





Course: International Fire Incident Investigation

Code	City	hotel	Start	End	price	Hours
588	ONLINE	ONLINE	2024-07-29	2024-08-02	1450 €	25



ABOUT THE COURSE.

Fire Incident Investigations are conducted to protect and preserve evidence at a fire (and therefore a potential crime) scene. This course is designed to provide an introduction to Fire Investigation and centres on scene preservation and the causes of fire. Utilising International best practice the course will promote an awareness of the need to identify and investigate the scene of suspicious/accidental fires and the need to liaise with other responding agencies to determine how they respond and work together to extinguish a fire, treat casualties, make the site safe, and preserve and examine the evidence. Delegates will develop an understanding of the chemistry of combustion, the stages and disciplines involved in reconstructing and

work together to extinguish a fire, treat casualities, make the site safe, and preserve and examine the evidence. Delegates will develop an understanding of the chemistry of combustion, the stages and disciplines involved in reconstructing and documenting events to determine the causes of fire.

The analysis of a fire scene not only requires the investigator to determine the origin of the fire but also the cause and how the fire developed, the fire's probable route of spread through a building and how it was extinguished. It is one of the more challenging areas of forensic science due to the multi-disciplinary nature of the investigator's job as fires can be caused by, or involve, everyday items, the investigator also need to understand many other disciplines, such as prevention, construction, electricity, gas and even human behaviour. And ultimately therefore can be called to court as expert witnesses.

Introduction to International Fire Scene Investigation

Fire Prevention, Construction and Evacuation Plans

Fire Chemistry, Combustion and Behaviour

Safety and Management at the Fire Scene

Analysis of Fire natterns, origins, causes, scene preservation & Reports

- Analysis of Fire patterns, origins, cause, scene preservation & Reports

YOU WILL LEARN

- YOU WILL LEARN
 Upon Completion of the Course, Participants will be able to:
 Understand the roles and responsibilities of all Emergency Responders
 Methods of fire scene investigation and security.
- Methods of thre scene investigation and security.
 USA NFPA 921 / 1033 & UK Chief Fire Officers Association Procedures
 Fire and Explosion Dynamics
 Collection and Preservation of Evidence
 Origin Determination and application of burn patterns
 Determination of Electrical Fire Causes
 DESIGNED FOR

This introductory course has been designed to provide those personnel who are, or will become responsible for Fire Investigation within their organisation. Fire-fighters, law enforcement, security personnel, insurance company loss adjusters, supervisors and those managers responsible for the process but who may not have had sufficient time to devote to the subject.

The Process

Delegates will be encouraged to fully participate in this new programme through the use of syndicate work and presentations, group discussions and questionnaires. PowerPoint slides, training DVD's and case-studies will be fully utilised. The seminar will include a comprehensive manual incorporating the full text and a copy of all slides in addition to a CD.

- How to identify and investigate a suspicious/accidental fire scene
 Understand the proper procedure for securing a fire scene
 Understand proper evidence collection techniques and the importance of evidence preservation
 Understand the chemistry of combustion and extinction
- Understand the unemissty of combustonia and extinction.

 Understand how safety aspects of building construction and design relates to fire prevention and Safety Define and explain the common terms used in fire investigations.
- The Results

- Document an emergency scene, in accordance with international best practices and legal requirements

 *At the end of the course; the student will be able to successfully undertake a Fire Investigation using a systematic approach of the scene

 *The student will be able to identify, preserve and collect many types of potential evidence using the methods discussed in the course

 *Demonstrate a technical understanding of characteristics and impacts of fire loss and the crime of arson necessary to conduct competent fire/emergency investigations and analysis.

- Demonstrate a technical understanding or characteristics and anaport.

 The Core Competencies

 Participants in the programme will develop the following competencies:

 Understand the reasons for accurate fire scene investigation

 Understand the physical property of fire and its effects on fuels present at a fire scene

 Understand the application of burn patterns to the area or point of fire origin

 Understand sources of ignition and its application to the fuel present

 Know various methods of fire scene security

COURSE CONTENT

- Day One
 Introduction to International Fire Investigation
 The Cost of Fires International Fire Loss Statistics
 The role of the first responders at the scene?
 Command and Control at the scene, Incident Commander
 Guide to Best Practice. USA NFPA 921 & 1033 and UK Procedures
 Classification of Fire, Fire Prevention & Risk Assessment
 Building Construction & Decime & Engineering Plan
- Building Construction & Design & Fire/Emergency Evacuation Plans
- Case Study

- Case Study

 <u>Day Two</u>

 Incident Indicators and Cause Determination
 What is the origin and cause of the fire Structures
- Vehicles
- Explosions
- Accidental Fire Causes
- Accidental Fire Causes
 Basic Principles of Electricity and Electrical Fires
 Cigarette-caused Fires
 Case Study

- Case Study
 Day Three
 Fire Investigation in Action
 Conducting the Investigation
 How to collect, preserve and report evidence. Consider the use of Trained Fire
- Investigator Dog Teams
 Observations When Approaching the Scene

- Observations When Approaching the Scene
 Observations upon Arrival
 Observations during Firefighting Operations
 Accurately sketch a fire scene
 Understand proper methods for photographing a fire scene
 Fire Investigator Responsibility Questionnaire
 Types of Evidence
 Direct
 Circumstantial
- Circumstantial
- Evidence Handling Chain of Evidence
- Courtroom Evidence
- <u>Day Four</u> Human Behaviour in Fires
- Evacuations Alarm Response
- Witness Interviews Death Investigations
- Sociological and cultural factors
- Potential Psychological Issues in Fire Investigations
- Case Study

<u>Day Five</u> Evaluation, Reports and Records

- Evaluation, Reports and Records
 Preparing the Fire Incident Report what is required
 Judgment and Decision Making
 Coordinate efforts with other organisations in Preparing for Court
 Subpoena witnesses, property owners/occupants to obtain sworn testimony
 Prosecution and Defence Techniques, Testifying in Court Cases
 Testifying as an Expert Witness
 Review of the course Time Permitting



The Scandinavian Academy employs modern methods in training and skills development, enhancing the efficiency of human resource development. We follow these practices:

• Theoretical Lectures:

 We deliver knowledge through advanced presentations such as PowerPoint and visual materials, including videos and short films.

• Scientific Assessment:

• We evaluate trainees skills before and after the course to ensure their progress.

• Brainstorming and Interaction:

 We encourage active participation through brainstorming sessions and applying concepts through role play.

• Practical Cases:

• We provide practical cases that align with the scientific content and the participants specific needs.

• Examinations:

 $\circ\,$ Tests are conducted at the end of the program to assess knowledge retention.

• Educational Materials:

• We provide both printed and digital scientific and practical materials to participants.

• Attendance and Final Result Reports:

• We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.

• Professionals and Experts:

• The programs scientific content is prepared by the best professors and trainers in various fields.

• Professional Completion Certificate:

Participants receive a professional completion certificate issued by the Scandinavian Academy for
 Training and Development in the Kingdom of Sweden, with the option for international authentication.

• Program Timings:

 Training programs are held from 10:00 AM to 2:00 PM and include buffet sessions for light meals during lectures.