efti Electricity Forum Training Institute

# NEW !! - 2018 UPDATE - CSA Z462 LOW VOLTAGE ARC FLASH/ELECTRICAL SAFETY TRAINING

**1-DAY COURSE**
**$399**

**January 22, 2018 - Richmond, BC**
**January 24, 2018 - Edmonton, AB**
**January 29 , 2018 - Saskatoon, SK**
**February 1, 2018 - Winnipeg, MB**
**February 8, 2018 - Mississauga, ON**
**May 1, 2018 - Richmond, BC**
**May 3, 2018 - Edmonton, AB**
**May 14, 2018 - Mississauga, ON**
**May 17, 2018 - St. John's, NL**
**May 22, 2018 - Fredericton, NB**
**May 28, 2018 - Saskatoon, SK**
**May 30, 2018 - Winnipeg, MB**

**WWW.ELECTRICITYFORUM.COM/ELECTRICAL-TRAINING/ARC-FLASH-TRAINING**

**BOTH COURSES $699**

# MEDIUM VOLTAGE / HIGH VOLTAGE ELECTRICAL SAFETY TRAINING

**January 23, 2018 - Richmond, BC**
**January 25, 2018 - Edmonton, AB**
**January 30 , 2018 - Saskatoon, SK**
**February 2, 2018 - Winnipeg, MB**
**February 9, 2018 - Mississauga, ON**
**May 2, 2018 - Richmond, BC**
**May 4, 2018 - Edmonton, AB**
**May 15, 2018 - Mississauga, ON**
**May 18, 2018 - St. John's, NL**
**May 23, 2018 - Fredericton, NB**
**May 29, 2018 - Saskatoon, SK**
**May 31, 2018 - Winnipeg, MB**

**1-DAY COURSE**
**$399**

**WWW.ELECTRICITYFORUM.COM/ELECTRICAL-TRAINING/HIGH-VOLTAGE-SAFETY-TRAINING**

**COMPLETE COURSE DETAILS AT**
**LV - WWW.ELECTRICITYFORUM.COM/ELECTRICAL-TRAINING/ARC-FLASH-TRAINING**
**MV/HV - WWW.ELECTRICITYFORUM.COM/ELECTRICAL-TRAINING/HIGH-VOLTAGE-SAFETY-TRAINING**
**COMBINED - WWW.ELECTRICITYFORUM.COM/ELECTRICAL-TRAINING/LV-HV-ARC-FLASH-TRAINING**

## BONUS FEATURES

- 100-Page Electrical Safety Handbook - Value $20
- 0.7 – 1.4 Continuing Education Unit (CEU) Credits
- A **FREE** Magazine Subscription (Value $50)
- **$100** Coupon toward any future 2018 Electricity Forum events (restrictions apply)
- Course Presentations in Paper Format

NOTE: This course DOES NOT INCLUDE A CSA Z462-18* Standard. Copies of the CSA Z462-18* Standard must be purchased separately from Canadian Standards Association and brought to the course.

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EARN CONTINUING EDUCATION UNITS (CEUS)

## DAY ONE - 2018 CSA Z462 Arc Flash Training Update

**8:00am**

**UNDERSTANDING ELECTRIC POWER SYSTEMS**

- Time-Current Curves & Power System Studies
- Electrical Arc Characteristics

**PREPARING TO WORK SAFELY**

- Hazard Risk Analysis/ Task Assessment
- Assessment to Lockout or Work Energized
- Overview of Lockout Fundamentals
- Working Energized defined
- Preparing a Job Briefing and Planning Checklist
- How to plan for an Energized Electrical Work Permit
- Elements of an Energized Electrical Work Permit

**ELECTRICAL HAZARDS**

- Electrical Shock
- Effects of current on human beings
- Shock Protection Boundaries
- Approach to Energized electrical conductors or circuit parts operating at 50 Volts or more
- Arc Flash/ Arc Blast
- Elements and characteristics of an Arc Flash Event
- Arc Flash Hazard Analysis
- Arc Flash Protection Boundary for voltages between 50 and 600 Volts

**ESTABLISHING AN ELECTRICALLY SAFE WORK CONDITION**

The most effective way to prevent electrical injury is to completely remove the source of supply. This section will discuss the methods and process of achieving an electrically safe work condition. Including the following:

Working On or Near De-energized Electrical conductors or Circuit Parts That Have Lockout Devices Applied

Principles of Lockout Tagout Execution:

a. Employee Involvement
b. Training
c. Plan
d. Control of Energy
e. Identification
f. Voltage
g. Coordination

**HAZARDOUS ELECTRICAL ENERGY CONTROL PROCEDURES**

a. Individual Qualified Employee Control Procedure
b. Simple Lockout Tagout Procedure
c. Complex Lockout Tagout Procedure
d. Coordination
e. Training and Retraining

**...and more**

## DAY TWO - MEDIUM/HIGH VOLTAGE

**8:00am**

**RECOGNIZING ELECTRICAL SAFETY HAZARDS - WHERE DO THEY EXIST?**

A detailed review of critical electrical safety hazards created by energized electrical equipment:

- Insulation
- Power Cables
- Power Transformers
- Instrument Transformers
- Dealing With Fault Currents
- Disconnect Switches
- Switchgear
- Circuit Breakers
- Fuses
- Electrical Relays
- Motor Starters
- AC/DC Motors
- Capacitors
- Emergency UPS Systems

**RESOLVING ELECTRICAL SAFETY HAZARDS**

Objective: Determine the controls used to protect workers from all energy sources created in the workplace. Benefits of a safe workplace include fewer injuries, lower worker compensation costs, reduced service interruptions, greater protection of capital investment, and increased uptime. This section will provide you with a detailed blueprint that maximizes electrical safety and all the benefits it generates.

- Hierarchy of Controls
- Management Control
- Legislation
- Electrical Code
- Purchasing Controls
- Engineering Controls
- Training
- Safety Documentation
- Rules
- Safe Work Practices
- Safe Work Procedures
- Codes of Practice
- Operating Procedures
- Permits & Clearances
- Switching Procedures
- Physical Equipment
- Personal Protective Equipment
- Safety Equipment
- Signs and Barriers
- Equipment Protection
- Interlock
- Grounding
- Field Control
- Inspections
- Job Planning
- Pre-job Meeting
- Hazard Identification
- Hazard Reporting
- Work Methods
- Limits of Approach
- Switching Practices

**...and more**

**FOR COMPLETE PROGRAM DETAILS: WWW.ELECTRICITYFORUM.COM/ELECTRICAL-TRAINING/LV-HV-ARC-FLASH-TRAINING**

## WAYS TO REGISTER

**1 (855) 824-6131**
**(905) 686-1040**

**ON-LINE:**
www.electricityforum.com/electrical-training/lv-hv-arc-flash-training

The fee includes Course presentation materials, refreshments, **Lunch is Included with this course.**

The fee includes Course presentation materials, refreshments, Lunch NOTE: This course DOES NOT INCLUDE A CSA Z462-18 Standard. Copies of the CSA Z462-18 Standard must be purchased separately from Canadian Standards Association and brought to the course.

The registration fee to attend the 2-Day Low Voltage and MV/HV Electrical Safety Training Workshop is $699.00 + Tax.

Register and prepay 14 days before forum date and receive an early bird discount of $50.00

**SPECIAL PROMOTION: Register 3 delegates at the full price of $699 each, and get a 4th registration FREE!**

* Note: The Electricity Forum is an independent provider of electrical safety training and is a Corporate Supporter of the CSA. All trade-marks and copyright associated with the [CSA Z462-18 Arc Flash Standard] are the intellectual property of the Canadian Standards Association and the Electricity Forum claims no ownership of rights thereto.

## WHEN & WHERE

**Richmond, BC**
**January 22-23, 2018**
**May 1-2, 2018**
Sandman Signature Hotel
10251 ST. Edwards Drive
**Tel:** 604-278-9611

**Saskatoon, SK**
**January 29-30, 2018**
**May 28-29, 2018**
Sandman Airport Hotel
310 Circle Drive
**Tel:** 306-477-4844

**Mississauga, ON**
**February 8-9, 2018**
**May 14-15, 2018**
Hampton Inn and Suites
3279 Caroga Drive, Mississauga, ON
**Tel:** 905-671-4730

**Winnipeg, MB**
**Februry 1-2, 2018**
**May 30-31, 2018**
Sandman Hotel & Suites
1750 Sargent Ave.
**Tel:** 204-775-7263

**Edmonton, AB**
**January 24-25, 2018**
**May 3-4, 2018**
Sawridge Inn Edmonton South
4235 Gateway Blvd NW
**Tel:** 780-438-1222

**St. John's, NL**
**May 17-18, 2018**
Comfort Inn St.John's Airport
106 Airport Road
**Tel:** 709-726-3408

**Fredericton, NB**
**May 22-23, 2018**
Call For Hotel Info.
905-686-1040 ext. 230

**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.