and inserting blocks, applying dimensions, annotations and hatch patterns, as well as plotting techniques. The emphasis is on the specifics of the tools in the software along with the necessary concepts and techniques used by electricians that allow users to be productive regardless of their drafting discipline.

Course No:..... CAD 1/24
Start Date:..... Monday February 26, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 11
Location:..... Mississauga Training Centre

AutoCAD Essentials for Electricians – Level II

Prerequisite – AutoCAD Level I

The AutoCAD Essentials – Level 2 course is designed for the AutoCAD user who has completed a Level 1 ACAD course. There will be a brief review of the commands and concepts learned in Level 1 in order to continue increasing your knowledge of this powerful program. This course, designed for the electrical trade, will take you beyond the basics so you can apply your understanding to the work you're doing in the field.

Building on the material learned in AutoCAD Level 1, this course will strengthen the skills gained in the introductory class. Advanced topics include layer control, printing, creating and editing viewports, block attributes, drawing references, navigating the AutoCAD tool palettes, and customizing the interface. In addition to weekly exercises, a final project will be assigned at the end of this course that will incorporate all materials learned in class and will be an example of drawings encountered in the industry.

Course No:..... CAD2 1/24
Start Date:..... Tuesday February 27, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 11
Location:..... Mississauga Training Centre

Networking Fundamentals

Prerequisite – Proficiency with Windows 7 and/or 10 computer use. Must have a good internet connection and up-to-date PC, Tablet or Mac.

Networking is no longer used just to connect computers to the internet, but is a central part of countless systems including lighting building automation, security and audiovisual systems. As a result, there is an even greater need for fundamental networking knowledge and skills on the job.

This course lays the foundation needed by members in all of these areas and many others tasks across our sectors. Upon successful completion of this course, students will be able to describe, verify and configure the basic requirement of Ethernet and both IPb4 and Plv6 for routing, address sub netting and effectively use a variety of both graphic and command line troubleshooting tools.

This course is a prerequisite for Configuring and Troubleshooting Networks for Business Systems and a critical skill for communication technicians and ICI electricians working with modern infrastructure and systems.

Course No:..... NF1 1/24
Start Date:..... Thursday February 29, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Oshawa Training Centre

"It is the mark of an educated mind to be able to entertain a thought without accepting it.

ARISTOTLE

Licensing & Classification

*309A Pre-Exam Course

Prerequisite – Must be a 5th term apprentice, completed all three (3) levels of trade school, and cleared to write by the Electrical Apprentice Training Alliance.

This Pre-Exam course is designed on a proven successful model of learning how to write the C of Q and masters exam, or for that matter, any electrical trade exam. Throughout the course the apprentice will learn the "tricks of the trade" of exam writing combined with the refresher of the actual material topics such as, but not limited to, common occupational skills, installation of services, motors and controls, distribution equipment and communication systems.

After successful completion of the course, the apprentice will have demonstrated their strengths to be able to understand and communicate effectively on the "how to write an electrical exam," with the ability for understanding, interpreting and solving the question to find the best answer.

The overall plan is to attend class with the workbook homework completely prepared. The class will then spend time analyzing the structure and details of the question and answer choices. At the end of the course, there will be a simulated comprehensive four-hour exam with detailed take-up. The apprentice will have a maximum of nine days to continue studying from the additional practice exam questions and no later than the tenth day of completing the course the apprentice will be writing a previously scheduled exam.

Please note: Apprentices will be required to purchase the on-line C & M Practice Exam Questions through Orderline. Apprentices will be eligible for reimbursement of this cost upon successful completion of the C of Q exam through the Education and Training fund.

Course No:..... CFQ 1/24
Start Date: ..... Tuesday February 6, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 12
Location:..... Online

*Electrical Code Review

Electrical Code Review is designed for the participant to learn the professional method of how to use the code. This course is geared toward practical everyday use in the field using the Canadian and Ontario Electrical Safety Codes

Using the hands-on approach of in-depth analysis of questions and answers, the participants will learn the structure and components of the Code from loading circuits, wiring methods, and equipment installation from the general use sections, as well as the specific sections of the electrical code.

Course No:..... ECR 1/24
Start Date: ..... Tuesday February 13, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Online

Masters License – Pre-Exam

Prerequisite – Must have a 309A with a minimum of three (3) years' experience as an Ontario Journeyperson Electrician or a 442A Lineman in good standing.

This review course will cover the latest Ontario Electrical Safety Code. Related topics include the Occupational Health & Safety Act (.H.S.A.), Lien Act, Workers Health & Safety Act and Local Union By-laws as they apply to the Master Electrician.

******NOTE: A COY OF YOUR 309A LICENSE MUST BE INCLUDED WITH YOUR REGISTRATION OR IT WILL NOT BE PROCESSED [you can email separately to: learning@ibew353.org]. YOU MUST HAVE YOUR 309A FOR A MINIMUM OF THREE (3) YEARS.******

*****THE INTRODUCTORY NIGHT IS MANDATORY ATTENDANCE*****

Course No:..... PEM 1/24
Start Date: ..... Monday January 22, 2024
*..... **see schedule below*
Time:..... Weekdays – 6:30pm – 9:30pm
..... Saturdays – 9:00am – 4:00pm
Sessions: 16
Location:..... Online

Introductory Night**	**Monday Jan. 22**	**Session 9**	Wednesday Mar. 20
Session 1	Wednesday Feb. 7	**Session 10**	Saturday Mar. 23
Session 2	Saturday Feb. 10	**Session 11**	Wednesday Mar. 27
Session 3	Wednesday Feb.14	**Session 12**	Wednesday Apr. 3
Session 4	Wednesday Feb. 21	**Session 13**	Saturday Apr. 6
Session 5	Saturday Feb. 24	**Session 14**	Monday Apr. 8
Session 6	Wednesday Feb. 28	**Session 15**	Wednesday Apr. 10
Session 7	Wednesday Mar. 6	**Session 16**	Saturday Apr. 13
Session 8	Saturday Mar. 9	**ESA EXAM Dates to be determined**	

*Trade Applications

This review course is being sponsored by the Examining Board to assist members with reclassification and preparing for the exam.

Topics covered in this program include:

- Conduit bending and installation of EMT and rigid conduit, core line and PVC
- 3-phase power – including load balancing, 3-phase and neutrals
- Current safety and code regulations
- Grounding services and transformers
- Class of power
- Class of fuses
- Line hazards and tag and lock procedures

When complete, students will be better prepared to write the exam.

Course No:..... TRADE 1/24
Start Date:..... Thursday February 15, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 11
Location:..... Mississauga Training Centre

Conduit Bending & Fabrication

Conduit Fabrication Level I

Prerequisite – Minimum first term Apprentice.

This introductory course was designed to provide members with an overview of EMT conduit bending procedures. It is intended for members who have minimal or no conduit bending skills. The focus of this course is to provide members with a hands-on opportunity to practice conduit bending using hand benders.

NOTE: Safety shoes or work boots must be worn during class.

Course A:..... CF1 1/24
Start Date:..... Monday February 26, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Toronto Training Centre

Course B:..... CF1 2/24
Start Date:..... Tuesday February 27, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Oshawa Training Centre

Estimating

Electrical Estimating – Introduction*

This course is ideal for electricians with a desire to learn the basics of producing electrical construction estimates. The course will take the students from an overview of electrical estimating to performing actual estimates.

The focus is on practical information rather than a textbook. This course is designed for the service-small jobbing environment and will offer an approach to material take-off including appropriate order and types of forms available.

Topics such as where to start, material, pricing, recapping and quotations are also covered.

Course A:..... IEE 1/24
Start Date:..... Tuesday February 6, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 12
Location:..... Toronto Training Centre

Course B:..... IEE 2/24
Start Date:..... Tuesday February 13, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 12
Location:..... Mississauga Training Centre

Course C:..... IEE 3/24
Start Date:..... Thursday February 15, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 12
Location:..... Oshawa Training Centre

Welding

Welding – The Fundamentals

Prerequisite – Journeyperson Electrician.

This course is designed as the first step for members interested in certified welding within the electrical trade. This fundamental course will allow the students to become familiar with the equipment and tools used to do Shielded Metal Arc Welding (SMAW) and oxy-acetylene cutting. Students will practice the SMAW stick process in the flat, horizontal, vertical up and overhead positions depending on the individual students ability. All practical exercises will be reinforced through general class sessions that will include welding theory, safety and symbology.

NOTE: PPE, safety shoes or work boots must be worn during class.

****THERE IS A $250.00 NON-REFUNDABLE FEE FOR A STUDENT KIT. IT MUST BE PAID PRIOR TO THE START OF THE FIRST CLASS****

****Please note that the first class will start at 6:00pm to facilitate the distribution of PPE****

Course A:..... WELD 1/24
Start Date:..... Monday January 22, 2024
*..... **Runs Monday and Wednesday nights*
Time:..... 6:30pm – 9:30pm
Sessions: 14
Location:..... Mississauga Training Centre
*Fee:..... $250.00 **non-refundable*

Course B:..... WELD 2/24
Start Date:..... Monday January 22, 2024
*..... **Runs Monday and Wednesday nights*
Time:..... 6:30pm – 9:30pm
Sessions: 14
Location:..... Oshawa Training Centre
*Fee:..... $250.00 **non-refundable*

Welding – Level I

Prerequisite – Journeyperson Electrician and Welding – The Fundamentals or equivalent experience.

This course is designed as the second step for members interested in certified welding within the electrical trade. This Level I course will allow the student to become more familiar with the equipment and the tools used to do Shielded Metal Arc Welding (SMAW). Students will practice the SMAW stick process, honing their skills in the flat and horizontal positions, to prepare for the Canadian Welding Bureau (CWB) test on these two positions. Practical exercises will be reinforced through general class sessions that will include a continuation of welding theory, safety and symbology.

A testing date will be established closer to the end of the course for students who are ready. A separate charge will apply for testing costs. Members taking this course are asked to bring their original manual from the "Welding Fundamentals" course, as we will be adding material to it.

NOTE: PPE, safety shoes or work boots must be worn during class.

Course A:..... WELD1 1/24
Start Date:..... Wednesday March 13, 2024
*..... **Runs Wednesday and Monday nights*
Time:..... 6:30pm – 9:30pm
Sessions: 14
Location:..... Mississauga Training Centre

Course B:..... WELD1 2/24
Start Date:..... Wednesday March 27, 2024
*..... **Runs Wednesday and Monday nights*
Time:..... 6:30pm – 9:30pm
Sessions: 14
Location:..... Oshawa Training Centre

Green Initiatives

Solar Energy – Level I

Introduction to inverter-based electrical power generation, storage and grid-tie.

Prerequisite – 309A license holder or 309A Apprentice.

****NOTE: A COPY OF YOUR CURRENT 309A LICENSE OR Skilled Trade Ontario MEMBERSHIP NUMBER MUST BE INCLUDED WITH YOUR REGISTRATION OR IT WILL NOT BE PROCESSED.**

This course introduces the student to the production of usable power from Photo-Voltaic technology.

The student will learn the theoretical aspects of today's solar PV technology and familiarize themselves with the terminology, calculations and what to consider for proper site location, sizing and designing these systems.

This course will demonstrate the construction of solar arrays, and the installation of inverters. Students will also review the electrical code requirements, and focus on the applicable concepts for grounding and bonding as well as the Ontario – Micro and Fit regulations and work through the requirements of this initiative.

Although this is not a hands-on course, it includes working through a system design from concept to final layout including financial analysis and all major considerations for Solar PV.

Course No.:..... SOLE 1/24
Start Date:..... Monday February 26, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Toronto Training Centre

Solar Energy – Level II

Introduction to inverter-based electrical power generation, storage and grid-tie.

Prerequisite – 309A Journeyperson and Successful Completion of Solar Energy – Level I.

In the second level of the solar energy training, the student will build on the theoretical knowledge of photovoltaics learned in Level 1. Introduction of stand-alone inverter systems will also be covered. The class will be assembling a modern operational ground mount array following the 2021 Ontario Electric Safety Code. After completion of the course, the student will be knowledgeable in all areas of Photovoltaic Installations such as assembly, wiring and site safety practices. The course will cover site evaluation and preparation grid tied inverter set up requirements, and the 2021 electrical code.

Course No:..... SOLE2 1/24
Start Date:..... Monday February 26, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Toronto Training Centre

Electric Vehicle Infrastructure Training Program

Prerequisite – Journeyperson Electrician

****NOTE: IN ORDER TO REGISTER, YOU MUST INCLUDE A COPY OF YOUR CURRENT 309A LICENSE and/or Skilled Trades Ontario CARD WITH YOUR REGISTRATION {or email to: learning@ibew353.org}****

The *Electrical Vehicle Infrastructure Training Program (EVITP) – Phase 1* is the first level of training for the installation and maintenance of plug-in hybrid electric vehicle (PHEV) and electric vehicle (EV) infrastructure.

This course will cover the detailed concepts required for the proper installation and maintenance of the infrastructure including:

- Automobile manufacturer's charging performance integrity specifications
- EV battery types, specifications, and charging characteristics
- Utility interconnect, notice, policies and requirements
- Charging station fundamentals including brand/model-specific installation for both Level 1 & Level 2 charging stations
- Service level assessments and upgrade implementation
- Canadian Electrical Code (CEC) standards and requirements, and
- First responder safety and fire hazard measures

At the end of the course, there is an industry exam available. The student will be required to pay an additional fee in order to sit the exam. Upon successful completion of the course and passing the exam, students will receive a certificate from EVITP.

Students should bring a copy of the Canadian or Ontario Electrical Code to class.

Course A:..... EVITP 1/24
Start Date: ..... Wednesday February 7, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Toronto Training Centre

Course B:..... EVITP 2/24
Start Date: ..... Thursday February 15, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Oshawa Training Centre

Course C:..... EVITP 3/24
Start Date: ..... Saturday April 13, 2024
Time:..... 8:30am – 4:30pm
Sessions: 3
Location:..... Barrie Training Centre

SkillsPass gives millions of workers the ability to manage and share their training certificates Designed for today's mobile workforce, SkillsPass replaces the old system of paper-based certificates with an easy-to-use application you can access by phone, tablet or computer. You can access your training certificates and licenses here.

For more information please call: 877-202-0008 or go to: https://www.skillspass.com/

Safety

Introduction to Thermography*

Many aspects of our industry are governed by temperature. From the terminations of conductors to the conductivity of disconnect switches, 'heat' is a big factor in the reliability and failures of our electrical equipment and installations. But what if you could see 'heat'? Thermal infrared imaging allows you to 'see' the anomalies before they become a dangerous risk of fire and personal injury.

This course introduces the student to hands-on Infrared Thermography (Thermal-Photography) and using in-class thermal imaging cameras, they get to see how heat is measured and recorded without ever making contact with a component. Unique thermal applications are discussed and demonstrated to showcase the incredible capabilities of this fascinating visual instrument.

As an electrical thermographer, there are a number of certification levels that can open up our industry to thermographic competency. From finding 'hot spots,' to qualifying predictive and preventative maintenance procedures, thermal scanning reveals what abnormalities the naked eye cannot see.

Course No:..... ITI 1/24
Start Date:..... Thursday February 22, 2024
Time: ..... 6:30pm – 9:30pm
Sessions: 9
Location:..... Mississauga Training Centre

*First Aid and CPR

This is a two (2) session standard course where the participants receive training, testing and certification in both First Aid and CPR and a manual to keep for your own use.

In order to successfully meet the requirements of this program, you must be on time and attend 100% both days.

Course A:..... FA&CPR 1/24
Start Date:..... Saturday February 24 ***AND***
..... Sunday February 25, 2024
Time: ..... 8:00am – 4:00pm
Location:..... Toronto Training Centre

Course B:..... FA&CPR 2/24
Start Date:..... Saturday March 2 ***AND***
..... Sunday March 3, 2024
Time: ..... 8:00am – 4:00pm
Location:..... Mississauga Training Centre

Course C:..... FA&CPR 3/24
Start Date:..... Saturday April 6 ***AND***
..... Sunday April 7, 2024
Time: ..... 8:00am – 4:00pm
Location:..... Oshawa Training Centre

Course D:..... FA&CPR 4/24
Start Date:..... Saturday May 4 ***AND***
..... Sunday May 5, 2024
Time: ..... 8:00am – 4:00pm
Location:..... Barrie Training Centre

*Mental Health First Aid – Standard

Mental Health First Aid (MHFA) is offered to someone with an emerging mental health or substance use problem or in crisis, until appropriate treatment is found, or the situation resolves. An evidence-based course, MFHA Standard has been proven to give participants:

- The tools to recognize signs of decline in mental well being
- The ability to talk about their mental health
- The knowledge to discuss professional and other supports that could help with recovery or imporved mental well being
- The confidence to reach out to these supports
- The tools to assist during a mental health or substance use crisis, and,
- The knowledge to use MHFA action to maintain one's own mental wellness.

Please note: Module 1 is a self-study unit that is due prior to the start of the course. Details will follow with your confirmation letter.

Course No:..... MHFA-S 1/24
Start Date:..... Saturday February 24 ***AND***
..... Saturday March 2, 2024
Time: ..... 9:00am – 12:30pm
Location:..... Online

*Mental Health First Aid – Supporting Youth

Mental Health First Aid (MHFA) is the help provided to a person who is showing signs of declining mental well-being or crisis. The MHFA – Supporting Youth, is a course designed for members of the public who have frequent contact with young people (ages 12 to 24), for example, parents and guardians, school and training staff, sports coaches, mentors, and youth workers.

Participants will learn how to:

- Recognize signs that a young person may be experiencing a decline in their mental well-being, or a mental health or substance use crisis
- Initiate conversations that encourage a young person to talk about a mental health or substance use problem
- Discuss professional and other supports that could help with recovery to improved mental well-being
- Assist in a mental health or substance use crisis situation
- Check in within one's own mental well-being and take action as needed.

Please note: Module 1 is a self-study unit that is due prior to the start of the course. Details will follow with your confirmation letter.

Course No:..... MHFA-Y 1/24
Start Date:..... Saturday March 16 ***AND***
..... Saturday March 23, 2024
Time: ..... 9:00am – 12:30pm
Location:..... Online

*Basic Certification – Part I

Prerequisite – In order to meet Ministry of Labour and WHSC regulations, 100% attendance is required to successfully complete this course.

This course will empower workers and health and safety representatives with a better understanding of the Occupational Health and Safety law. Members who take this program will be more effective health and safety representatives or joint committee members, or may train to become WHSC qualified health and safety instructors.

This program consists of sixteen core modules including an introduction to the Internal Responsibility System; employer responsibilities under occupational health and safety law; worker participation and their rights to participate in health and safety. The Ministry of Labour (MOL) inspector's role in enforcing the Act as well as the Joint Health and Safety Committees duties, functions and powers are also outlined in detail.

This program will also review the duties and qualifications of the certified member and their role regarding inspections, investigations, work refusals and interacting with MOL inspectors. Another key area we review in this program is the Health and Safety Policy and workplace hazard identification.

Course No:..... SAFE 1/24
Start Date:..... Wednesday February 14 2024
Time:..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Online

*Certification Part II – Construction Sector Program

Prerequisite – Basic Certification - Part I

Before JHSC members can become fully certified, they are required to complete a second round of training commonly known as Certification Part II training. This training is designed to help certified representatives identify, assess and control, or better yet eliminate, hazards specific to their workplace.

The Construction Sector program covers the hazards of workplaces typical in the construction sector including worker trades committees; hazards of dust and fibres; electrical hazards; confined space entry hazards; hazards of cranes, hoists and rigging; welding hazards among others.

Course No:..... SAFE2 1/24
Start Date:..... Monday February 26, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 10
Location:..... Online

WHSC WORKERS HEALTH & SAFETY CENTRE

Training for What **Matters** Most

*Certification – Refresher

Prerequisite – Basic Certification - Part I and Part II

To maintain certification status, a JHSC member must complete Certification Refresher training every three (3) years. This training must involve a review of key concepts from Part 1 and Part 2 certification programs, updates to legislation, standards, codes of practice and occupational health and safety best practices. The training must also give certified members an opportunity to share and discuss best practices and current occupational health and safety issues.

Course No:..... CRT-R 2/24
Start Date:..... Tuesday March 5 ***AND***
..... Thursday March 7, 2024
Time:..... 6:30pm – 9:30pm
Location:..... Online

NEW Overhead Catenary Systems – Level I

Prerequisite – Fourth or fifth term 309A apprentice with successful completion of Advanced Trade School, or 309A or 442A Journeyperson.

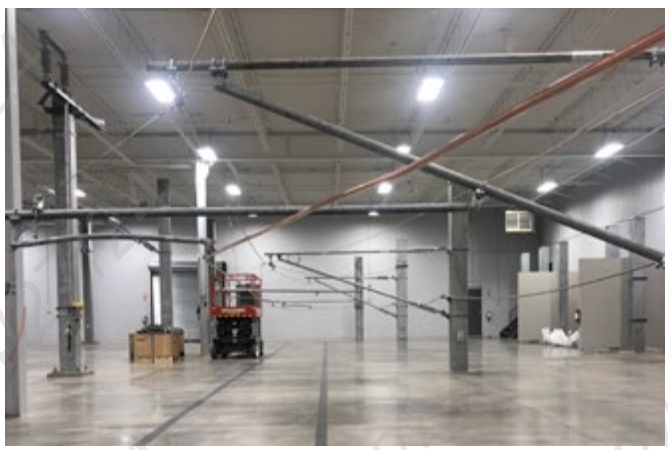
The aim of this course is to provide the basic overhead catenary system knowledge required for accessing construction site safety and effectively for those who are directly or indirectly involved with overhead catenary system construction activities such as:

- A basic introduction to OCS construction sites
- The technical terminology used when working on an OCS construction site
- The types of documentation associated with OCS construction sites and the recording and reporting procedures that need to be followed
- The general safety requirements for accessing OCS construction sites
- Understand the basic principles of the electrical and traction power system
- An overview of the specialist machinery and tools used to construct OCS

At the end of the course, students will understand the rules and regulations required for personnel to access overhead line construction sites safely and effectively and will qualify *OCS Level II – OCS Construction Activities and Practical Skills.*

Course A:..... OCS 1/24
Start Date:..... Tuesday February 20, 2024
Time:..... 6:30pm – 9:30pm
Sessions: 4
Location:..... Oshawa Training Centre

Course B:..... OCS 2/24
Start Date:..... Tuesday April 2, 2024
Time:..... 6:30pm - 9:30pm
Sessions: 4
Location:..... Oshawa Training Centre



IBEW 353 EDUCATION AND TRAINING

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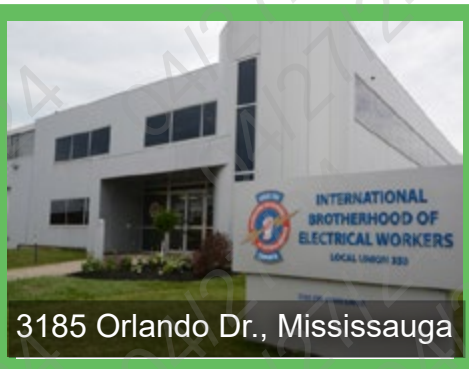
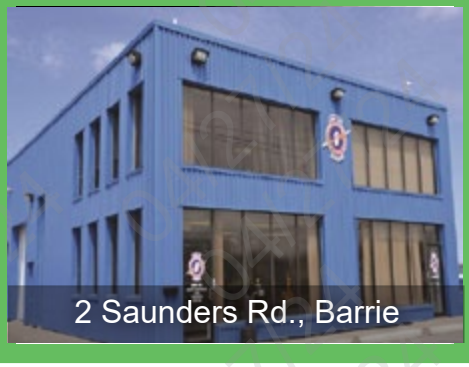


3185 Orlando Dr., Mississauga


1001 Ritson Rd. S., Oshawa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