

Automatic Fire Alarm Association



2019 COURSE CATALOG

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CEUs Available for NICET, Engineers and Other!

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Automatic Fire Alarm Association

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4.	A User's Guide to Simplifying NFPA 72 and the NEC (7 hours) <i>NFPA 72-2016, 2014 NEC (7 Hours)</i>
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6.	Carbon Monoxide Detection Seminar (7 hours)
7.	Fire Alarm Plan Review (7 hours)
8.	Fire Alarm Testing and Inspection Seminar – NFPA 72-2010 (7 hours)
9.	Fire Alarm Testing and Inspection Seminar – NFPA 72-2013 (7 hours) <i>Preparation for the NICET I&T Certification Exams</i>
10.	Fire Alarm Testing and Inspection Seminar – NFPA 72-2016 (7 hours)
11.	Selling Safety (7 hours)
12.	Understanding International Building Code Fire Alarm Requirements <i>IBC 2012 (7 hours) and IBC 2015 (7 hours)</i>
13.	Understanding NFPA 101-Life Safety Code- Fire Alarm Requirements <i>NFPA 101-2009 (7 hours) and NFPA 101-2012 (7 hours)</i>
14.	Understanding Fire Alarm Requirements of the 2016 California Building Standards Code (CBSC) (7 hours)
15.	“Back to Basics” Understanding NFPA 72: National Fire Alarm and Signaling Code <i>NFPA 72-2013 (14 hours) and NFPA 72-2016 (14 hours)</i>
16.	Prep for NICET Level I & II Fire Alarm Certification Seminar

Training Program Accreditation

CEUs for Engineers, NICET and more!

All AFAA onsite training seminars are now recognized and accepted by NICET, American Council of Engineering Companies (ACEC).

The Registered Continuing Education Providers Program (RCEP) is a single comprehensive education management system for engineers, surveyors, design professionals and quality education providers. Managed by the American Council of Engineering Companies, the purpose of RCEP is to create a comprehensive registry of quality continuing education providers for engineers and related A/E/C industry professionals.

Automatic Fire Alarm Association

A User's Guide to Simplifying NFPA 72 and the NEC (NFPA 72-2013 and NEC NFPA 70-2011) 1-day Course Outline (7 hours)

Preparation for NICET Fire Alarm Certification

AFAA024

Course Description

This interactive one-day course will provide a better understanding of how to use NFPA 72, National Fire Alarm and Signaling Code, 2013 edition and includes the fire alarm wiring requirements of the NEC. This information will not only be helpful to designers, installers and service personnel, but also those preparing to take a NICET test for Fire Alarm Systems. This course will include some practice quizzes to help the attendee locate and use the information in NFPA 72.

7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student workbook (provided)
- Students must bring their copy of the 2013 NFPA 72 or purchase one
- Students are encouraged, but not required, to bring a copy of the 2011 NEC
- Calculator, pencils and note paper (Student to provide)

Course Outline

1. Pre Quiz
2. Layout of NFPA 72
 - a. How to locate information quickly
 - b. Discussion of key sections of NFPA 72
3. Fire Alarm requirements of the 2011 NEC
4. Review of the NICET CBT process
5. Post Quiz

Automatic Fire Alarm Association

A User's Guide to Simplifying NFPA 72 and the NEC (NFPA 72-2016 and NEC NFPA 70-2014) 1-day Course Outline (7 hours)

AFAA034

Course Description

This interactive one-day course will provide a better understanding of how to use NFPA 72, National Fire Alarm and Signaling Code, 2016 edition and includes the fire alarm wiring requirements of the NEC. This information will not only be helpful to designers, installers and service personnel, but also those preparing to take a NICET test for Fire Alarm Systems. This course will include some practice quizzes to help the attendee locate and use the information in NFPA 72.

7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student workbook (provided)
- Students must bring their copy of the 2016 NFPA 72 or purchase one
- Students are encouraged, but not required, to bring a copy of the 2014 NEC
- Calculator, pencils and note paper (Student to provide)

Course Outline

6. Pre Quiz
7. Layout of NFPA 72
 - a. How to locate information quickly
 - b. Discussion of key sections of NFPA 72
8. Fire Alarm requirements of the 2014 NEC
9. Review of the NICET CBT process
10. Post Quiz

Automatic Fire Alarm Association

Basic Fire Alarm Seminar 1-day Course Outline (7 hours)

AFAA030

Course Description

This basic fire alarm seminar is an application course beneficial for new installers, sales personnel, service technicians, plus building and fire inspectors involved in acceptance testing and/or plans review. This course is also useful as a refresher for anyone involved with fire alarms. This seminar reviews fire alarm system fundamentals; their components; and the proper methods used to satisfy the requirements of NFPA 72-2016, *National Fire Alarm and Signaling Code* and NFPA 70-2014, *National Electrical Code*.

7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student workbook and handouts (provided)
- Calculator, pencils and note paper (Student to provide)

Course Outline

Chapter 1 – Fundamentals.

Control panels, power supplies, circuits, signals, initiating devices, notification appliances, fire safety control functions; addressable, analog, and multiplex systems; emergency voice/alarm communication systems, survivability, and two-way emergency communications systems; battery-set calculations and voltage-drop calculations.

Chapter 2 – Initiating Devices.

Review the proper application of manual fire alarm boxes, heat detectors, smoke detectors, flame detectors, waterflow switches, supervisory signal-initiating devices.

Chapter 3 – Notification Appliances.

Review the proper application of horns, bells, buzzers, chimes, speakers, strobes, and annunciators. Discuss sound transmission in the built environment.

Chapter 4 - Fire Safety Control Functions.

A review of control functions such as smoke door release, elevator recall, HVAC fan shutdown, smoke control/management systems, high-rise applications, and atriums. Discuss duct detector requirements and installation. Fire safety control function circuit supervision requirements.

Automatic Fire Alarm Association

Carbon Monoxide Detection Seminar

1-day Course Outline (7 hours)

AFAA025

Course Description

This seminar focuses on new requirements for Carbon Monoxide detection in the 2015 NFPA 101, *Life Safety Code*, and the 2015 *International Residential Code*, current legislation requiring CO detection, and a review of the requirements of NFPA 720 – 2015, *Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment*, IBC-2015, and NFPA 101-2015 *Life Safety Code*

Course Materials

- Student workbook and handouts (provided)
- NFPA 720-2015 (Attendee needs to bring their own NFPA 720-2015 or purchase one)
- Calculator, pencils and note paper (Student to provide)

Course Outline

1. Review the CO requirements of the 2015 NFPA 101, *Life Safety Code*
2. Review the CO requirements of the 2015 *International Residential Code*
3. Review legislative requirements for CO detection
4. Review the requirements of 2015 NFPA 720

Automatic Fire Alarm Association

Fire Alarm Plan Review 1-day Course Outline (7 hours)

AFAA036

Course Description

This application course describes the common problems associated with the plan review process and offers suggestions for improvement by providing plan review and acceptance test checklists, spreadsheets to determine battery and voltage drop calculations, exercises to determine proper spacing of smoke detectors, exercises to determine proper audibility of fire alarm notification appliances and proper sizing and placement of visible notification appliances. This seminar is intended for authorities having jurisdiction involved in fire alarm system plan review, contractors providing submittal documentation for plan review and fire alarm system designers.

This seminar is based on 2016 NFPA 72, 2014 NFPA 70 (NEC) and 2015 IBC and 2015 NFPA 101.

7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student course book and handout workbook (provided)
- Ruler and compass (provided)
- Calculator, pencils and note paper (Student to provide)

Course Outline

1. Review the Requirements for Plan Review and Submittals based on the International Building Code and NFPA 72.
2. Review of pre-plan and plan review checklists examples
3. Review secondary power supply requirements including battery-set calculations
4. Review voltage-drop limits including voltage-drop calculations
5. Review smoke detector location and spacing requirements including practical exercises
6. Review fire alarm audible notification requirements including practical exercises
7. Review fire alarm visible notification requirements including practical exercises
8. Review of pre-acceptance and acceptance testing checklist examples

Automatic Fire Alarm Association

Fire Alarm System Testing & Inspection Seminar – Based on NFPA 72-2010

1-day Course Outline (7 hours)

AFAA017

Course Description

This basic application course reviews the requirements for fire alarm systems testing and inspection; how to perform the tests properly; and how to conduct visual inspections in order to satisfy the requirements of NFPA 72, 2010 *National Fire Alarm and Signaling Code*. This seminar is beneficial for installers performing acceptance or reacceptance tests of new fire alarm systems; service technicians performing periodic testing and inspection of existing fire alarm systems; building and fire inspectors witnessing acceptance and reacceptance testing; and personnel representing the owner, whom is responsible for the testing and inspection of fire alarm systems in their facilities.

Course Objective

Upon completion of this course, the attendee will be able to determine the testing and inspection requirements of NFPA 72 and how to perform these tests. 7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student workbook and handouts (provided)
- Calculator, pencils and note paper (Student to provide)
- Students must bring a copy of NFPA 72-2010 or purchase one

Course Outline

1. Why Test and Inspect?
 - A. Enforcement of requirements
 - B. “Selling” Testing and Inspections to the Owner
2. Visual Inspections
 - A. How to conduct a proper visual inspection
 - B. Documentation
3. Testing Requirements
 - A. Acceptance Testing
 - B. Reacceptance Testing
 - C. Periodic Testing
 - D. Documentation
4. Functional Tests
 - A. How to conduct the functional tests, how to conduct sensitivity tests for smoke detectors

Automatic Fire Alarm Association

Fire Alarm System Inspection and Testing Seminar Preparation for the NICET I&T Certification Exams

Based on NFPA 72-2013

1-day Course Outline (7 hours)

AFAA026

Course Description

This basic application course reviews the requirements for fire alarm systems testing and inspection; how to perform the tests properly; and how to conduct visual inspections in order to satisfy the requirements of NFPA 72, 2013 *National Fire Alarm and Signaling Code*. This seminar is beneficial for installers performing acceptance or reacceptance tests of new fire alarm systems; service technicians performing periodic testing and inspection of existing fire alarm systems; building and fire inspectors witnessing acceptance and reacceptance testing; and personnel representing the owner, whom is responsible for the testing and inspection of fire alarm systems in their facilities.

Course Objective

Upon completion of this course, the attendee will be able to determine the testing and inspection requirements of NFPA 72 and how to perform these tests, as well as understand the NICET application process and requirements. 7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student workbook (provided)
- Students must bring a copy of NFPA 72-2013 or purchase one
- Calculator, pencils and note paper (Student to provide)

Course Outline

1. Pre Quiz
2. NICET T&I Certification Information
3. IBC/IFC Code Requirements for T&I
4. NFPA 101 Requirements for T&I
5. NFPA 72-2013
 - a. Chapter 7 - Documentation
 - b. Chapter 10 - Qualifications
 - c. Chapter 14 – ITM
6. Post Quiz

Automatic Fire Alarm Association

Fire Alarm System Inspection and Testing Seminar Based on NFPA 72-2016

1-day Course Outline (7 hours)

AFAA031

Course Description

This basic application course reviews the requirements for fire alarm systems testing and inspection; how to perform the tests properly; and how to conduct visual inspections in order to satisfy the requirements of NFPA 72, 2016 *National Fire Alarm and Signaling Code*. This seminar is beneficial for installers performing acceptance or reacceptance tests of new fire alarm systems; service technicians performing periodic testing and inspection of existing fire alarm systems; building and fire inspectors witnessing acceptance and reacceptance testing; and personnel representing the owner, whom is responsible for the testing and inspection of fire alarm systems in their facilities.

Course Objective

Upon completion of this course, the attendee will be able to determine the testing and inspection requirements of NFPA 72 and how to perform these tests, as well as understand the NICET application process and requirements. 7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student workbook (provided)
- Students must bring a copy of NFPA 72-2016 or purchase one
- Calculator, pencils and note paper (Student to provide)

Course Outline

6. Pre Quiz
7. NICET T&I Certification Information
8. IBC/IFC Code Requirements for T&I
9. NFPA 101 Requirements for T&I
10. NFPA 72-2016
 - a. Chapter 7 - Documentation
 - b. Chapter 10 - Qualifications
 - c. Chapter 14 – ITM
6. Post Quiz

Automatic Fire Alarm Association

Selling Safety

1-day Course Outline (7 hours)

AFAA018

Course Description

This seminar is intended for sales representatives interested in selling fire alarm services. The seminar includes a review of codes and standards, fire alarm system fundamentals, the sales process, and the importance of using clear contract language. Other sales opportunities are reviewed, including testing and inspection, monitoring, and others.

This seminar is based upon the 2009 edition of the International Building Code and the 2010 edition of NFPA 72, *National Fire Alarm and Signaling Code*.

7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student workbook (provided)
- Pencil and note paper – (student to provide)

Course Outline

1. Don't be afraid to sell fire protection services
 - a. Understand why fire protection is provided; codes and standards
2. Fire alarm system fundamentals
 - a. Pieces and parts
3. Jump into Fire!
 - a. Define your market segments
4. What have you done for me lately?
5. Other sales opportunities

Automatic Fire Alarm Association

Understanding IBC Fire Alarm Requirements

1-day Course Outline (7 hours)

IBC 2012 - AFAA020

IBC 2015 - AFAA028

Course Description

This seminar is beneficial for designers of fire alarm systems, project managers or lead installers responsible for fire alarm systems and authorities having jurisdiction responsible for fire alarm system plan review and acceptance testing. It is also useful for those preparing for the NICET Level III and IV computer-based test. Discussions and practical exercises are used to improve the participant's knowledge of and how to use the building and fire codes in determining fire alarm requirements. This seminar is based upon the 2012 or 2015 edition of the International Building Code.

7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Objectives

Upon completion, each participant should have a better idea of how to use the IBC in determining minimum fire alarm requirements according to the building's intended use and occupant load.

Course Materials

- Student workbook (provided)
- International Building Code, 2012 or 2015 edition (Student to provide or purchase)
- Calculator, pencils and note paper - Student to provide

Course Outline

1. Introduction and discussion of Codes and Standards
2. Review the format of the International Building Code
3. Discuss the changes between editions
4. General fire alarm requirements such as submittal document requirements
5. Specific fire alarm requirements by occupancy use group and occupant load
6. Practical exercises and discussion of fire alarm system requirements

Automatic Fire Alarm Association

Understanding NFPA 101 Fire Alarm Requirements

1-day Course Outline (7 hours)

NFPA 101-2012 - AFAA023

NFPA 101-2009 - AFAA009

Course Description

This seminar is beneficial for designers of fire alarm systems, project managers or lead installers responsible for fire alarm systems and authorities having jurisdiction responsible for fire alarm system plan review and/or acceptance testing. Discussions of general and specific requirements for fire alarm systems and practical exercises intended to improve the participant's knowledge of how to use the building/fire codes for determining fire alarm requirements. This seminar is based upon the 2009 or 2012 edition of NFPA 101, *Life Safety Code*.

7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student workbook (provided)
- NFPA 101, *Life Safety Code 2009 or 2012* (student to provide or purchase)
- Calculator, pencils and note paper - Student to provide

Course Outline

1. Introduction and discussion of Codes and Standards
2. Review the format of NFPA 101, *Life Safety Code*
3. Discuss the general fire alarm requirements
4. Specific fire alarm requirements by occupancy type
5. Practical exercises and discussion of fire alarm system requirements

Automatic Fire Alarm Association

Understanding the Fire Alarm Requirements 2016 California Building Standards Code (CBSC) 1-day Course Outline (7 hours)

AFAA035

Overview

The 2016 California Building Standards Code (Cal. Code Regs., Tit. 24) effective January 1, 2017

Course Description

This seminar is beneficial for designers of fire alarm systems, project managers or lead installers responsible for fire alarm systems and authorities having jurisdiction responsible for fire alarm system plan review and acceptance testing. It is also useful for those preparing for the NICET Level III and IV computer-based test. Discussions and practical exercises are used to improve the participant's knowledge of and how to use the building and fire codes in determining fire alarm requirements. This seminar is based upon the 2015 edition of the International Building Code as referenced by the CBSC.

7 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Objectives

Upon completion, each participant should have a better idea of how to use the CBSC in determining minimum fire alarm requirements according to the building's intended use and occupant load.

Course Materials

- Student workbook (provided)
- California Building Code - Student to provide
- Calculator, pencils and note paper - Student to provide

Course Outline

1. Introduction and discussion of Codes and Standards
2. Review the format of the California Building Code
3. General fire alarm requirements such as submittal document requirements
4. Specific fire alarm requirements by occupancy use group and occupant load
5. Practical exercises and discussion of fire alarm system requirements

Automatic Fire Alarm Association

“Back to Basics”

Understanding NFPA 72: National Fire Alarm and Signaling Code 2-day Course Outline (14 hours)

NFPA 72-2013 AFAA032

NFPA 72-2016 AFAA033

Course Description

This 2 day seminar reviews and explains the ever changing roles of fire alarm systems and how to apply NFPA 72 - The National Fire Alarm and Signaling Code for improved protection and compliance.

After discussing NFPA 72 “cover to cover” students will be able to explain how building, fire, and life safety codes influence the requirements fire alarm systems. In addition, students will be able to determine how NFPA 72 is used to design, install, and maintain a fire detection and alarm system and how the Code is arranged.

In addition to new technologies and major revisions in the Code, we will address the newest requirements for initiating devices, notification appliances, emergency control operations, power supplies, circuits, pathways and much more.

This seminar is an exceptional opportunity for fire alarm system designers, project managers, installers, contractors, fire & building code officials, and project managers to advance and expand their fire alarm and signaling system knowledge and understanding.

14 Contact Hours Continuing Education - Participant must attend entire seminar to receive credit.

Course Materials

- Student workbook, flash drive, book bag (provided)
- NFPA 72-2013 or NFPA 72-2016 (based upon the class attending) student must bring a copy or purchase one.
- Calculator, pencils and note paper (Student to provide)

Course Outline

1. Introduction and discussion of Codes and Standards
2. Review the format of NFPA 72
3. Discuss the general requirements of the code
4. Practical exercises and discussion of fire alarm system requirements

Automatic Fire Alarm Association

Prep for NICET Levels 1 & 2 Seminar 2-day Course Outline (14 hours)

AFAA037

Course Description

In this course, participants will take an in-depth look into the codes and standards referenced by NICET for fire alarm certification. The course is designed for anyone considering or preparing to take a certification exam or simply seeking additional knowledge of the codes and standards governing fire alarm design, installation and general work practices. The interactive nature of the course delivery and practical exercises will improve participants knowledge of the use and application of NFPA 72, the NEC, and the building and fire code requirements for fire alarm systems. In addition, attendees will have the opportunity to dialogue with instructors familiar with the certification and testing process.

Learning Objectives

At the conclusion of the course, participants will be able to:

- Understand the purpose, scope, structure, layout, and application of NFPA 72-2013, the NEC (2011 edition) and the 2012 edition of the International Building Code.
- Distinguish between codes and standards and how those differences apply to certification.
- Recall where to locate information within the codes and standards referenced by NICET.
- Recognize proper wiring methods as required by the NEC.
- Prepare simple shop drawings after assembling basic project information.

Course Length

2-days (14 hours total – 7 hours per day) – Students must attend both days.

Course Outline

Day One

1. NFPA 72 “pre-quiz”
2. Layout of NFPA 72
3. Fire alarm requirements from the NEC
4. Review of the NICET CBT process
5. “Post-quiz”

Day Two

6. Introduction to codes vs. standards
7. Format of International Building Code
8. Changes between editions
9. General fire alarm requirements
10. Specific fire alarm requirements
11. Practical exercises