Training in Fire Detection, Alarms and Emergency Lighting

Training Pathways for:
• Fire Detection & Alarm Systems for the Workplace
• Fire Detection & Alarm Systems for Dwellings
• Emergency Lighting
• BTEC Qualifications
**Welcome**

Develop knowledge of fire detection, alarms and emergency lighting and progress on to our new BTEC qualifications available at Levels 2, 3 or 4.

Our credentials speak for themselves:
- we are an Institution of Fire Engineers (IFE) Approved Training Centre
- we have significant experience of delivering fire safety training, from major blue chip companies to the public sector and SMEs
- we operate a quality management system in accordance with BS/EN/ISO 9001, assessed and approved by Lloyds Register
- we are a constituent member of the Confederation of Fire Protection Associations Europe (CFPA Europe)
- we are a NEBOSH Accredited Centre
- we are an Edexcel Accredited Centre
- we have achieved the Investors in People Award
- the majority of our courses offer CPD points

I would be very pleased to discuss, without obligation, any fire safety training needs that you may have in this area and hope that you will consider using the FPA for your training and development needs.

Sue Tyley, Associate Director, Training
Email: styley@thefpa.co.uk

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Introduction

Background
This comprehensive suite of modular training courses in Fire Detection & Alarm Systems and Emergency Lighting has been developed through a partnership between the Fire and Security Association (FSA), a division of the Electrical Contractors Association (ECA) and the Fire Protection Association, and is designed to meet the training requirements of those involved with design, installation, commissioning and servicing of associated systems.

All of these courses have received external accreditation from the awarding body, Edexcel. Successful delegates can achieve a BTEC Award or Certificate which acts to confirm to clients, employers, regulatory and certification bodies the level and breadth of competence of an individual.

Extensive choice
The modular structure of the training programme reflects the needs of companies and/or individuals to develop and demonstrate competence:
• in different aspects of systems i.e. design, installation, commissioning and/or servicing
• for different types of premises i.e. simple or complex workplaces/dwellings
• for different job roles i.e. those who work under supervision or those who supervise/manager projects

Find your pathway
All training pathways commence with a core module. You are then able to select the pathway modules that best suit your competency requirements resulting in a training pathway tailored to your needs. Gone is the ‘one course fits all’ approach.

You will be able to clearly demonstrate to customers and/or employers evidence of training matched against:
• the National Occupational Standards in Systems
• relevant British Standards
• SP203 for Fire Detection & Alarm Systems
• relevant legislation and guidance
• a sector competence matrix agreed by sector employers

Routes to Qualifications
In response to demand from the sector, the FPA and FSA have introduced a brand new qualification pathway for those working in the fire detection, alarms and emergency lighting sector.

BTEC Qualification
Each of the course modules can be combined with a work-based assignment to achieve a BTEC Award at Level 2, 3 or 4 in any individual discipline. The modules can also be grouped together to achieve a full BTEC Level 3 Award for Simple Premises or a full BTEC Level 4 Certificate for Complex Premises.

The first of its kind, this new qualification pathway offers external certification to confirm your level of competence. See pages 4/5 for more information.

Links to professional memberships
All the courses featured in this brochure result in an FPA/FSA Certificate, approved by the Institution of Fire Engineers.

The Institution of Fire Engineers
The IFE provides professional recognition for fire engineers across a broad spectrum and has achieved recognition from a number of professional bodies, including Engineering Council UK which regulates the engineering profession in the UK.

New BTEC Qualifications
The FPA and FSA are delighted to introduce this brand new qualification pathway for those working in the fire detection, alarms and emergency lighting systems sector. The first qualification of its kind for the industry, it opens up progression routes through to a Level 4 Certificate and offers the workforce opportunities to achieve nationally recognised qualifications across the range of functions and premises that make up the sector.

What is a BTEC?
BTEC qualifications have been running for twenty-five years and are offered by the Edexcel awarding organisation. BTEC stands for the ‘Business and Technology Education Council’ and in 2010 more than one million students enrolled on a BTEC course. Level 2, 3 and 4 BTEC qualifications are work related qualifications which aim both to accommodate the needs of employers and to allow progression to university. They provide work related learning with key theoretical background, and are based on relevant National Occupational Standards (NOS) as determined by sector skills councils.

How can I achieve a BTEC Qualification?
Each of the modular training courses provides the underpinning knowledge for a BTEC qualification. Following successful completion of a course, you will then be asked to complete a work-based assignment in order to provide evidence of your competence in applying the skills and knowledge gained on the course.

The assignment will be based upon tasks and projects that occur within your daily work schedule. You will have a nominated FPA tutor to help you with any queries that may arise.

Upon successful completion of the work-based assignment you can either claim a single BTEC Award or complete further modules to build up a number of individual BTEC Awards. If you complete all of the modules at Level 3 you can achieve an overarching BTEC Award for Simple Premises or at Level 4 a BTEC Certificate for Complex Premises.

Are there any modules that are compulsory?
You must always attend the core Foundation course relevant to your chosen pathway and any other training days linked to the BTEC qualification that you wish to achieve.

To achieve a Level 3 BTEC qualification, you must first complete the Level 2 BTEC assignments. To achieve a Level 4 BTEC qualification, you must have attended the Level 2 and Level 3 training days but can choose to start with the Level 3 BTEC assignments or go straight to Level 4 assignments.

What level of qualification can I achieve?
The BTEC Award is available at Intermediate (L2), Advanced (L3) and Professional (L4) level.

The BTEC Certificate is available at Professional (L4) level.

Can I register for an individual Award?
You can register for the full BTEC Award or Certificate, details shown on page 4 or you can register for individual BTEC Awards.

Individual BTEC Awards at Level 2 cost £96 plus the cost of associated training modules
Individual BTEC Awards at Level 3 cost £140 plus the cost of associated training modules
Individual BTEC Awards at Level 4 cost £186 plus the cost of associated training modules

If you would like help or advice in choosing the right course for your please contact us for an informal and confidential discussion.

By phone: 01608 812 500
E-mail: training@thetpa.co.uk
By fax: 01608 812 501
Website: www.thetpa.co.uk
By post: Fire Protection Association, London Road, Moreton in Marsh, Gloucestershire GL56 0RH
BTEC Level 2 Award:
Fundamentals of Fire Detection & Alarm Systems
Duration: 2 days
FPA Member Price: £385.00 + VAT
Non-FPA Member Price: £425.00 + VAT

BTEC Level 3 Award:
Fire Detection & Alarm Systems for Simple Work Premises or Domestic Dwellings
Duration: 5 days
FPA Member Price: £925.00 + VAT
Non-FPA Member Price: £990.00 + VAT

BTEC Level 4 Certificate:
Fire Detection & Alarm Systems for Complex Work Premises or Domestic Dwellings
Duration: 8 days
FPA Member Price: £1,399.00 + VAT
Non-FPA Member Price: £1,495.00 + VAT
Price inclusive of Level 2 and Level 3 modules

Price inclusive of Level 2 BTEC Award

For more information on the definition of single and complex premises see pages 6 & 14.

BTEC Level 2 Award:
Fundamentals of Emergency Lighting
Duration: 1 day
FPA Member Price: £285.00 + VAT
Non-FPA Member Price: £285.00 + VAT

BTEC Level 3 Award:
Emergency Lighting for Simple Premises
Duration: 5 days
FPA Member Price: £925.00 + VAT
Non-FPA Member Price: £990.00 + VAT
Price inclusive of Level 2 BTEC Award

BTEC Level 4 Certificate:
Emergency Lighting for Complex Premises
Duration: 9 days
FPA Member Price: £1,549.00 + VAT
Non-FPA Member Price: £1,650.00 + VAT
Price inclusive of Level 2 and Level 3 modules

Price inclusive of Level 2 BTEC Award

For more information on the definition of single and complex premises see page 20.
Steps to your pathway modules:

Step 1: Complete Core Module M1A
Step 2: Select your area of interest
Step 3: Choose a module and premises type

Key:

- Simple premises
- Complex premises

Definitions:

**Simple workplace premises**
- The occupants:
  - are/will be awake
  - are/will be familiar with the premises
- The premises:
  - will contain no hazardous process or storage risks
  - not have significant numbers of occupants present (under 60 staff and under 300 persons in public access buildings)
- Example: Office and industrial premises, small shops, classroom areas of schools and colleges

**Complex workplace premises**
- The occupants may:
  - be asleep (other than single private dwelling house (SPDH) and blocks of individual flats)
  - be unfamiliar with the premises
- The premises may:
  - contain hazardous process or storage risks
  - cater for large numbers of occupants
- Example: Larger shops and shopping centres, museums, leisure centres, other large assembly buildings, halls of residence, sleeping areas and boarding schools, hotels, hospitals, care homes, manufacturing plants, railway stations, airports.

Core Module M1A
Fundamentals of Fire Detection and Alarm Systems & Fire Legislation
see pages 8–9 for details

Installation & Commissioning

M3E
Installation Engineer
1 Day (page 10)

M3F
Commissioning Engineer
½ Day (page 12)

M3G
Commissioning Engineer
½ Day (page 12)

M3C / M3D
Installation Engineer
1 Day (page 10)

M3H
Servicing Engineer
½ Day (page 12)

M3I
Service Engineer
½ Day (page 12)

M3A
Design Engineer
1 Day (page 10)

M3B
Design Engineer
1 Day (page 10)
Fundamentals of Fire Detection & Alarm Systems

Overview

Fire detection and alarm systems are installed into virtually all commercial and industrial premises in the UK. However, despite their recognition they are frequently mismanaged, often creating unwanted alarms. It is therefore essential that those with responsibility for design, servicing, installation and management of these systems have an understanding of their operation and application.

The latest fire detection and alarm systems harness cutting-edge technology to ensure that fires are detected faster and that any potential damage is minimised.

This new two day core module will focus on the legal requirements for fire detection systems and also provide an overview of the different components of fire alarm technology and their principles of operation.

The course provides a thorough understanding of the essentials of fire detection and alarm systems and delegates who successfully complete this module may choose to undertake further pathway modules covering the design, servicing and installation of such systems.

Who will benefit?

• those whose work requires them to have an appreciation of the installation and operation of fire detection and alarm systems
• maintenance/building services engineers
• architects and specifiers
• fire officers and fire engineers
• building control officers
• consulting engineers
• electrical contractors

Learning outcomes

You will develop:

• understanding of the legal framework regarding fire detection and alarm systems including the Fire Safety Order 2005 and similar legislation in Scotland and Ireland, Disability Discrimination Act and Electricity at Work Regulations
• knowledge of the different types of fire detection systems and latest alarm technology including their principles of operation
• understanding of the layout of a fire alarm system including specific references to power supplies, wiring and cabling
• appreciation of the testing and certification requirements
• an understanding of the differences between simple and complex premises

Programme

Course content will cover:

• legislation and regulations affecting fire detection and alarm systems
• general principles and terminology
• fundamentals of fire risk assessment
• principles of fire science
• smoke behaviour
• types of fire alarm systems and principles of operation
• types of detectors and how they work
• audible and visual alarms
• wiring and cabling of systems
• power supplies
• zoning
• testing and certification requirements
• false alarms
• schematics and design drawings
• responsibilities of the designer, installer, commissioner, servicing and maintenance staff

Assessment of learning

Knowledge will be continually assessed throughout each module using short tests and exercises to confirm levels of understanding

Certification

• Successful achievement of the in-course assessment will lead to an FPA/FSA Certificate. This course has been awarded 13 IFE CPD hours

Progression opportunities

• This course is a prerequisite for any individual wishing to take further pathway modules in the design, installation, commissioning or maintenance of fire detection and alarm systems. You can also progress onto a BTEC Award or Certificate.

This course helped identify and close ‘knowledge gaps’. I am better equipped to deal with consultations and design engineer meetings as a result.

Lloyd Morgan, Canterbury Christ Church University

Course Information

Duration: 2 days
FPA Members: £289.00 + VAT
Non-members: £329.00 + VAT

Price excludes the cost of accommodation. ECA members are entitled to the FPA Member price.

Book online at www.thefpa.co.uk

Pay 7 weeks in advance and get 10% OFF!
## Fire Detection & Alarm Systems for the Workplace

### Pathway 1 Modules

All pathway modules are preceded by the core module on pages 8-9. All courses are held at the FPA training venue, Moreton in Marsh. *ECA members are entitled to the FPA member price.

### Course Code & Title | Who will benefit | Learning outcomes | Programme | Duration | Cost* | Certification
--- | --- | --- | --- | --- | --- | ---
**M3A** Design Engineer | Designers of simple, conventional premises. Those with prior knowledge of BS 7671. | This course develops knowledge of BS 5839 Part 1. You will complete associated design exercises. | The course will:  
- apply the core module to design in simple, conventional premises and also cover:  
  - sections 1, 2, 3 and 5 to include interfacing, false alarms and certification  
  - interpretation of different types of architectural plans and symbols | 1 day |  
FPA Members £149 +VAT  
Non-members £189 +VAT | Design Engineer for Fire Detection & Alarm Systems in Simple Workplace Premises

**M3B** Design Engineer | Designers of complex premises including analogue addressable systems. Those who have completed M3A Designer or equivalent. | This course develops knowledge of BS 5839 Parts 1, 8 and 9; BS 7273 and BS 6266. You will complete associated design exercises. | The course will:  
- apply the core module to design in complex premises and also cover:  
  - review and reinforcement of radio and networks  
  - protocols - closed and open systems  
  - computer suites; IT  
  - hazardous areas  
  - BS 9999 | 1 day |  
FPA Members £149 +VAT  
Non-members £189 +VAT | Design Engineer for Fire Detection & Alarm Systems in Complex Workplace Premises

**M3C** Installation Engineer | Those who want to understand the basics of systems installation; must have completed the C&G 2351/2360/2330 or equivalent. | This course develops knowledge of BS 5839 Part 1; learning is formally assessed. | The course will:  
- apply the core module to installation in simple, conventional premises and also cover:  
  - practice and workmanship  
  - responsibilities of the installer  
  - reading building plans  
  - cabling | 1/2 day |  
FPA Members £79 +VAT  
Non-members £99 +VAT | Installation Engineer for Fire Detection & Alarm Systems in Simple Workplace Premises

**M3D** Installation Engineer | Those who want to develop competence as an installation engineer in simple premises; must have completed M3C Installer or equivalent for approved electricians. | This course builds upon M3C Installer developing more in-depth knowledge of BS 5839 Part 1. | The course will:  
- apply the core module to installation in simple, conventional premises and also cover:  
  - inspection and testing  
  - certification  
  - programming for analogue systems | 1/2 day |  
FPA Members £79 +VAT  
Non-members £99 +VAT | Installation Engineer for Fire Detection & Alarm Systems in Simple Workplace Premises

**M3E** Installation Engineer | Those who want to develop competence as an installation engineer working on more complex premises; must have completed M3D Installer or equivalent. | This course builds upon M3C and M3D Installer, developing more in-depth knowledge of BS 5839 Part 1 plus Parts 8, 9 and 6266. Learning is formally assessed. | The course will:  
- apply the core module to installation in complex premises and also cover:  
  - co-operation with other systems  
  - actuations  
  - hazard areas  
  - data networks  
  - interconnections i.e. lifts, magnlocks, access control, ARC connections, sprinklers | 1 day |  
FPA Members £149 +VAT  
Non-members £189 +VAT | Installation Engineer for Fire Detection & Alarm Systems in Complex Workplace Premises
### Fire Detection & Alarm Systems for the Workplace

**Pathway 1 Modules**

All pathway modules are preceded by the core module on pages 8–9.

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<th>Course Code &amp; Title</th>
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<th>Learning outcomes</th>
<th>Programme</th>
<th>Duration</th>
<th>Cost*</th>
<th>Certification</th>
</tr>
</thead>
</table>
| M3F Commissioning Engineer | Those who wish to be competent installation engineers for simple premises; must have completed M3D Installer or equivalent. | This course further develops knowledge of BS 5839 Part 1. Learning is assessed via a case study activity. | The course will:  
- apply the core module to commissioning in simple, conventional premises  
- extend learning from M3D  
and also cover:  
- the design certificate, install certificate and ‘as fitted’ drawing  
- commission, certification, acceptance, verification process and documentation  
- user handbook | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Commissioning Engineer for Fire Detection & Alarm Systems in Simple Workplace Premises |
| M3G Commissioning Engineer | Those who wish to be competent installation engineers for complex premises; must have completed M3E Installer and M3F Commissioner or equivalent. | This course reinforces and adds to knowledge of BS 5839 Part 1. Learning is formally assessed. | The course will:  
- apply the core module to commissioning in complex premises  
- extend learning from M3F  
and also cover:  
- device and address  
- cause and effect  
- BS 5839 Part 1 S5 in detail | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Commissioning Engineer for Fire Detection & Alarm Systems in Complex Workplace Premises |
| M3H Service Engineer | Those who want to be able to service systems for simple premises; should have previously completed an electrical safety module i.e. Safe Isolation. | This course further develops knowledge of BS 5839 Part 1. Learning is formally assessed. | The course will:  
- apply the core module to servicing in simple, conventional premises  
and also cover:  
- as fitted’ drawings, handbook  
- test equipment (excluding weekly)  
- section 6 including documentation and certification  
- false alarms reporting | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Service Engineer for Fire Detection & Alarm Systems in Simple Workplace Premises |
| M3I Service Engineer | Those who want to be able to service systems for complex premises; must have completed M3H Servicing or equivalent. | This course reinforces and adds to knowledge of BS 5839 Part 1. Learning is formally assessed. | The course will:  
- apply the core module to servicing in complex premises  
- extend learning from M3H  
and also cover:  
- false alarm monitoring, cause and effect, liaison  
- panel interface  
- periodic interval assessment  
- battery back-up systems (vented) | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Service Engineer for Fire Detection & Alarm Systems in Complex Workplace Premises |

All courses are held at the FPA training venue, Moreton in Marsh. *ECA members are entitled to the FPA member price.

All prices stated here relate to standalone courses without BTEC qualification.
Steps to your pathway modules:

Step 1: Complete Core Module M1A
Step 2: Select your area of interest
Step 3: Choose a module and dwellings type

Key:

- Simple premises
- Complex premises

Definitions:

**Simple domestic dwellings**
- single dwelling houses or shared housing with a floor area no greater than 200m² per floor

**Complex domestic dwellings**
- dwelling houses or shared housing with a floor area per storey greater than 200m² and 3 storeys or more;
- common areas of HMOs; NHS supported houses with either more than 6 residents and/or more than 3 storeys

Core Module M1A
Fundamentals of Fire Detection and Alarm Systems & Fire Legislation
see pages 8–9 for details

Installation & Commissioning

Installation Engineer
1 Day (page 16)

Commissioning Engineer
1/2 Day (page 18)

Servicing

Servicing Engineer
1/2 Day (page 18)

Design

Design Engineer
1 Day (page 16)

M4E / M4F
Installation Engineer
1 Day (pages 16 & 18)

M4G
Commissioning Engineer
1/2 Day (page 18)

M4H
Commissioning Engineer
1/2 Day (page 18)

M4C / M4D
Installation Engineer
1 Day (page 16)

M4G
Commissioning Engineer
1/2 Day (page 18)

M4A
Design Engineer
1 Day (page 16)

M4B
Design Engineer
1 Day (page 16)
## Fire Detection & Alarm Systems for Dwellings

Pathway 2 Modules

All pathway modules are preceded by the core module on pages 8–9.

### All courses are held at the FPA training venue, Moreton in Marsh. *ECA members are entitled to the FPA member price. All prices stated here relate to standalone courses without BTEC qualification.

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<th>Course Code &amp; Title</th>
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<th>Duration</th>
<th>Cost*</th>
<th>Certification</th>
</tr>
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| M4A  
Design Engineer | Design Engineers who design fire alarm installations for simple, domestic premises. Those with prior knowledge of BS 7671. | This course develops the knowledge of designers of fire alarm installation for dwelling houses to BS 5839 Part 6. You will complete associated design exercises. | The course will:  
- apply the core module to simple domestic dwellings  
- verification and certification  
- interpretation of product data  
- verification and certification | 1 day | FPA Members £149 +VAT  
Non-members £189 +VAT | Design Engineer for Fire Detection & Alarm Systems in Simple Domestic Dwellings |
| M4B  
Design Engineer | Designer Engineers who design fire alarm installations for complex domestic premises. Those who have completed M4A Designer or equivalent. | This course builds on previous knowledge of installation and develops understanding of design principles, operation and technology of domestic fire alarm systems in complex dwellings. You will complete associated design exercises. | The course will:  
- apply the core module to complex domestic dwellings  
- extend learning from M4A  
- domestic sprinkler systems  
- radio linked systems  
- networked systems  
- BS 5839 Part 1 requirements  
- mixed systems  
BS 5839 Part 1 requirements | 1 day | FPA Members £149 +VAT  
Non-members £189 +VAT | Design Engineer for Fire Detection & Alarm Systems in Complex Domestic Dwellings |
| M4C  
Installation Engineer | Installation Engineers who want to understand the basics of fire alarm installations for simple, domestic premises. Those with prior knowledge of BS 7671; must have completed the C&G 2351/2360/2330 or equivalent. | This course develops knowledge of the installation of fire alarms in simple dwelling houses to BS 5839 Part 6. | The course will:  
- apply the core module to installation in simple, domestic dwellings  
- practice and workmanship  
- test equipment | 1/2 day | FPA Members £149 +VAT  
Non-members £189 +VAT | Installation Engineer for Fire Detection & Alarm Systems in Simple Domestic Dwellings |
| M4D  
Installation Engineer | Those who want to develop competence as an installation engineer in simple domestic premises; must have completed M4C Installer or equivalent; for approved electricians. | This course develops depth of knowledge of installations in simple dwelling houses to BS 5839 Part 6. | The course will:  
- apply the core module to installation in simple, domestic dwellings premises  
- extend learning from MAC  
- electrical verification  
- advanced testing and certification requirements  
- systems installed in premises with conversions | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Installation Engineer for Fire Detection & Alarm Systems in Simple Domestic Dwellings |
| M4E  
Installation Engineer | Those who want to understand the basics of installation of fire alarms for complex dwellings. Those who have prior knowledge of BS 7671 and have completed M4C Installer. | This course builds on M4C Installers and introduces and develops knowledge of BS 5839 Part 6 including fire alarm technology of domestic systems in complex dwellings. | The course will:  
- apply the core module to installation in complex domestic dwellings  
- extend learning from MAC  
- verification and certification  
- electrical verification and certification  
- complex building structures and plans  
- domestic sprinkler systems  
- BSE systems  
- radio linked systems  
- networked systems  
- mixed systems  
- BS 5839 Part 1 requirements | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Installation Engineer for Fire Detection & Alarm Systems in Complex Domestic Dwellings |
### Fire Detection & Alarm Systems for Dwellings

#### Pathway 2 Modules

All pathway modules are preceded by the core module on pages 8–9. All courses are held at the FPA training venue, Moreton in Marsh. *ECA members are entitled to the FPA member price.

<table>
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<th>Course Code &amp; Title</th>
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<th>Learning outcomes</th>
<th>Programme</th>
<th>Duration</th>
<th>Cost*</th>
<th>Certification</th>
</tr>
</thead>
</table>
| M4F Installation Engineer | Those who want to develop competence as an installation engineer working on more complex premises; must have completed M4D installer or equivalent. | This course further develops the knowledge of installers of BS 5839 Part 6, including fire alarm technology of domestic systems in complex dwellings. | The course will:  
- apply the core module to installation in complex domestic dwellings  
- extend learning from M4C and M4D and also cover:  
  - verification and certification  
  - complex building structures and plans  
  - health and safety supervision  
  - domestic sprinkler systems  
  - BS 5839 Part 1 requirements  
- BSE systems  
- radio linked systems  
- mixed systems | 1/2 day | FPA Members £99 + VAT  
Non-members £79 + VAT | Installation Engineer for Fire Detection & Alarm Systems in Complex Domestic Dwellings |
| M4G Commissioning Engineer | Those who wish to be competent installation engineers for simple premises; must have completed M4D installer or equivalent. | This course develops knowledge of installation for engineers wishing to advance to commissioning. It builds on previous knowledge of BS 5839 Part 6 and introduces basic design aspects of commissioning practices and procedures for domestic fire alarm systems in simple dwellings. | The course will:  
- apply the core module to commissioning in simple domestic dwellings  
- extend learning from M4D and also cover:  
  - verification and certification  
  - electrical verification and certification  
  - relevant parts of BS 5839 Part 1  
  - fundamentals of fire alarm design  
  - ‘as fitted’ drawings  
  - documentation; building log books | 1/2 day | FPA Members £79 + VAT  
Non-members £99 + VAT | Commissioning Engineer for Fire Detection & Alarm Systems in Simple Domestic Dwellings |
| M4H Commissioning Engineer | Those who wish to be competent installation engineers for complex premises; must have completed M4F installer and M4G Commissioner or equivalent. | This course builds on previous knowledge of commissioning and BS 5839 Part 6. It develops understanding of design principles, commissioning practices and procedures for domestic fire alarm systems in complex dwellings. | The course will:  
- apply the core module to commissioning in complex domestic dwellings  
- extend learning from M4F and M4G and also cover:  
  - advanced testing, verification and certification requirements  
  - advanced fire alarm design  
  - BS 5839 Part 1 requirements  
- ‘as fitted’ drawings  
- documentation; building log books | 1/2 day | FPA Members £79 + VAT  
Non-members £99 + VAT | Commissioning Engineer for Fire Detection & Alarm Systems in Complex Domestic Dwellings |
| M4I Service Engineer | Those who want to be able to service systems for simple domestic dwellings; should have previously completed an electrical safety module i.e. Safe Isolation. | This course introduces knowledge of the servicing requirements of fire alarm systems in simple dwellings. | The course will:  
- apply the core module to servicing in simple domestic dwellings  
- extend learning from M4D and also cover:  
  - reading schematics and drawings  
  - service records and documentation  
  - false alarm reporting  
- ‘as fitted’ drawings  
- documentation; building log books | 1/2 day | FPA Members £79 + VAT  
Non-members £99 + VAT | Service Engineer for Fire Detection & Alarm Systems in Simple Domestic Dwellings |
| M4J Service Engineer | Those who want to be able to service systems for complex domestic dwellings; must have completed M4I Servicing or equivalent. | This course introduces new topics and further develops knowledge of BS 5839 Part 6 service requirements for domestic systems in complex dwellings. | The course will:  
- apply the core module to servicing in complex domestic dwellings  
- extend learning from M4I and also cover:  
  - advanced testing and certification requirements  
  - verification and certification  
  - cause and effect of false alarms  
  - BS 5839 Part 1 requirements  
- ‘as fitted’ drawings  
- documentation; building log books | 1/2 day | FPA Members £79 + VAT  
Non-members £99 + VAT | Service Engineer for Fire Detection & Alarm Systems in Complex Domestic Dwellings |
Emergency Lighting Pathway 3

Steps to your pathway modules:

Step 1: Complete Core Module M1A

Step 2: Select your area of interest

Step 3: Choose a module and premises type

Key:

- Simple premises
- Complex premises

Definitions:

Simple workplace premises

The occupants:
- are/will be awake
- are/will be familiar with the premises

The premises:
- will contain no hazardous process or storage risks
- nor have significant numbers of occupants present (under 60 staff and under 300 persons in public access buildings)

Example: Office and industrial premises, small shops, classroom areas of schools and colleges

Complex workplace premises

The occupants may:
- be asleep (other than single private dwelling house (SPDH) and blocks of individual flats)
- be unfamiliar with the premises

The premises may:
- contain hazardous process or storage risks
- cater for large numbers of occupants

Example: Larger shops and shopping centres, museums, leisure centres, other large assembly buildings, halls of residence, sleeping areas and boarding schools, hotels, hospitals, care homes, manufacturing plants, railway stations, airports.

Complex domestic dwellings

- dwelling houses or shared housing with a floor area per storey greater than 200m² and 3 storeys or more;
- common areas of HMOs; NHS supported houses with either more than 6 residents and/or more than 3 storeys

Core Module M1B

Fundamentals of Emergency Lighting
see pages 22–23 for details

- Installation, Commissioning & Verification
- Surveying
- Servicing
- Design

M2E Installation Project Manager ½ Day (page 26)

M2D Installation Engineer ½ Day (page 24)

M2F Installation Project Manager ½ Day (page 26)

M22C Installation Engineer ½ Day (page 24)

M2D Installation Engineer ½ Day (page 24)

M2G Commissioning & Verification Engineer ½ Day (page 26)

M2D Installation Engineer ½ Day (page 24)

M2B2 Surveying Engineer ½ Day (page 24)

M2B2 Surveying Engineer ½ Day (page 24)

M2J Service Engineer ½ Day (page 26)

M2J Service Engineer ½ Day (page 26)

M2A1 Design Engineer 1 Day (page 24)

M2B1 Design Engineer 1 Day (page 24)
Fundamentals of Emergency Lighting & Fire Legislation

Overview

All workplaces covered by the UK Fire Legislation have a requirement to safeguard the ‘safety of relevant persons.’ The legislation also states that ‘emergency routes and exits requiring illumination must be provided with emergency lighting of adequate intensity in the case of failure of their normal lighting.’ Approved Document B to the Building Regulations provides guidance as to when emergency lighting is necessary to satisfy this requirement.

This one day course will focus on the legal requirements for emergency lighting systems and also provide a review of the types of emergency lighting products and components and their principles of operation.

The course provides thorough coverage of the basics of emergency lighting and delegates who have successfully achieved this module may choose to undertake further pathway modules regarding the design, surveying, maintenance and installation of such systems.

Who will benefit?

• those whose work requires them to have an appreciation of the installation and operation of emergency lighting systems
• facilities managers
• architects and specifiers
• fire officers
• building control officers
• fire and rescue personnel
• building services engineers
• electrical contractors

Learning outcomes

You will develop:

• understanding of the legal framework requiring emergency lighting including the Fire Safety Order 2005 and Approved Document B
• an awareness of the different types of emergency lighting equipment including luminaire types, systems and linked addressable systems
• knowledge of British and European standards including correct locations of emergency lighting systems and of illuminance levels
• an appreciation of how to service and test such systems
• an awareness of risk analysis

Programme

The course includes:

• lighting principles, light distribution and its effects
• legislation and regulations affecting emergency lighting
• general principles and terminology
• classification of escape routes and areas
• emergency lighting systems, types and principles of operations
• requirements for fire safety signs
• current emergency lighting standards, codes of practice and their general requirements
• ICI guidance
• wiring systems
• sources of photometric data and how it is used
• basics of central emergency power systems
• fundamentals of testing and certification
• automatic testing systems
• maintenance requirements
• risk analysis concepts and principles

Assessment of learning

Knowledge will be continually assessed throughout each module using short tests and exercises to confirm levels of understanding

Certification

• Successful achievement of the in-course assessment will lead to an FPA/FSA Certificate.
• This course has been awarded 13 IFE CPD hours

Progression opportunities

• This course is a prerequisite for any individual wishing to take further pathway modules in the design, installation, commissioning or maintenance of fire detection and alarm systems. You can also progress onto a BTEC Award or Certificate.

I found the course to be extremely useful. The tutor was obviously very knowledgeable in the subject area. He delivered the course content in a professional manner.

John Pearce - Hochiki Europe Ltd

Course Information

Duration: 1 day
FPA Members: £149.00 + VAT
Non-members: £189.00 + VAT
ECA members are entitled to the FPA Member price.

Book online at www.thefpa.co.uk

Pay 7 weeks in advance and get 10% OFF!
<table>
<thead>
<tr>
<th>Course Code &amp; Title</th>
<th>Who will benefit</th>
<th>Learning outcomes</th>
<th>Programme</th>
<th>Duration</th>
<th>Cost*</th>
<th>Certification</th>
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</table>
| **M2A1** Design Engineer | Designers of conventional EL installations in simple premises. Those with prior knowledge of BS 7671. | This course develops knowledge of BS 5266 Parts 1, 7 and 8 and the basic principles, operation and technology of EL systems. You will complete associated design exercises. | The course will:  
* apply core module to design of simple, conventional premises and also cover:  
  - schematics  
  - building structures and architectural plans  
  - interfaces with BMS  
  - environmental considerations | 1 day | FPA Members £149 +VAT  
Non-members £189 +VAT | Design Engineer for Emergency Lighting in Simple Premises |
| **M2A2** Surveying Engineer | Surveyors of conventional EL installations in simple premises. Those with prior knowledge of BS 7671. | This course develops knowledge of BS 5266 Parts 1, 7 and 8 and the basic principles, operation and technology of EL systems. Completion of risk assessment exercise is included. | The course will:  
* apply the core module to surveying of simple, conventional premises and also cover:  
  - emergency lighting risk analysis concepts and principles  
  - risk analysis of installations in simple types of premises  
  - risk assessment checklist, completion & inspection certificates | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Survey Engineer for Emergency Lighting in Simple Premises |
| **M2B1** Design Engineer | Designers of systems for complex premises and those who have completed M2A Designer or equivalent. | This course develops knowledge of BS 5266 Parts 1, 7 and 8. You will complete associated design exercises. | The course will:  
* apply the core module to designing for complex premises and also cover:  
  - hazardous areas  
  - multi building complexes/sites  
  - high occupancy premises, HMOs, hotels, hospitals, factories  
  - radio linked systems | 1 day | FPA Members £149 +VAT  
Non-members £189 +VAT | Design Engineer for Emergency Lighting in Complex Premises |
| **M2B2** Surveying Engineer | Surveyors of complex premises and those who have completed M2A Surveyor or equivalent. | This course develops knowledge of BS 5266 Parts 1, 7 and 8; completion of risk assessment exercise. | The course will:  
* apply the core module to surveying in complex premises and extend learning from M2A Surveying and also cover:  
  - risk analysis of installations in complex types of premises  
  - risk assessment checklist, completion and inspection certificates for complex premises  
  - centrally supplied EL Battery systems  
  - system comparisons  
  - BS 50272-2 Working on DC systems | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Survey Engineer for Emergency Lighting in Complex Premises |
| **M2C** Installation Engineer | Installers of conventional EL installations in simple premises. Those with prior knowledge of BS 7671; must have completed C&G 2351/2360/2330 or equivalent. | This course develops knowledge of EL installers in BS 5266 Parts 1, 7 and 8 and the basic principles, operation and technology of EL systems. | The course will:  
* apply the core module to installation of systems in simple, conventional premises and also cover:  
  - comparison of system types  
  - schematics  
  - site documentation  
  - self contained luminaires and conversions | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Installation Engineer for Emergency Lighting in Simple Premises |
| **M2D** Installation Engineer | Installers of conventional EL installations in complex premises. Those who have prior knowledge of BS 7671. Those who have completed module M2C installer or equivalent. | This course develops knowledge of installers in EL systems, BS 5266 Part 1, 7 and 8, introduces Parts 2, 4 and 6 and the operation and technology of EL systems in complex premises. | The course will:  
* apply the core module to installation complex premises and also cover:  
  - hazardous areas  
  - multi building complexes/sites  
  - high occupancy premises, HMOs, hotels, hospitals, factories  
  - automatic testing systems safety & BSEN 52034  
  - radio linked systems | 1/2 day | FPA Members £79 +VAT  
Non-members £99 +VAT | Installation Engineer for Emergency Lighting in Complex Premises |
## Pathway 3 Modules

All pathway modules are preceded by the core module on pages 22-23.

### Course Code & Title
- **M2E Installation Project Manager**
- **M2F Installation Project Manager**
- **M2G Commissioning and Verification Engineer**
- **M2H Commissioning and Verification Engineer**
- **M2I Service Engineer**
- **M2J Service Engineer**

### Who will benefit
- Installation Project Managers who manage the commissioning and verification of conventional EL installations in simple premises. Those with prior knowledge of BS 7671. Those who have completed M2C Installer or equivalent.
- Installation Project Managers who manage the commissioning and verification of EL installations in complex premises. Those with prior knowledge of BS 7671. Those who have completed M2D and M2E Installer or equivalent.
- Commissioning and Verification Engineers who commission and verify EL installations in simple premises. Those with prior knowledge of BS 7671. Those who have completed M2D Installer and M2G Commissioner or equivalent.
- Commissioning and Verification Engineers who commission and verify EL installations in complex premises. Those who have completed M2D Installer and M2G Commissioner or equivalent.
- Service Engineers who service conventional EL installations in simple premises; should have previously completed an electrical safety module i.e. Safe Isolation.
- Service Engineers who service EL installations in complex premises. Those with prior knowledge of BS 7671. Those who have completed module M29 Servicing or equivalent.

### Learning outcomes
- This course develops knowledge of managing EL installation projects and reinforces EL installation, knowledge of BS 5266 Parts 1, 7 and 8.
- This course builds on and develops knowledge of managing EL installation projects and installation and reinforces EL knowledge of BS 5266 Parts 1, 7 and 8 and introduces Parts 2, 4 and 6.
- This course develops knowledge of commissioning and verification of EL installations, reinforces EL knowledge of BS 5266-1, 7, and 8 and develops understanding of EL systems and design.
- This course further develops and builds on knowledge of commissioning and verifying EL installations, reinforcing EL knowledge of BS 5266 Part 1 and introduces BS 5266 Parts 2, 4 and 6.
- This course develops knowledge of EL in BS 5266 Parts 1, 7 and 8 and introduces the servicing of EL systems in simple premises. Practical risk assessment examples and exercises will be completed.
- This course develops knowledge of EL. Service Engineers in BS 5266 Part 1 plus 2, 4 and 6 and builds on module M2I.

### Programme
- **M2E Installation Project Manager**
  - **The course will:**
    - apply the core module to installation project management of simple, conventional premises
    - extend learning from M2C
    - and also cover:
      - EL products & components comparisons
      - building structures & architectural plans
  - **Duration:** 1/2 day
  - **Cost:**
    - **FPA Members:** £79 + VAT
    - **Non-members:** £99 + VAT
  - **Certification:** Installation Project Manager for Emergency Lighting in Simple Premises

- **M2F Installation Project Manager**
  - **The course will:**
    - apply the core module to installation project management of complex premises
    - extend learning from M2D and M2E
    - and also cover:
      - testing principles
      - site documentation
      - radio linked systems
      - interface with BMS and FM software systems
  - **Duration:** 1/2 day
  - **Cost:**
    - **FPA Members:** £79 + VAT
    - **Non-members:** £99 + VAT
  - **Certification:** Installation Project Manager for Emergency Lighting in Complex Premises

- **M2G Commissioning and Verification Engineer**
  - **The course will:**
    - apply the core module to commissioning and verification of EL installations, reinforces EL knowledge of BS 5266-1, 7, and 8 and develops understanding of EL systems and design.
    - extend learning from M2C
    - and also cover:
      - design principles
      - limitations of EL products & systems
      - EL risk assessment
  - **Duration:** 1/2 day
  - **Cost:**
    - **FPA Members:** £79 + VAT
    - **Non-members:** £99 + VAT
  - **Certification:** Commissioning and Verification Engineer for Emergency Lighting in Simple Premises

- **M2H Commissioning and Verification Engineer**
  - **The course will:**
    - apply the core module to commissioning and verification of installations in complex premises
    - extend learning from M2D and M2G
    - and also cover:
      - BS 5266 Parts 2, 4 & 6
      - system testing principles and automatic testing systems
      - interface with BMS and FM software
  - **Duration:** 1 day
  - **Cost:**
    - **FPA Members:** £149 + VAT
    - **Non-members:** £189 + VAT
  - **Certification:** Commissioning and Verification Engineer for Emergency Lighting in Complex Premises

- **M2I Service Engineer**
  - **The course will:**
    - apply the core module to servicing of simple premises
    - servicing of mains lighting luminaries
    - risk assessment of servicing activity and premises
    - routine maintenance schedules, testing and certification
    - finding, interpreting and using suitable product installation data
    - verification
  - **Duration:** 1/2 day
  - **Cost:**
    - **FPA Members:** £79 + VAT
    - **Non-members:** £99 + VAT
  - **Certification:** Service Engineer for Emergency Lighting in Simple Premises

- **M2J Service Engineer**
  - **The course will:**
    - apply the core module to servicing of complex premises
    - extend learning from M2I
    - and also cover:
      - EL design
      - system testing principles and automatic testing systems
      - radio linked systems
  - **Duration:** 1/2 day
  - **Cost:**
    - **FPA Members:** £99 + VAT
    - **Non-members:** £99 + VAT
  - **Certification:** Service Engineer for Emergency Lighting in Complex Premises
**Customer Details**

Your name  
Position  
Company  
Address  
Postcode  
Telephone  
E-mail  
Date of Birth  
(BTEC only)  
FPA Membership Number  

**Course Details**

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<thead>
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<th>Module Code</th>
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Additional Information, e.g. dietary requirements or disabilities:  
Total fees £  
VAT £  
TOTAL £  

**Payment Details (Tick Box)**

- Enclosed is a cheque for the total cost of the order (payable to Fire Protection Association)  
- Please invoice. Our purchase order no is  
- Please debit card A/C no  
  Name on card  
  Issue No (Switch only)  
  Valid from / Expiry date / Security number (last three digits on reverse of card)  
  Please indicate card type VISA / SWITCH / SOLO / MAESTRO / DELTA / MAESTRO  

Please sign to confirm you have read our terms and conditions (available at www.thefpa.co.uk) and agree to adhere to them.

Signed:   Date: