



# IFE Level 4 Certificate in Fire Science and Fire Safety

**Qualification Number: 500/5924/5**

## Introduction

The IFE Level 4 Certificate 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 4 Certificate 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 Station 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 fire safety measures that individuals need in order to assess situations and to evaluate and 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 Member grade (MIFireE).

## 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 Station Manager (or equivalent) roles or those who wish to develop and demonstrate knowledge and understanding relevant to the role of Station Manager in preparation for promotion to this role
- Those operating in specialist fire and rescue contexts such as aviation or fire prevention/fire safety inspection 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 and safety and relevant specialist areas

## Qualification Structure

In order to achieve the IFE Level 4 Certificate 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 3: Fire Service Operations and Incident Command

Unit 4: Aviation Fire Operations

Unit 5: Leadership and Management in Fire and Rescue

Unit 6: Fire Investigation

Unit 7: Civil Emergency and Disaster Management

There are no restrictions on the choice of optional units so candidates are able to choose any combination that is appropriate to their own situation and/or the requirements of their workplace.

## 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 4 Certificate 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 2018 may combine these with achievements from 2017, 2016, 2015, and 2014.

The IFE will automatically issue a full Level 4 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 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 panel review 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 success in this qualification requires extensive knowledge and understanding and they should therefore ensure that they are fully prepared prior to sitting examinations. This qualification provides progression from the Level 3 Certificate in Fire Science, Operations, Fire Safety and Management and from the Level 3 Diploma in Fire Science and Fire Safety. Candidates who have previously achieved an IFE qualification at Level 3 will be able to build upon relevant knowledge and understanding. Candidates who have not achieved an IFE qualification at Level 3 are advised to refer to the Level 3 specifications in order to ensure that they have acquired relevant foundation knowledge and understanding.

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 Level

This qualification has been designed to enable candidates to demonstrate that they have attained skills and knowledge at Level 4. Other types of qualifications that are set at Level 4 include certificate of higher education (CertHE), higher national certificate (HNC) and Level 4 NVQs.

The qualifications regulator, Ofqual, has provided the following descriptors to illustrate the knowledge and skills expected from those who hold qualifications at Level 4.

#### Level 4 Knowledge descriptor

The candidate:

- Has practical, theoretical or technical knowledge and understanding of a subject or field of work to address problems that are well defined but complex and non-routine.
- Can analyse, interpret and evaluate relevant information and ideas.
- Is aware of the nature of approximate scope of the area of study or work.
- Has an informed awareness of different perspectives or approaches within the area of study or work.

#### Level 4 Skills descriptor

The candidate can:

- Identify, adapt and use appropriate cognitive and practical skills to inform actions and address problems that are complex and non-routine while normally fairly well-defined.
- Review the effectiveness and appropriateness of methods, actions and results.

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

## **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 achieve the IFE Level 4 Certificate in Fire Science and Fire Safety will be able to build on their learning to progress to qualifications at higher levels such as degree qualifications.

## **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>