



# IFE Level 3 Diploma in Fire Science and Fire Safety

Qualification Number: 500/6216/5

## Introduction

The IFE Level 3 Diploma in Fire Science and Fire Safety has been developed by the Institution of Fire Engineers (IFE), representatives of Fire and Rescue services and other fire professionals. The content and structure of the qualification has been established to reflect best professional practice.

## Aims of the Qualification

The IFE Level 3 Diploma in Fire Science and Fire Safety has been designed to enable individuals to demonstrate a wide range of critical knowledge and understanding relevant to a number of fire professional roles such as Watch Manager in the Fire and Rescue Service, Fire Safety specialist and Fire Investigation specialist. It focuses on the underpinning understanding of fire engineering science and safety that individuals need in order to assess situations and to respond to diverse hazards and incidents.

Additionally, success in achieving this qualification will enable candidates to meet the academic requirement for membership of the Institution of Fire Engineers at Graduate grade (GIFireE).

## Target Audience

The qualification will meet the needs of:

- Those employed in fire and rescue service roles across the world, particularly those who are either already in Watch Manager or equivalent roles or those who wish to develop and demonstrate knowledge and understanding relevant to the role of Watch Manager in preparation for promotion to this role
- Those operating in specialist fire and rescue contexts such as aviation or fire prevention/fire safety audit roles who need to develop and apply a wide range of knowledge and understanding in their role
- Other fire professionals who wish to demonstrate their knowledge and understanding of fire science, fire safety and other specialist areas

## Qualification Structure

In order to achieve the IFE Level 3 Diploma in Fire Science and Fire Safety, candidates must achieve four units: two mandatory units and two optional units.

### Mandatory Units

Unit 1: Fire Engineering Science

Unit 2: Fire Safety

### Optional Units

Unit 4: Aviation Fire Operations

Unit 5: Leadership and Management in Fire and Rescue

Unit 6: Fire Service Operations and Incident Command

Unit 7: Fire Investigation

### Restrictions on Optional Units

Candidates should note that the former Unit 3 (Fire Service Operations and Incident Command – International) may **NOT** be used in combination with Unit 6 towards the Level 3 Diploma in Fire Science and Fire Safety due to the content overlap between these units.

### Selecting Units

Other than the combination restriction noted above, candidates may choose the two units that are most appropriate to their own situation and/or the requirements of their workplace.

## Qualification Level

This qualification has been designed to enable candidates to demonstrate that they have attained skills and knowledge at Level 3. Other types of qualifications that are set at Level 3 include A Levels, AS Levels and Level 3 NVQs.

The qualifications regulator, Ofqual, has provided the following descriptors to illustrate the knowledge and skills expected from those who hold qualifications at Level 3.

### Level 3 Knowledge descriptor

The candidate:

- Has factual, procedural and theoretical knowledge and understanding of a subject or field of work to complete tasks and address problems that while well-defined, may be complex and non-routine.
- Can interpret and evaluate relevant information and ideas.
- Is aware of the nature of the area of study or work.
- Is aware of different perspectives or approaches within the area of study or work.

### Level 3 Skills descriptor

The candidate can:

- Identify, select and use appropriate cognitive and practical skills, methods and procedures to address problems that while well-defined, may be complex and non-routine.
- Use appropriate investigation to inform actions.
- Review how effective methods and actions have been.

Candidates are advised to bear these descriptors in mind when preparing for assessment and when presenting examination responses.

### **Form of Assessment**

Each unit is assessed separately via written examination. The duration of the examination is three hours.

Candidates will be required to complete **six** questions from a choice of **eight** questions. Question-types will vary depending on the subject assessed but could include in-depth essay questions, questions requiring calculations and questions requiring the drawing/annotation of plans and diagrams.

### **Certification**

Candidates achieving the required combination of units will be awarded the IFE Level 3 Diploma in Fire Science and Fire Safety. The qualification is not graded.

Candidates do not need to achieve all four units at the same examination session. Candidates who achieve fewer than four units at one examination session will receive a Unit Certificate for each unit achieved. Candidates are required to achieve the four units within five years. This means that candidates who achieve units in 2019 may combine these with achievements from 2018, 2017, 2016, and 2015.

The IFE will automatically issue a full Level 3 Diploma in Fire Engineering and Fire Safety certificate at the point where candidates have achieved all four of the units required.

### **Unit Certification and Grading**

Unit certificates are issued where candidates achieve fewer than four units at an examination session.

Achievement at unit level is graded. Candidates, who achieve a Pass at unit level, will be awarded one of the following grades: A, B, C or D.

In order to achieve a Pass grade, candidates must demonstrate a thorough understanding of a range of subject areas and must demonstrate that they fully appreciate the critical safety issues. They will need to achieve at least 40% of the marks available.

The notional grade boundaries for the Pass level grades are as follows:

Grade D	40 - 49%
Grade C	50 - 59%
Grade B	60 - 69%
Grade A	70% and above

Candidates who achieve below the required level will receive a Fail result.

Note: Grade boundaries are reviewed and confirmed by an expert awarding review panel following each examination session in line with standard examination and awarding procedures.

## Entry Requirements

There are no formal entry requirements.

However, candidates are advised that this specification provides progression from the Level 3 Certificate in Fire Science, Operations, Fire Safety and Management; therefore, candidates who have previously achieved the Level 3 Certificate will be able to build upon relevant knowledge and understanding. Candidates who have not achieved the Level 3 Certificate are advised to ensure that they have developed the fundamental knowledge and understanding covered in the specification for the Level 3 Certificate.

Candidates should be aware that most examination questions will take the form of essay questions. Candidates will therefore need to be able to communicate effectively in writing. In addition, candidates are advised that mathematical skills will be required in order to complete the Fire Engineering Science examination and relevant calculations in other units.

## Qualification Learning Time

The length of time needed to complete this qualification will vary depending upon the starting point (ie previous knowledge and experience) for each individual. Research suggests that most candidates should spend around 100 hours preparing for each unit. For most candidates, learning and preparation will take the form of self-study.

Total qualification time is therefore 412 hours comprising:

- 400 hours (over 4 units) of learning - self-study/course training
- 12 hours (over 4 units) of assessment - examinations

## 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.

## **Progression**

Candidates who are successful in achieving the Level 3 Diploma will be able to progress to the Level 4 Certificate in Fire Science and Fire Safety. Candidates may choose to progress only to specific units (e.g. Aviation Fire Operations or Fire Safety) if they prefer to extend specific aspects of their knowledge rather than achieving the full qualification.

## **Further Information**

Past examination papers can be downloaded from the IFE's website - <http://www.ife.org.uk/Qualifications/Past-Papers-and-Exam-Reports>

The Preparing for Examinations page of the website provides a Candidate Guide (which includes information about examinations) and recommended reading - <http://www.ife.org.uk/Preparing-for-Examinations>