



IFE Level 5 Award in Fire Investigation: Theory and Practice

Qualification Handbook

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IFE Level 5 Award in Fire Investigation: Theory and Practice

Qualification Number: 603/2287/1

About the Institution of Fire Engineers (IFE)

The IFE is the professional institution for those working in the fire sector. The IFE is a registered charity working for societal benefit. Founded in 1918, the IFE's mission is to promote, encourage and improve the science, practice and professionalism of fire engineering.

Members of the IFE share a commitment to envisioning, preparing, mentoring and building for the future, ensuring that the fire profession remains relevant and valued, protecting people, property and the environment from fire.

The IFE has six strategic priorities. The provision of qualifications contributes to three of these priorities ie:

- Facilitate awareness of fire issues and developments through the communication of ideas, knowledge, information
- Foster professionalism by establishing and maintaining pathways and recognised standards of fire professionalism and competency.
- Increase knowledge in the science, practice and professionalism of fire engineering.

Section 1: Qualification Information and Content

Introduction to the IFE Level 5 Award in Fire Investigation: Theory and Practice

This qualification has been developed in partnership between the IFE, the Fire Service College and fire investigation experts. The qualification has been designed to incorporate understanding (including the underpinning science) and practical skills required by those who undertake fire investigation.

Target Audience

This qualification will be appropriate for fire officers, scenes of crimes officers and others involved in investigating and reporting on incidents involving fires.

Qualification Aims

Individuals who achieve this qualification should:

- have technical understanding of the fire science that underpins effective fire investigation including combustion, fire behaviour, toxicology, fire debris analysis and electricity
- be able to work as an effective member of a multi-agency team in a fire investigation incident
- be able to assess health and safety issues at a fire investigation incident and implement appropriate protocols to ensure safe working
- be able to identify and analyse post-fire indicators that may be present at a fire scene in order to determine origin and cause of fire
- be able to use observational skills to identify items recovered from the debris and to recreate the fire scene to identify points of origin

Qualification Structure

The qualification comprises one unit only ie Fire Investigation: Theory and Practice.

The unit is divided into five sub-sections (elements) as follows:

1. Determine and explain the physical and chemical properties of fuels, substances and materials and assess implications for fire investigation
2. Recognise the signs and symptoms of electrical circuit and component failure and assess the implications for fire investigation
3. Plan a fire investigation and manage a fire scene
4. Conduct a fire scene investigation using the scientific method
5. Analyse, interpret and evaluate evidence found at a fire scene

In order to achieve the qualification, candidates must meet all of the assessment criteria set out in the qualification.

Form of Assessment

Assessment for this qualification is by portfolio. Evidence generated by learners will be internally assessed and will be externally quality assured by the IFE.

All assessment criteria must be met.

Centres and candidates are advised that assessment should be designed to enable candidates to demonstrate that they are performing at Level 5 (please see descriptors provided below).

Candidates may demonstrate attainment by a variety of methods as long as these methods:

- are appropriate to the assessment of the knowledge, understanding and skills set out in the specification;
- enable assessors to confirm that the activity and/or evidence provided has been undertaken in suitable conditions and can be authenticated as the work of the candidate.

Examples of acceptable methods include:

- Assessor observation
- Records
- Reflective accounts
- Professional discussion
- Assignments
- Presentation materials including supporting notes and handouts
- Reports

Qualification Level

This qualification has been designed to enable candidates to demonstrate that they have attained skills and knowledge at Level 5. Other types of qualifications that are set at Level 5 include diplomas of higher education (DipHE), foundation degrees and higher national diplomas (HND)

The qualifications regulator, Ofqual, has provided the following descriptors to illustrate the knowledge and skills expected from those who hold qualifications at Level 5.

Level 5 Knowledge descriptor

The candidate:

- has practical, theoretical or technological knowledge and understanding of a subject or field of work to find ways forward in broadly defined, complex contexts.
- can analyse, interpret and evaluate relevant information, concepts and ideas.
- is aware of the nature and scope of the area of study or work.
- understands different perspectives, approaches or schools of thought and the reasoning behind them.

Level 5 Skills descriptor

The candidate can:

- determine, adapt and use appropriate methods, cognitive and practical skills to address broadly defined, complex problems.
- use relevant research or development to inform actions.
- evaluate actions, methods and results.

Centres and candidates are advised to bear these descriptors in mind in developing and presenting evidence to attainment.

Certification

Candidates who are successful in achieving a Pass, will be awarded the IFE Level 5 Award in Fire Investigation: Theory and Practice

The qualification is not graded and achievement of the qualification will be reported only as Pass.

Entry Requirements

There are no formal entry requirements. However, learners undertaking this qualifications should be aware that a good level of scientific knowledge will be helpful when accessing the scientific elements of the qualification. In addition, excellent communication skills will be required in order to synthesise and communicate complex information.

Progression

Candidates who achieve the IFE Level 5 Certificate in Fire Investigation: Theory and Practice will be able to build on their learning to progress to qualifications at higher levels such as degree qualifications.

Learning Time

Total qualification time is 90 hours.

- 84 hours of self-study/course training
- 6 hours of assessment (directed time)

Reasonable Adjustments

The IFE permits reasonable adjustments to be made where candidates have disabilities (including medical conditions and learning disabilities such as Dyslexia). The IFE's policy on reasonable adjustment aims to enable candidates with disabilities and other difficulties to access the IFE assessments without compromising the assessment process or the validity of the certificate.

The policy, which includes the arrangements for applying for reasonable adjustments, is published on the IFE's website. The IFE will consider all requests for reasonable adjustments. All requests for reasonable adjustments must be submitted to the IFE.

Whilst all requests for reasonable adjustments will be considered, it should be noted that the practical assessment will take place in situation where a recent incident has taken place or been simulated; as a result, a risk assessment that takes into account any potential risks to the candidate and also to other participants involved in the exercise, will need be carried out prior to confirming whether or not adjustments can be made without compromising safety.

Recommended Reading

Kirk's Fire Investigation
NFPA 921
NFPA 1033

Access to the Qualification

This qualification is assessed locally and externally quality assured by the IFE. Therefore, the IFE is unable to accept direct entries from learners. Learners who wish to undertake the qualification will need to do so via an approved centre. The IFE will be able to provide a list of approved centres on request.

Information for Assessment Centres

Organisations that would like to offer this qualification will need to secure approval from the IFE prior to commencing delivery. Potential assessment centres should contact the IFE in the first instance in order to initiate the approval process.

National Occupational Standards for Fire Investigation

This award enables candidates to develop knowledge and skills which are relevant to the following National Occupational Standards:

NOS (Units follow the codes and content as used in the Fire Professional Framework)	Coverage in the IFE Qualification		Comment
	Full	Partial	
FRS1- Investigate and report on incidents involving fire and/or explosion		✓	Note: this IFE qualification covers incidents involving fire only.
FRS4 - Examine the scene for evidence of origin, cause and the development of fire and/or explosion		✓	
FRS5 - Evaluate performance and effectiveness of structures and systems at the scene of incidents involving fire and/or explosions		✓	
FRS6 - Collect and evaluate documentary and witness evidence		✓	
FRS8 - Report on results of detailed investigation of scene involving fire and/or explosion		✓	

Unit 1 – Fire Investigation: Theory and Practice

Element 1: Determine and explain the physical and chemical properties of fuels, substances and materials and assess implications for fire investigation.

Assessment Criteria	Knowledge, understanding and skills
1.1 Explain how the chemical and physical properties of fuels influence their ignition and burning characteristics.	<p>Fuels</p> <ul style="list-style-type: none"> • Identification of fuels. • Properties and physical states of fuels and related ignition and burning characteristics. • Ignition sources and likelihood of ignition. <p>Chemistry of combustion</p> <ul style="list-style-type: none"> • Products of combustion. • Fire growth and development. • Flash point, fire point, vapour density, flammable limits. • Errors, inaccuracies and variations in published data. • Spontaneous and smouldering combustion. • Physical signs that can indicate the seat of a fire. <p>Oxidising materials Oxidising materials and supporters of combustion.</p> <p>Hazards and risks</p> <ul style="list-style-type: none"> • Asphyxiation, toxicity, irritants, mutagens, carcinogens. • Acute and chronic exposure and exposure limits.
1.2 Explain the nature of toxic hazards and risks that may be encountered during a fire investigation.	
1.3 Analyse the impact of oxidising materials on ignition and fire development.	

Assessment

Candidates must demonstrate that they have achieved each of the assessment criteria listed for the element. Examples of appropriate evidence include:

- a knowledge and understanding assessment (eg written test/assignment or professional discussion) that addresses each of the assessment criteria.
- a report showing application of relevant scientific knowledge and understanding when assessing a situation and drawing conclusions.

Element 2: Recognise the signs and symptoms of electrical circuit and component failure and assess the implications for fire investigation.

Assessment Criteria	Knowledge, understanding and skills
2.1 Determine the main mechanisms by which fires of an electrical origin may be initiated.	<ul style="list-style-type: none"> • Systematic and logical approach to examining electrical circuits and components. • Mechanisms relating to the failure of electrical circuits. • Identifying and interpreting indicators of failure and/or physical damage to electrical circuits and components. • Fire damage to wiring and components. • Local overheating, short circuits, insulation failures. • Ignition remote from fault. • Earthing of circuits. • Ventilation failure, tracking, arcing and static charge. Abnormal electrical activity. • Investigation indicators such as sleeving and adhering, overheating, breaks in conductors and insulation. • Arcing and charring to insulators. • Colour changes in conductors, melting, alloy formation, mechanical damage. • Appliances commonly blamed for fires. • Ohm's Law and basic electrical calculations. • Electrical supply, 230 Volt domestic and 400 Volt commercial and industrial systems. • Component examination to determine pre-fire condition.
2.2 Apply a systematic approach to evaluating electrical circuits that may be implicated in causing a fire.	
2.3 Investigate and analyse physical signs and symptoms of damaged electrical circuits and components in order to ascertain the cause of failure.	

Assessment

Candidates must demonstrate that they have achieved each of the assessment criteria listed for the element. Examples of acceptable forms of evidence include:

- practical exercises involving assessment and interpretation of physical materials.
- professional discussion.
- analysis of case studies.
- report showing application of relevant scientific knowledge and understanding when assessing a situation and drawing conclusions.

Element 3: Plan a fire investigation and manage a fire scene.

Assessment Criteria	Knowledge, understanding and skills
3.1 Evaluate a fire scene and determine the scope, resource requirements and timescale relevant to fire investigation.	<p>Planning</p> <ul style="list-style-type: none"> • Determine the scope and time-scale for the investigation. • Roles and responsibilities. • Determine priorities. • Working co-operatively and collaboratively. • Appropriate methodology and approach identified. • Requirement for equipment and resources identified. • Need for specialist support - roles, responsibilities and limit of authority of specialists/other agencies. • Assess need for consent to carry out investigation and secure relevant permission. <p>Controlling</p> <ul style="list-style-type: none"> • Scene control, scene delineated and cordoned appropriately. • Unauthorised access restricted. • Authorised access controlled and recorded. • Preservation strategies – identification of actions that could contaminate the scene. • Arrangements for preservation, recovery and storage of evidence. <p>Health and safety</p> <ul style="list-style-type: none"> • Risk assessment undertaken and recorded. • Safe person concept, safe systems of work, correct PPE. • Emergency procedures and evacuation. • Dangerous structures identified. • Condition of services. • Weather & environmental conditions. • Ongoing safety monitoring and review.
3.2 Determine appropriate controlling mechanisms to scene access security and preservation.	
3.3 Determine and maintain health and safety measures and controls at the fire scene including dynamic risk assessment.	

Assessment

Candidates must demonstrate that they have achieved each of the assessment criteria listed for the element.

Assessment should include a practical exercise. Completion of the exercise should be supplemented by professional discussion/written evaluation so that candidates are provided with the opportunity to explain and evaluate their considerations and actions during the exercise.

Element 4: Conduct a fire scene investigation using the scientific method.

Assessment Criteria	Knowledge, understanding and skills
4.1 Understand how to conduct a scientific survey and examination of a fire scene.	<p>Assessment of scene</p> <ul style="list-style-type: none"> • Survey and examination of a fire scene. • Methodology, techniques and process for logical and systematic scene examination. • Effective use of notes, sketches, photographs, video, referencing, and measurement to survey and record scene. • Importance of preliminary external and internal examination of scene. <p>Evidence</p> <ul style="list-style-type: none"> • Importance of identifying and recording positions of doors, windows, signs of forced entry. • Forensic awareness to avoid scene contamination. • Identification and treatment of potential evidence so as to avoid destruction, damage or contamination. • Layering/stratification of debris. • Need for careful archaeological scene excavation. • Examination of debris for potential evidence. • Recording of position of switches on appliances, equipment and plant. <p>Recording</p> <ul style="list-style-type: none"> • Logical, systematic and open-minded approach to investigation. • Principles to be applied in recording evidence. • Importance of maintaining integrity of evidence and processes to ensure this. • Principles and processes to be applied when dealing with fatalities.
4.2 Understand how to conduct an effective archaeological excavation at a fire scene using appropriate techniques, tools and methods.	
4.3 Understand the forensic aspects of an investigation and the importance of identifying and preserving evidence.	
4.4 Understand how to produce efficient and effective recording of evidence at the fire scene.	

Assessment

Candidates must demonstrate that they have achieved each of the assessment criteria listed for the element.

Assessment should include a practical exercise. Completion of the exercise should be supplemented by professional discussion/written evaluation so that candidates are provided with the opportunity to explain and evaluate their considerations and actions during the exercise.

Element 5: Analyse, interpret and evaluate evidence found at the fire scene.

Assessment Criteria	Knowledge, understanding and skills
5.1 Evaluate pre-fire scene geometry and interpret post-fire indicators to determine where a fire started and its likely cause.	<p>Interpretation of indicators</p> <ul style="list-style-type: none"> • Identification of post-fire indicators such as: burn patterns, plume patterns, soot deposition, pool burns, charring, calcination of plaster, spalling, melting, glass damage, time / temperature indications, etc. • Recognition of potential relationships and interactions between phenomena which caused different post-fire indicators. • Analyse the structural and environmental factors which may have influenced fire development. • Assess the potential/actual impact of the structure, finishes, fittings, equipment at the scene. • understand the term ‘geometrical fire spread indicators’. • (understand false indicators and how they can adversely affect the formulation of a hypothesis. <p>Analysis</p> <ul style="list-style-type: none"> • Recognition of influence of building and material performance in fire. • Recognition of any fire safety measures in suppressing fire. • Recognition of post-fire indicators caused by firefighting efforts. • Recognition of suspicious circumstances or activities. <p>Witnesses</p> <ul style="list-style-type: none"> • Identification of potential witnesses and assess the validity of potential evidence. • Techniques for carrying out interviews with witnesses and victims and for assessing relevance, validity and usefulness. <p>Use of multiple post-fire indicators to form working hypothesis</p> <ul style="list-style-type: none"> • Assessment, interpretation and evaluation of all facts and evidence to further develop working hypothesis. • Testing and challenging hypothesis. • Reconstruction of fire scene to help determine or confirm point of origin. • Radius of error. • Final conclusions and determination of possible point of origin. • Recording and presentation of findings. • Role of the expert witness. • Reference to research/other cases as applicable.
5.2 Analyse the cause of a fire based on facts, evidence, scientific understanding, logic and reasoned argument.	
5.3 Develop a working hypothesis drawing on scientific understanding and analysis of the scene (scientific method).	

Assessment

Candidates must demonstrate that they have achieved each of the assessment criteria listed for the element. Evidence should take the form of a written document such as a report.

The document should draw on understanding from across the elements and candidates will be required to demonstrate analysis skills as well as depth of understanding.

Written evidence may be supplemented by professional discussion to enable candidates to further expand on their points.

The evidence provided for this element may also be used as evidence to demonstrate attainment of assessment criteria contained in other elements; eg in determining the cause of the fire, candidates will need to draw on their scientific understanding and to explain how the chemical and physical properties of fuels in the specific fire scene context influenced their ignition.

Section 2: Centre Approval

Introduction

In order to deliver this qualification and carry out assessment, potential assessment centres must first secure approval from the IFE to operate as an assessment centre.

The Process

The process involves the following steps:

- Applicants must complete the centre approval form provided by the IFE. This form is available on request from the IFE.
- A desk review of the information provided will be carried out and the IFE will ask for additional information if appropriate.
- A centre visit will be arranged. The IFE will be represented by an appropriately experienced and qualified expert who will take on the role of External Quality Assurer (EQA).
- If the feedback from the EQA includes a recommendation that the centre should be approved, the approval process will be progressed. If further information is required (eg copies of centre policies or information on local assessors), approval will be delayed until all relevant documents have been received and reviewed. When all required standards have been met, the IFE will confirm that approval has been granted.

Requirements for Centres

The centre approval process will require centres to demonstrate that they have:

- facilities for managing local assessment – including equipment for use during candidate assessments.
- facilities for managing and maintaining assessment materials including recordings and documentation.
- assessors who have both subject and assessment expertise. (The IFE will require assessors to demonstrate experience and/or qualifications in the area that they are assessing.)
- robust processes for managing internal standardisation and verification of assessments.

Fees

An initial approval fee will be charged. Please see current fee lists.

Once approved, a fee per candidate will be charged for each candidate undertaking assessment and seeking certification.

There may be additional charges for centres in respect of EQA visits where only a small number of candidates are undertaking assessment.

Ongoing Quality Assurance Arrangements

The IFE operates a quality assurance strategy that applies to all centres and the IFE reserves the right to carry out centre audits at any time.

The number of qualification-related visits to centres each year will depend upon the number of candidates undertaking assessment. Most centres will receive a minimum of two external quality assurance visits per year. The IFE reserves the right to increase the number of visits and/or to request submission of candidate portfolios for further checks.

Section 3: Assessment and Quality Assurance

Introduction

This qualification is locally assessed with assessments standardised locally and external quality assurance undertaken by an IFE-appointed External Quality Assessor (EQA).

Roles and Requirements

Assessors

Centres will be required to identify and allocate assessors to undertake the assessment process. They will be required to provide details of those who carry out assessment to the IFE.

The IFE has set minimum requirements for those who carry out assessment for this qualification and centres must ensure that assessors meet these requirements. Assessors must:

- be subject experts with current experience of working in the specialist area; ideally, assessors should be qualified to level 6 (degree level) or above and have at least two years of experience of working in the specialist area. (Where potential assessors have extensive experience, in excess of four years and are recognised as expert by their employers, the requirement to hold a qualification at level 6 may be relaxed.)
- have experience of carrying out assessments in the specific subject area and/or hold an appropriate qualification.
- demonstrate commitment to CPD.

In addition, centres must, under all circumstances, be mindful of the potential for conflicts of interest and should ensure that assessors do not have personal/commercial interests in the outcome of any assessments that they undertake.

Centres should ensure that records are maintained that show which assessor undertook which assessment.

Standardisation and Internal Quality Assurance

Centres are responsible for ensuring that a robust system of standardisation and quality assurance is in place in order to ensure that standards are applied consistently and equitably across candidates regardless of the assessor that undertook the initial assessment.

An Internal Quality Assurance Lead/Internal Verifier must be appointed. The IFE should be notified of the person who has been allocated to the role. The individual leading on internal QA must have sufficient authority and resources to enable them to carry out the role effectively. They must have occupational knowledge and should have experience of assessment, ideally holding subject and assessment qualifications.

Centres must establish an internal standardisation process whereby assessors meet and cross-moderate assessment decisions. A formal record of internal moderation should be kept. This record should demonstrate that standardisation has taken place and should note any areas where

decisions have been made that set precedents to be followed on future occasions.

Internal quality assurance arrangements must include regular monitoring of assessor decisions and sampling of assessment decisions. Records should be made of the monitoring and checks undertaken to enable audit trails to be followed.

Note: as well as providing confirmation of the way in which centres are applying the assessment criteria, the information from internal assessment will be used by the IFE to contribute to the ongoing enhancement of assessment guidance.

External Quality Assurance

The IFE will arrange external quality assurance visits.

The purpose of external quality assurance is to ensure that:

- the centre is operating robust assessment processes (including internal quality assurance arrangements) that lead to appropriate and consistent decisions.
- assessment is fit for purpose, at the right level and generating sufficient evidence of attainment.
- all required policies and procedures are in place and are being applied.

Most centres will receive at least two quality assurance visits per year. The IFE reserves the right to increase the number of visits where a high volume of candidates are involved or where areas of concern have been noted.

Where additional external quality assurance visits are required, the IFE may re-charge the cost of the visit(s) to the centre.

During an external quality assurance visit, the IFE external quality assurer, will:

- meet candidates, assessors and internal verifiers.
- view candidate assessment records and evidence.
- view a list of candidates registered for the qualification
- view centre records including minutes of meetings, procedures, details of any new assessors etc.
- review progress following on from any previous visit.

Retaining Candidate Assessments

Centres should retain candidate portfolios/assessment materials for a minimum of six months after assessment decisions have been issued. In cases of appeals by candidates, individual assessments will need to be kept until any disputes about outcomes or appeals have been resolved.

Assessment

Introduction

The aim of assessment is to ensure that candidates have met the published standard.

Assessors must therefore be satisfied that the candidate has fully met the published requirements and has provided enough evidence for the assessor to be satisfied that the candidate could apply the knowledge, understanding and skills competently in the workplace.

The Assessment Process

Only approved assessors may undertake assessment.

Assessors should review the assessment outcomes against the requirements of the published specification. Prior to confirming that a candidate has met the standard, assessors should be confident that:

- the candidate had independently produced sufficient evidence in terms of depth and breadth.
- all aspects of the criteria have been fully met.

After the assessor has examined the evidence, the assessor must record an assessment decision and the justification for the decision.

Assessors must use the recording documents provided by the IFE when confirming that published criteria have been met.

Recognition of prior attainment

In some instances it may be possible for candidates to present evidence that has been attained prior to commencing the qualification. In determining whether or not evidence of prior achievement is appropriate, assessors must consider the following criteria:

- Specific requirements of the unit/qualification specification: all evidence must be evaluated against the specific requirements set out in the unit/qualification that the candidate is seeking to attain. Assessors must be confident in determining that there is sufficient evidence available to confirm that the candidate has fully met the requirements.
- Currency: all evidence must have been generated within two years of the date of issue of the qualification certificate.
- Individual's own work: it must be clear that the evidence provided is the candidate's own work and was completed in the required assessment conditions.
- Reliability: having considered the evidence available, the assessor must be confident that he/she would have arrived at the same decision if the assessment were to be repeated. In some instances, this may require further professional discussion with the candidate to confirm attainment.

Centres should see the IFE's Recognition of Prior Achievement (RPA) Policy and Process guidance for further information.

Section 4: Summary Assessment Forms

Introduction

The summary assessment forms that follow have been designed to enable assessors to collate the relevant evidence and to summarise the reason for their judgements.

Assessors are requested to use these documents for all candidates.

Assessors should be aware that evidence may be generated across different assessment tasks. For example, candidates will inevitably generate evidence in support of all aspects of the unit via their final report; it is therefore anticipated that evidence identified in support of assessment criteria 1.1, 1.2 and 1.3 will include reference to the content of the final report as well as to specific tasks undertaken in relation to element one. Indeed, it is likely that the application of understanding in generating the report will enable the assessor to be confident (or otherwise) in the candidate's attainment.

IFE Level 5 Award in Fire Investigation: Theory and Practice

Evidence Summary Sheet

Candidate Name:	
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Element 1: Determine and explain the physical and chemical properties of fuels, substances and materials and assess implications for fire investigation.

Assessment Criteria	Evidence Provided
	Meets assessment criterion: Yes/No
	Briefly explain reason for decision and identify where and how the evidence provided demonstrates (or fails to demonstrate) achievement of each assessment criterion
1.1 Explain how the chemical and physical properties of fuels influence their ignition and burning characteristics.	
1.2 Explain the nature of toxic hazards and risks that may be encountered during a fire investigation.	
1.3 Analyse the impact of oxidising materials on ignition and fire development.	

Assessor:	Date of Internal QA:
Assessor signature:	Name of Internal Quality Assurer:
Date:	Decision:

IFE Level 5 Award in Fire Investigation: Theory and Practice

Evidence Summary Sheet

Candidate Name:	
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Element 2: Recognise the signs and symptoms of electrical circuit and component failure and assess the implications for fire investigation.

Assessment Criteria	Evidence Provided
	Meets assessment criterion: Yes/No
	Briefly explain reason for decision and identify where and how the evidence provided demonstrates (or fails to demonstrate) achievement of each assessment criterion
2.1 Determine the main mechanisms by which fires of an electrical origin may be initiated.	
2.2 Apply a systematic approach to evaluating electrical circuits that may be implicated in causing a fire.	
2.3 Investigate and analyse physical signs and symptoms of damaged electrical circuits and components in order to ascertain the cause of failure.	

Assessor:	Date of Internal QA:
Assessor signature:	Name of Internal Quality Assurer:
Date:	Decision:

IFE Level 5 Award in Fire Investigation: Theory and Practice

Evidence Summary Sheet

Candidate Name:	
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Element 3: Plan a fire investigation and manage a fire scene.

Assessment Criteria	Evidence Provided
	Meets assessment criterion: Yes/No
	Briefly explain reason for decision and identify where and how the evidence provided demonstrates (or fails to demonstrate) achievement of each assessment criterion
3.1 Evaluate a fire scene and determine the scope, resource requirements and timescale relevant to fire investigation.	
3.2 Determine appropriate controlling mechanisms to scene access security and preservation.	
3.3 Determine and maintain health and safety measures and controls at the fire scene including dynamic risk assessment.	

Assessor:	Date of Internal QA:
Assessor signature:	Name of Internal Quality Assurer:
Date:	Decision:

IFE Level 5 Award in Fire Investigation: Theory and Practice

Evidence Summary Sheet

Candidate Name:	
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Element 4: Conduct a fire scene investigation using the scientific method.

Assessment Criteria	Evidence Provided
	Meets assessment criterion: Yes/No
	Briefly explain reason for decision and identify where and how the evidence provided demonstrates (or fails to demonstrate) achievement of each assessment criterion
4.1 Understand how to conduct a scientific survey and examination of a fire scene.	
4.2 Understand how to conduct an effective archaeological excavation at a fire scene using appropriate techniques, tools and methods.	
4.3 Understand the forensic aspects of an investigation and the importance of identifying and preserving evidence.	
4.4 Understand how to produce efficient and effective recording of evidence at the fire scene.	

Assessor:	Date of Internal QA:
Assessor signature:	Name of Internal Quality Assurer:
Date:	Decision:

IFE Level 5 Award in Fire Investigation: Theory and Practice

Evidence Summary Sheet

Candidate Name:	
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Element 5: Analyse, interpret and evaluate evidence found at the fire scene.

Assessment Criteria	Evidence Provided
	Meets assessment criterion: Yes/No
	Briefly explain reason for decision and identify where and how the evidence provided demonstrates (or fails to demonstrate) achievement of each assessment criterion
5.1 Evaluate pre-fire scene geometry and interpret post-fire indicators to determine where a fire started and its likely cause.	
5.2 Analyse the cause of a fire based on facts, evidence, scientific understanding, logic and reasoned argument.	
5.3 Develop a working hypothesis drawing on scientific understanding and analysis of the scene (scientific method).	

Assessor:	Date of Internal QA:
Assessor signature:	Name of Internal Quality Assurer:
Date:	Decision: