

# CANADA'S 2018 ELECTRICAL CODE



<b>Sept. 6-7, 2018</b>	<b>Saskatoon</b>
<b>Sept. 13-14, 2018</b>	<b>Calgary</b>
<b>Sept. 18-19, 2018</b>	<b>Edmonton</b>
<b>Sept. 20-21, 2018</b>	<b>Richmond</b>

We are producing a series of courses across Canada by one of Canada's leading experts on the 2018 Edition of Canada's Electrical Code to help electrical professionals on the effective application through an improved understanding of the intent of the rules. Also, our course will instruct electrical professionals on how to access and navigate through Canada's Electrical Code in a cost-efficient manner.

Make sure you are up to date on the many changes to the latest Electrical Code!

## BONUS FEATURES

- 100+Page Electrical Safety Handbook
- An **Electricity Forum Coupon** to be used against any future 2018-19 Electricity Forum Course
- 1.4 CEU credits issued by the Engineering Institute of Canada
- Forum Presentations in Paper Format

The following price for this Electrical Code Training course DOES NOT INCLUDE A COPY OF THE ELECTRICAL CODE. Copies of the Electrical Code can be purchased separately from Canadian Standards Association. This course includes lunch.

2-DAY COURSE

**\$699**

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complete course details:

[www.electricityforum.com/electrical-training/cec-training](http://www.electricityforum.com/electrical-training/cec-training)

# CANADA'S 2018 ELECTRICAL CODE

Electrical Code training is intended to do a lot more than instruct about what changes have taken place since the last time Canada issued a National Electrical Code. We are producing a series of courses across Canada by one of Canada's leading experts on Canada's Electrical Code to help electrical professionals on the effective application through an improved understanding of the intent of the rules. Also, our course will instruct electrical professionals on how to access and navigate through Canada's Electrical Code in a cost-efficient manner.

Canada's Electrical Code is the basis for all provincial and territorial electrical codes across Canada. Most provinces adopt the Code, without changes, while other provinces add their own amendments. You need to know both the national and specific provincial code differences.

We have created a unique course, designed for all levels of electrical professionals by one of Canada's leading experts in industrial, commercial, institutional and residential electrical installations, as well as the business of conducting electrical inspections.

The course will instruct not only on the latest code changes, but how to understand what the rules are and how to access the code with ease. Some people spend endless time searching for the rules that they need. This course will teach what you need to know, quickly and accurately. Our instructor will demonstrate how to find the answers you need in a few easy steps. You will find the answers easily and correctly with our training system.

***You won't want to miss this learning opportunity!!***

## **It's a Proven Fact:**

Electrical Engineering, Design, Maintenance and Construction professionals who understand the most current Electrical Code requirements will:

- Work more safely and provide a greater degree of electrical protection for electrical systems
- Work more productively. Make more money, save their clients' money
- Prevent system incompatibilities from holding up a job
- Experience a higher rate of passing electrical inspection

This interactive 2-Day Course will instruct industrial, commercial and institutional electrical professionals and electrical professionals on:

1. Understanding the most recent changes to Canada's National Electrical Code and individual provincial amendments.
2. Code Interpretation: How to most effectively interpret Canada's National Electrical Code in order to properly comply.
3. How to navigate and access the Code Rules accurately and time-effectively.

This course is designed to be an interactive, problem-solving, learning environment for delegates of all disciplines. Instructor-led calculations will determine minimum conductor sizes and maximum overcurrent ampacities for various loads as well as maximum overload settings for AC motors. Participants are encouraged to bring a calculator to the seminar in order to actively participate in the exercises

The positive outcome of this training is to improve the quality of installations and to pass electrical inspection with fewer deficiencies. It means working more efficiently and productively, saving time, energy, and money.

## AGENDA - DAY 1

### **WELCOME AND INTRODUCTION TO THE CODE**

- Electrical code overview
- Organization of the Code
- Critical related standards
- Equipment approval requirements

### **OBJECTIVES AND SCOPE**

- Objectives of the Code
- Exemptions

### **CONDUCTORS**

- Termination temperatures
- Wire and cable – specifications and conditions of use
- Conductor sizes, ampacities and temperature ratings
- Flame spread ratings

- Parallel conductors
- Underground conductors
- Sheath currents and eddy currents
- High voltage conductors

### **CIRCUIT LOADING AND DEMAND FACTORS**

- Intermittent loads
- Continuous loads
- 80% and 100% rated circuit breakers
- Car-plug panel feeder calculations

### **RESIDENTIAL CALCULATIONS**

- Single dwelling service calculations
- Apartment feeder calculations
- Branch circuit calculations

**complete course details:**

**[www.electricityforum.com/electrical-training/cec-training](http://www.electricityforum.com/electrical-training/cec-training)**

## GROUNDING AND BONDING

- What is Grounding and bonding?
- Electrical system grounding
- Service equipment grounding
- Electrical equipment bonding
- Bonding other systems
- Grounding and bonding methods
- High voltage grounding, ground potential rise, step and touch voltages

## PROTECTION AND CONTROL

- Interrupting rating (IR) of overcurrent devices
- Tap conductor requirements
- Ground fault protection
- Series rated electrical equipment
- Fuse and circuit-breaker applications
- Switching and disconnection

## FIRE ALARM SYSTEMS AND FIRE PUMPS

- Conductors
- Overcurrent protection

# AGENDA - DAY 2

## HAZARDOUS LOCATIONS

- Overview of major revisions to Section 18
- Area classifications, zones, divisions and groups
- Hazardous locations – wiring and equipment
- Sealing
- Intrinsically safe and non-incendive circuits
- Purged electrical systems

## INSTALLATION OF ELECTRICAL EQUIPMENT

- Capacitors and capacitor banks
- Transformers, Panelboards

## ELECTRIC MOTORS

- Service factor
- Overcurrent and overload protection
- Conductor ratings, service, feeders and branch circuits
- Grouped motor protection
- Motor disconnection
- Motor controls
- Power factor correction capacitors

## FIRE ALARM SYSTEMS AND FIRE PUMPS

- Fire alarm systems
- Smoke and CO alarms in dwellings
- Fire pumps

## HIGH VOLTAGE SUBSTATIONS AND LINES

- Electrical system fault levels
- Lightning protection
- Transformer and switchgear rooms
- Sprinklered equipment
- Overcurrent protection
- Lightning protection

## EMERGENCY POWER SUPPLY

- Wiring and overcurrent protection
- Emergency power supply, unit equipment, exit signs and unit equipment
- Wiring and overcurrent protection
- Emergency power supplies
- Emergency lighting
- Exit signs

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**MAIL:**

The Electricity Forum  
1885 Clements Rd., Unit 218  
Pickering, ON L1W 3V4



**REGISTER 3 DELEGATES  
AT FULL PRICE  
AND GET THE 4th REGISTRATION FREE!**

**WHEN & WHERE****Saskatoon, SK - September 6-7, 2018**

Sandman Airport Hotel  
310 Circle Drive,  
Tel: 306-477-4844

**Calgary, AB - September 13-14, 2018**

Holiday Inn Calgary Airport  
1250 McKinnon Drive  
Tel: 403-230-1999

**Edmonton, AB - September 18-19, 2018**

Sawridge Inn Edmonton South  
4235 Gateway Blvd NW  
Tel: 780 438-1222

**Richmond, BC - September 20-21, 2018**

Sandman Signature Vancouver Hotel & Resort  
10251 Edwards Drive  
Tel: 604-278-9611

**ATTENDEE INFORMATION**

To receive registration fee discounts, you must **REGISTER AND PREPAY** prior to the course date.

**NAME** \_\_\_\_\_

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The following price for this Electrical Code Training course DOES NOT INCLUDE A COPY OF THE ELECTRICAL CODE. Copies of the Electrical Code can be purchased separately from Canadian Standards Association and brought to the course. This course includes lunch. Price: Our Electrical Code Training course is priced at \$699.00 + GST/HST.

**CANCELLATION AND REFUND POLICY**

Registration fees are refundable only upon receipt of written notification 10 days prior to the conference date, less a 10 per cent service charge. Substitution of participants is permissible.

The Electricity Forum reserves the right to cancel any conference it deems necessary and will, in such event, make a full refund of the registration fees.

**INTERESTED IN ON-SITE ELECTRICAL CODE TRAINING?****Cost Effective On-Site Electrical Training**

Save the cost of travel and hotels AND save on our regular public enrollment registration fees. For more information, contact Randy Hurst, President, The Electricity Forum 1-855-824-6131. You can write to [randy@electricityforum.com](mailto:randy@electricityforum.com) or you can go to our on-site electrical training quotation page and ask for a FREE quotation: [www.electricityforum.com/onsite-requestforquote](http://www.electricityforum.com/onsite-requestforquote)