



Content
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Connection

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Fire Alarm Training

Course details: <https://electricityforum.com/electrical-training/fire-alarm-training>

COURSE DATES AND TIMES

October 24-25 , 2024

10:00 am - 4:30 pm ET

Fire Alarm Training - Our 12-Hour Live Online instructor-led course goes well beyond the recitation of Codes and Standards. We examine the purpose and specific application of the different codes and standards that regulate the industry. Avoid installation errors, failed inspections and false alarms!

Electricity Forums Training Institute's (EFTI) Fire Alarm Training Course qualifies for six (6) hours of CFAA Technician *Renewal Credits* (Category 2 Course) if you're renewing an annual Technician Registration, as per the CFAA website at <http://www.cfaa.ca/cecreditform.aspx>). If you're renewing a two year Technician Registration, the course qualifies for twelve (12) hours (Category 2 Course). To qualify for these credits, you must submit the EFTI Certificate of Completion, along with the course outline and the training schedule to the CFAA.

Our course is designed for individuals who want to become certified fire alarm designers or have responsibility for fire and life safety systems, including testing and maintenance. The training covers system design, installation, testing, and maintenance, providing participants with a wealth of practical tips, insights, and solutions that they can immediately implement on the job.

The course is specifically designed to comply with Canadian federal and provincial fire alarm design and installation standards. It provides the latest information on fire alarm technology available for use in Canadian jurisdictions, including integration with other building life safety systems, wireless fire alarm devices, special suppression systems, addressable devices, annunciation, special signaling appliances, and much more.

EFTI's Interactive Workshop allows participants to examine the purpose and specific application of relevant codes and standards that regulate the installation, verification, and annual testing of fire alarm and life safety systems. The workshop maximizes the training experience through a dynamic curriculum that encourages group discussion and problem solving.

The course is taught by recognized and experienced fire protection professionals who provide participants with the latest information on the industry. They also provide specific examples that help participants navigate through the planning, installation, and testing protocols required by Canadian jurisdictions.

The course qualifies for six hours of CFAA Technician Renewal Credits (Category 2 Course) for those renewing an annual Technician Registration and twelve hours for those renewing a two-year Technician Registration. Participants must submit the EFTI Certificate of Completion, along with the course outline and training schedule, to the CFAA to qualify for these credits.

Instructor-led training offers a better experience than online or webinar training as it challenges participants with problem-solving exercises as they work through learning modules and actively participate in group discussions. This approach ensures that participants fully understand the material and can apply it to real-world situations.

The course is an excellent foundation for individuals interested in learning about verifying a new installation or assisting with compiling an Integrated Testing Plan. It covers the most common mistakes seen in the field and provides participants with the knowledge and skills needed to avoid them.

For instance, many installers are unaware of mounting height requirements for devices and their interconnections that actually supersede the manufacturer's instructions. Knowing these requirements can prevent installations from being rejected by the Verifier or the local jurisdictional authority.

Participants also learn the correct method for choosing an automatic fire detector and which detector is correct for a specific application. They also learn about the different types and styles of wiring, selection of components for specific applications, and the documentation required to ensure a successful installation.

At the end of the two-day intensive course, participants will feel confident in their ability to directly use the knowledge and skills they have acquired. They will be able to identify the elements their project requires and leverage new technologies and concepts to succeed. They will also be confident, assertive, and able to speak to the installer/engineer/designer/AHJ about their project when something in the plans and specs doesn't seem right or may actually be missing.

Upon completion, students will understand:

- Current Industry Standards
- Code Compliance
- Risk Management
- Design, Budgeting, Installation and Verification
- Inspection, Maintenance and Troubleshooting
- Detection
- Alarm Signaling and Monitoring
- Suppression
- Evacuation
- Emergency Lighting
- Emergency Backup and Generators

Students will also be able to:

- Navigate through the relevant codes to find required compliance
- Review key changes in industry standards and codes new to fire alarm systems
- Identify the key elements of all phases of a fire alarm system's life
- Identify the stakeholders at different stages of a fire alarm system's life
- Recognize the function of major fire alarm system components
- Locate and apply key fire detection requirements for emergency control functions such as door control and elevator recall, security access/egress and offsite monitoring
- Calculate the required spacing and determine the correct placement of fire detection and signalling devices

WHO SHOULD ATTEND

Fire System and Electrical installation, testing and maintenance personnel, electrical contractors, facility managers, physical plant directors, fire and building inspectors in municipal, provincial and federal governments, service personnel, owners, plant managers and/or property managers for housing authorities, industrial, commercial and institutional properties.

STUDENTS RECEIVE

- FREE 100-Page Digital Handbook (Value \$20)
- \$100 Coupon Toward Any Future Electricity Forum Event (Restrictions Apply)
- 1.2 Continuing Education Unit (CEU) Credits
- FREE Magazine Subscription (Value \$25.00)
- Course Materials In PDF Format

COURSE OUTLINE

Fire Alarm Training Online Course - Design, Installation, Testing and Maintenance

Course Instructor:

Frank Kurz, Executive Director of the Fire Protection Technicians Network.

Frank is Chair of the ULC Working Groups responsible for developing both the Verification and Inspection Standards for Canada and is a committee member of the following standards: CAN/ULC-S561, CAN/ULC-S524, and CAN/ULC-S1001.

DAY ONE

CANADIAN BUILDING CODE

- Fire alarm minimum requirements Classification of buildings
- Requirements for high rise buildings

GOVERNING DOCUMENTS

- CODES AND STANDARDS
- CAN/ULC-S524 STANDARD
- CEC

DESIGN DOCUMENTS

- Plans and Specifications
- Riser drawing
- Criteria for system acceptability

WORKSHOP 1: ELEMENTS OF DESIGN AND INSTALLATION AFFECTING LIFE SAFETY SYSTEMS

- CAN/ULC -S524, CEC, & NBC Building Code Requirements
- “Good Engineering Practice”
- Layout
- Manual Initiating Devices
- Automatic Initiating Devices
- Supervision
- Addressable versus Conventional
- Zoning & Annunciation

AUTOMATIC INITIATING DEVICES

- TYPES
- SMOKE
- BEAM
- HEAT
- AIR SAMPLING
- FIRE SIGNATURE
- HEAT
- INSTALLATION
- ENVIRONMENTAL CONSIDERATIONS

WORKSHOP 2: SIGNALLING DEVICE INSTALLATION

- Audible & Visible Signal Appliances
- Sound Principals

- Audibility
- Intelligibility
- Candela
- Specific Applications & Design Criteria
- Mass Notification
- Building Owners/Management Responsibilities

WORKSHOP 3: CONTROL PANELS

- Supervision
- Signalling Stages
- Class A Circuits
- Class B Circuits
- Hybrid Circuits
- Data Communication Loops
- Power Buss Risers
- Conventional Systems
- Addressable Systems
- Hybrid Systems
- Zoning
- Building Systems Integration – Elevator
- Recall, Dampers, Fan & Smoke Control
- Power Supply Requirements (Primary & Emergency) – Batteries, UPS's, & Generators

WORKSHOP 4: OPEN SESSION AND GROUP DISCUSSION

- New Installations
- Upgrades
- Retrofits
- Replacement of Components
- Replacement of Control Equipment
- Replacement of Field Devices

DAY TWO

Review of Day One Workshops & Questions

NETWORKED SYSTEMS

- Transponders
- Networking Methods
- Large Scale Networks
- Style “A”
- Style “B”
- Style “C”
- Isolators

SPRINKLERS

- Alarm Devices
- Supervisory Devices
- Zoning

COMMAND AND CONTROL FACILITY

- Requirements
- Remote Monitoring Requirements
- CAN/ULC-S561
- Building Code Requirements

WORKSHOP 5: SYSTEM TROUBLESHOOTING

- Ground Faults
- Power Supply Faults
- Supervision Faults
- End – of – Line Devices

WORKSHOP 6: VERIFICATION & COMMISSIONING, PERIODIC TESTING REQUIREMENTS AND THE FIRE CODE

- Building Code Requirements
- CAN/ULC-S537 Appendix “C”
- CAN/ULC-S1001 Report
- Fire Code Requirements
- CAN/ULC-S536 Appendix “E”
- Daily Testing
- Monthly Testing
- Documentation & Forms

WORKSHOP 7: DEVELOPING A PREVENTIVE MAINTENANCE PROGRAM

- Implementing a Fire Safety Plan

COURSE REVIEW AND QUESTIONS

COURSE TIMETABLE

Both days:

Start: 8:00 a.m.
Coffee Break: 10:00 a.m.
Lunch: 12:00 noon
Restart: 1:15 p.m.
Finish: 4:30 p.m.

Contact us Today for a FREE quotation to deliver this course at your company's location.

<https://electricityforum.com/onsite-requestforquote>