

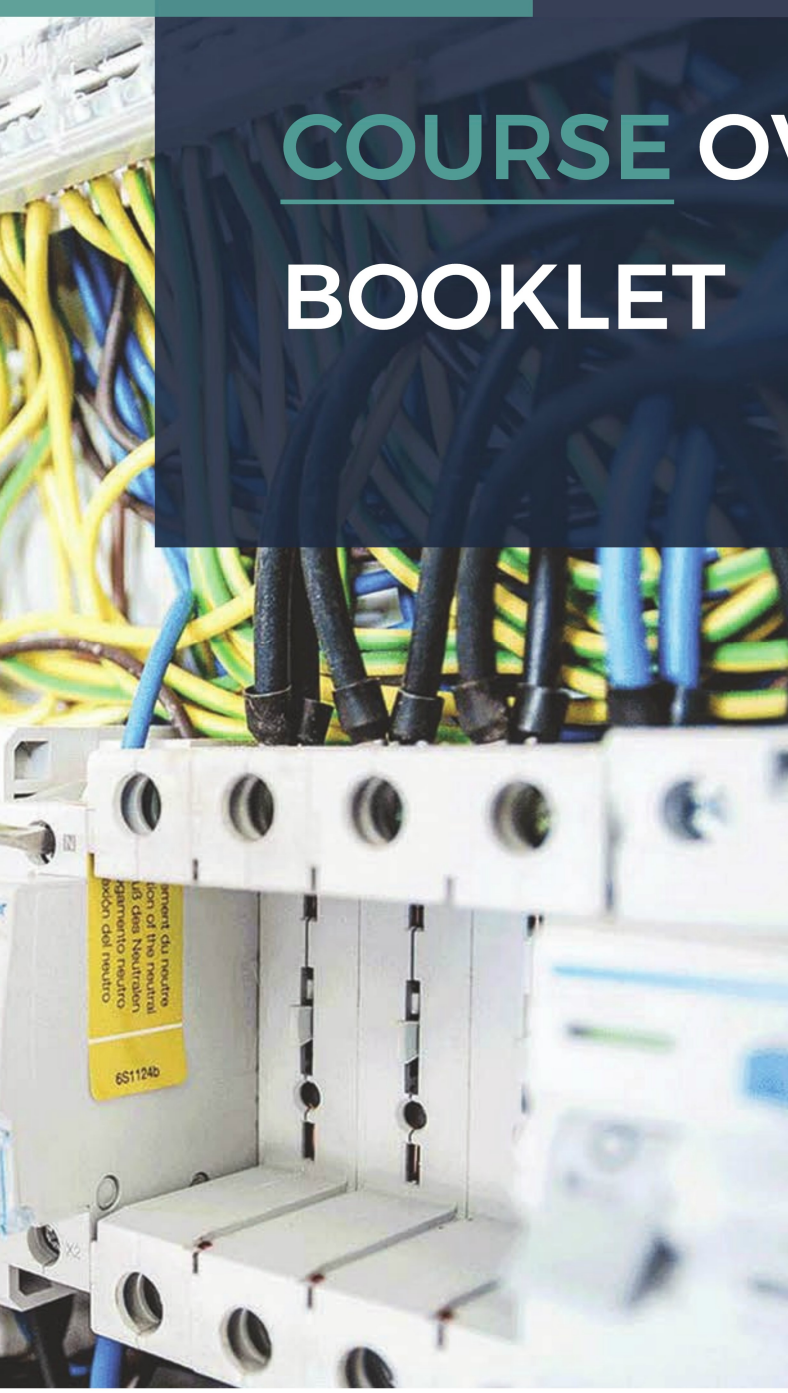
TECHNIQUE

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TECHNIQUE

For **ALL** your engineering training needs

AIR CONDITIONING & REFRIGERATION

We offer approved Air Conditioning and Refrigeration Training From specific courses like F-Gas to Brazing and Pipework to a full Total Air Con/Refrigeration Package Course. Both BESA and City & Guilds Accredited.

Our Air Conditioning and Refrigeration training courses are designed to be as practical as they possibly can be, with workshop time taking more than 70% of the course.

You will gain sufficient skills and techniques to install, pressure test, leak test, evacuate, dehydrate and commission typical air-conditioning units in accordance with the regulations and industry good practice.



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Course Overview - 10 Days

Our intensive 10, 15, or 20 day air conditioning and refrigeration training courses have been structured to meet the ever increasing demands on industry to meet safety, environmental, and legal requirements regarding installation, commissioning, service, and maintenance of both refrigeration and air conditioning systems including the electrical aspects of installation dependent upon course selection.

The courses are accredited with the BESA F-Gas qualification, or City & Guilds 2079, BESA Pipe work and Brazing - (commercial), along with an EAL Level 3 Unit - Maintenance of Refrigeration Systems from the EAL Level 3 Certificate in Engineering Technology (QCF) qualification.

Total Air Conditioning and Refrigeration Course - 10 days

Sufficient Skills, technical knowledge and techniques to install, pressure test, leak test, evacuate, dehydrate, and commission typical air conditioning units in accordance with the regulations and industry good practice. You will also gain the necessary skills to maintain, install and repair refrigeration plant.

- Single stage refrigeration systems
- Domestic refrigeration systems
- Various types of commercial refrigeration systems
- Various types of industrial refrigeration systems
- Performance characteristics
- Plant operating conditions

On completion of the 10 day course, candidates will understand the operation of a simple system and be able to carry out diagnostic, installation and repair work. The following qualifications will be undertaken during the course,

- BESA or City & Guilds F-Gas qualification
- BESA Pipework and Brazing
- EAL Level 3 Unit - Maintenance of Refrigeration systems

Air Conditioning Electrical Installer Course - 10 days

Prior to course commencement (on the second week of your Air Con & Refrigeration course), you will be provided with the necessary pre-course reading material which includes section reviews to check your understanding. The first week will work through electrical principles, the applicable wiring regulations and circuit constructional techniques. The second week will cover the inspection and testing procedures and applicable building regulations.

Additional Options

The 10 day course can be supplemented by one of two electrical courses dependant upon your anticipated career path or candidates looking mainly toward the installation of air conditioning systems in domestic/commercial properties, we offer an Air Conditioning Electrical Installation Course which upon successful completion provides you with the relevant qualifications to register with a Part P competent persons scheme, allowing you to work legally within a domestic property installing electrical circuits. There is no requirement to be Part P registered to work in a commercial premise, however the qualifications achieved are industry recognised and meet the technical knowledge required to carry out such work. Please also note the qualifications obtained would allow other electrical works to be carried out, so whilst installing an air conditioning system in a conservatory, you could also install the socket and the lighting circuits

COST

£1600 + VAT

DURATION

10 DAYS

PRE-REQUISITE

NONE

BOOKINGS:

Website: www.LearnTechnique.com

Telephone: 01246 802222

Email: enquiries@LearnTechnique.com

Course Overview - 15 Days

Our intensive 10, 15, or 20 day air conditioning and refrigeration training courses have been structured to meet the ever increasing demands on industry to meet safety, environmental, and legal requirements regarding installation, commissioning, service, and maintenance of both refrigeration and air conditioning systems including the electrical aspects of installation dependent upon course selection.

The courses are accredited with the BESA F-Gas qualification, or City & Guilds 2079, BESA Pipe work and Brazing - (commercial), along with an EAL Level 3 Unit - Maintenance of Refrigeration Systems from the EAL Level 3 Certificate in Engineering Technology (QCF) qualification.

Total Air Conditioning and Refrigeration Course - 10 days

Sufficient Skills, technical knowledge and techniques to install, pressure test, leak test, evacuate, dehydrate, and commission typical air conditioning units in accordance with the regulations and industry good practice. You will also gain the necessary skills to maintain, install and repair refrigeration plant.

- Single stage refrigeration systems
- Domestic refrigeration systems
- Various types of commercial refrigeration systems
- Various types of industrial refrigeration systems
- Performance characteristics
- Plant operating conditions

On completion of the 10 day course, candidates will understand the operation of a simple system and be able to carry out diagnostic, installation and repair work. The following qualifications will be undertaken during the course,

- BESA or City & Guilds F-Gas qualification
- BESA Pipework and Brazing
- EAL Level 3 Unit - Maintenance of Refrigeration systems

Refrigeration Electrics Maintenance Course - 5 Days

Prior to course commencement you will be provided with the necessary pre-course reading material which includes section reviews to check your understanding. During the five days you will work through electrical principles, the applicable wiring regulations and refrigeration electrical component identification, functionality and testing.

What will be gained in the extra 5 days?

- City & Guilds 2382-18 Level 3 18th Edition Wiring Regulations
- LOGIC Essential Electrics Certificate
- LOGIC Refrigeration Electrics Certificate

COST

£2400 + VAT

DURATION

15 DAYS

PRE-REQUISITE

NONE

BOOKINGS:

Website: www.LearnTechnique.com

Telephone: 01246 802222

Email: enquiries@LearnTechnique.com

Course Overview - 20 Days

Our intensive 10, 15, or 20 day air conditioning and refrigeration training courses have been structured to meet the ever increasing demands on industry to meet safety, environmental, and legal requirements regarding installation, commissioning, service, and maintenance of both refrigeration and air conditioning systems including the electrical aspects of installation dependent upon course selection.

The courses are accredited with the BESA F-Gas qualification, or City & Guilds 2079, BESA Pipe work and Brazing - (commercial), along with an EAL Level 3 Unit - Maintenance of Refrigeration Systems from the EAL Level 3 Certificate in Engineering Technology (QCF) qualification.

Total Air Conditioning and Refrigeration Course - 10 days

Sufficient Skills, technical knowledge and techniques to install, pressure test, leak test, evacuate, dehydrate, and commission typical air conditioning units in accordance with the regulations and industry good practice. You will also gain the necessary skills to maintain, install and repair refrigeration plant.

- Single stage refrigeration systems
- Domestic refrigeration systems
- Various types of commercial refrigeration systems
- Various types of industrial refrigeration systems
- Performance characteristics
- Plant operating conditions

On completion of the 10 day course, candidates will understand the operation of a simple system and be able to carry out diagnostic, installation and repair work. The following qualifications will be undertaken during the course,

- BESA or City & Guilds F-Gas qualification
- BESA Pipework and Brazing
- EAL Level 3 Unit - Maintenance of Refrigeration systems

Air Conditioning Electrical Installer Course - 10 days

Prior to course commencement (on the second week of your Air Con & Refrigeration course), you will be provided with the necessary pre-course reading material which includes section reviews to check your understanding. The first week will work through electrical principles, the applicable wiring regulations and circuit constructional techniques. The second week will cover the inspection and testing procedures and applicable building regulations.

What will be gained in the extra 10 days?

- City & Guilds 2382-18 Level 3 18th Edition Wiring Regulations
- City & Guilds 2393-10 Level 3 Applicable Building Regulations
- City & Guilds 2392-10 Level 2 Certificate in Fundamental Inspection, Testing & Initial Verification
- City & Guilds 2391-50 Level 3 Inspection and Testing (optional element at cost of £150+VAT)
- LOGIC Essential Electrics certificate

COST	DURATION	PRE-REQUISITE
£2929 + VAT	20 DAYS	NONE

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

TECHNIQUE

For **ALL** your engineering training needs

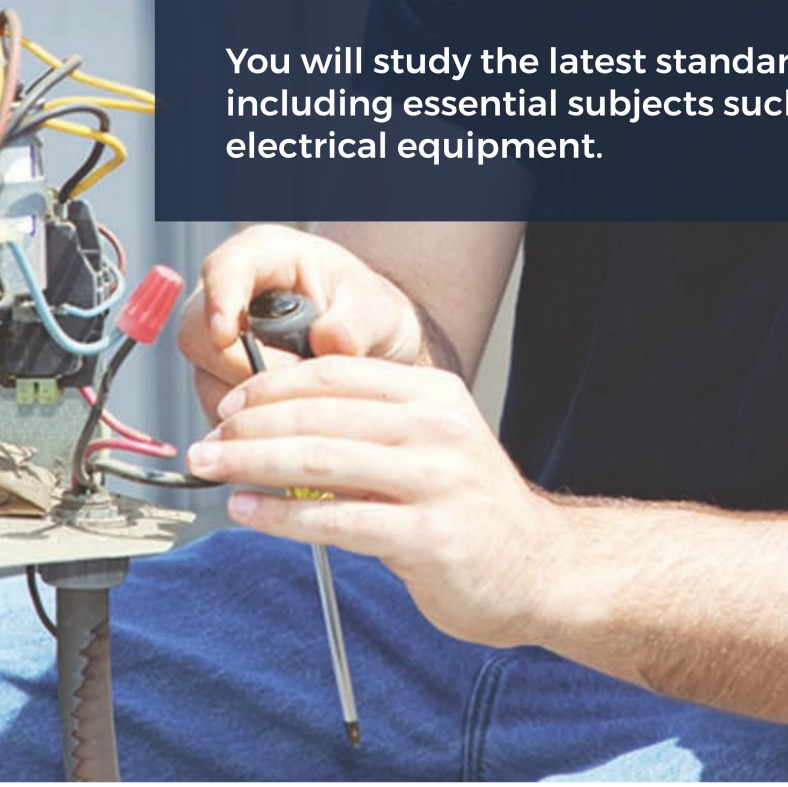
CITY & GUILDS

Technique Learning Solutions is a City and Guilds approved training centre offering Electrical, Air Con and Refrigeration Qualifications.

City and Guild course are aimed at anyone involved in the design, construction and inspection and testing of electrical systems, also a nationally recognised 'must have' qualification for companies seeking to recruit electricians.

We have been delivering 'City and Guilds Approved' courses for years and although it is mainly theory based, you can't beat real training in a real classroom. By training with other people in your class, you will benefit from being able to ask relevant questions as well as finding the answers to many questions from your fellow students.

You will study the latest standard of the Industry Standard regulations, including essential subjects such as safety, selection and erection of electrical equipment.



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Portable Appliance Testing -2 Days

This City and Guilds 2377-22 course is a one or two day 'practical' workshop aimed at anyone involved in the inspection and testing of portable electrical equipment, covering everything necessary to successfully achieve the City and Guilds 2377-22 level 3 examination, with certification awarded to successful candidates.

The City and Guilds 2377-22 course includes both a theory element and a practical element. At the request of our students we have now constructed a two-day City and Guilds 2377-22 course aimed at new starters to the testing of portable electrical equipment with minimal electrical knowledge, covering everything necessary to successfully achieve the City & Guilds examination, with certification awarded to successful candidates.

The examination is 1 hour 45 minutes multiple choice, open book PC based examination with instant results in addition to the practical assessment.

The course cost includes comprehensive notes based on the latest edition of the Code of Practice for in-service Inspection and Testing of Portable Electrical Equipment, examination entry fees, a buffet lunch, and refreshments throughout the day.

Recommended: Code of Practice for in-service Inspection and Testing of Electrical Equipment 4th Edition ISBN 978-1-84919-626-0

The code of practice, which is required for the examination, can be loaned from ourselves for the duration of the course and examination.

Candidates having a supervisory or managerial responsibility for overseeing the testing of portable electrical equipment either within their own company or as a service provider, have the option to undertake the 2377-32 component of this qualification, in addition to the normal 2377-22 component.

Management Requirements for the Maintenance of Electrical Equipment - City & Guilds 2377-32

The 2377-32 component examination is a multiple choice, open book PC based examination with instant results.

No further guided tuition is provided towards this component as sufficient coverage is given within the 1 day course, however, candidates are advised to refresh their knowledge of the Code of Practice before attending the examination.

A further examination fee of £50 + VAT is payable for this component.

COST	DURATION	PRE-REQUISITE
£250 + VAT	2 DAYS	NONE

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - City & Guilds 2382-15 Level 3 Certificate in the Requirements for Electrical Installations - BS 7671:2008

18th edition course is a 3 day short course aimed at anyone involved in the design, construction and inspection and testing of electrical systems, also a nationally recognised 'must have' qualification for companies seeking to recruit electricians.

The 18th edition course is intended to introduce the candidate to a working knowledge of the Wiring Regulations along with a brief overview of the Electricity at Work Regulations covering their statutory duties. Previous knowledge of the regulations is not assumed, however a fundamental knowledge of electrical principles is assumed. The 18th edition course covers Amendment 3 from January 2015. We have been delivering this course for years and although it is mainly theory based you can not beat real training in a real classroom. By training with other people in your class you will benefit from being able to ask relevant questions as well as finding the answers to many questions from your fellow students that you may not even thought of.

The examination is a 2 hour multiple choice, open book PC based examination with instant results

The course costs include examination entry fees, a buffet lunch and refreshments throughout the day.

Focus

You will study the latest standard of the IEE wiring regulations, including essential subjects such as safety, selection and erection of electrical equipment.

There are 7 key modules and current amendments:

- Section 1 – Scope, Object and Fundamentals
- Section 2 – Definitions
- Section 3 – Assessment of general characteristics
- Section 4 – Protection for Safety
- Section 5 – Selection and Erection of equipment
- Section 6 – Inspection & Testing
- Section 7 – Special Installations or locations

This course does include the latest amendments such as:

- Electromagnetic Disturbance
- Surge Protection
- Medical locations
- Operating and Maintenance Gangways

This classroom based course will show, teach and perfect you on how to reference and use the book for situations that you will encounter while working in the field.

COST
£380 + VAT

DURATION
3 DAYS

PRE-REQUISITE
Basic Electrical Knowledge

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - 2391-52

Overview

The new Testing and Inspection City & Guilds 2391-52 Combined Course qualification replaces and is improved on the former 2394/2395 that was previously available to electricians but has since been withdrawn.

The City & Guilds 2391-50 Initial Verification and Certification of Electrical Installations and City & Guilds 2391-51 Periodic Inspection, Testing and Certification of Electrical Installations has been designed to meet the needs of the electrical installation industry and is aimed at practicing electricians wish to carry out initial verification, inspection, testing, periodic inspection, condition reporting and certification of single and three phase electrical installations. We recommend that students attending this training course have an understanding of basic electrical theory and hold City & Guilds 2382 17th Edition Wiring Regulations.

- Requirements for completing the safe isolation of electrical circuits & installations
- Requirements for inspecting, testing, initial verification & recording the condition of electrical installations
- Requirements for completing initial verification & periodic inspection of electrical installations
- Differences between initial verification & periodic inspection
- Requirements for safe testing of electrical installations which have been put into service
- Requirements for testing before circuits are live
- Requirements for testing live installations
- Understanding and interpreting test results
- Requirements for the completion of electrical installation certificates, electrical installation condition reports and associated documentation
- Confirmation of safety of system & equipment prior to completion of inspection, testing and commissioning
- Carrying out inspection of electrical installations prior to them being put into service
- Ability to test electrical installations prior to them being put into service
- Produce electrical installation certificates, electrical installation condition reports with recording

In order to claim the full City & Guilds 2391-52 qualification, students must successfully complete the following:

- Completed during the course each student will sit a 2 hours online Multiple choice exam (open book)
- Then will have to re-attend and complete a Practical Assessment which is 4hrs and 20mins.

Practical Assessment Breakdown – 2391-52

- Task A – Visual Inspection – 30mins
- Task B – Periodic Inspection and Test – 2hrs and 30mins
- Task C – Short Answer Questions – 1hr and 20mins

To further support this course, we offer a 1 day practical workshop (at the cost of £120.00 Net VAT) available to candidates who have completed the course and require further 'hands on' practical experience prior to their practical exam. Most students who take this option elect to complete this the day before their practical assessment.

COST
£795 + VAT

DURATION
5 DAYS

PRE-REQUISITE
2382 (Recommended)

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Level 2 Fundamental Inspection, Testing & Initial Verification & Certification of Electrical Installations

This course is aimed at newcomers to inspection & testing of electrical installations, who possibly require certification to demonstrate technical knowledge & practical ability for entry into a 'Part P Competent Person's Scheme'

Certification is achieved on successful completion of both the multiple-choice, computer-based examination & the practical assessment.

This is a 4 day course for candidates who have a working knowledge of the 17th Edition Wiring Regulations, to City & Guilds 2382-15 level – we strongly recommend that City & Guilds 2382-15 is achieved prior to sitting this course, however, this is NOT an entry requirement.

There are 2 examinations involved:

- A 'closed book' multiple-choice, computer-based examination has 50 questions lasting 1 hour 40 minutes & having instant results.
- A practical assessment lasting approximately 2 hours arranged for a mutually convenient date & time for as soon as possible after the course has ended.

To further support this course, we offer a 1 day practical workshop available to candidates who have completed the course and require further 'hands on' practical experience prior to their practical exam. Most students who take this option elect to complete this the day before their practical assessment.

The course costs include examination entry fees, buffet lunch and refreshments throughout the day.

Recommended book list:

BS 7671: 2018 IET 18th Edition Wiring Regulations

Inspection and Testing Guidance Note 3 Incorporating Amendment No.1: 2011

Please note; both the above books can be loaned for the duration of the course.

COST
£545 + VAT

DURATION
4 DAYS

PRE-REQUISITE
17th Edition
Wiring Regs

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Level 3 Certificate in the Building Regulations for Electrical Installations in Dwellings - ½ Day

A 1/2 day short course aimed at anyone involved in electrical installations in dwellings. The Government approved Document P (electrical safety) came into effect on the 1st January 2005. For the first time the mainstream work of domestic installers became subject to the requirements and procedures associated with building control.

The examination is a 40 minute open book pc based assessment and will be held in the afternoon following the course.

The course costs include examination entry fees, buffet lunch and refreshments throughout the day.

Recommended book list:

Electricians Guide to the Building Regulations ISBN: 978 0 86341 862 4

The above publication which is required for the examination can be loaned by ourselves for the duration of the course and examination, or purchased at a discounted rate at our centre on the day of the course.

Domestic Electrical installers need to appreciate the requirements that apply to building work they carry out in connection with their electrical work, and the need to understand the way that building control works and the procedures that need to be followed.

This short course is to enable those involved in the installation of electrical systems within the domestic environment to gain an understanding of how electrical installations in dwellings must comply with all relevant Building Regulation and how electrical installations in dwellings can affect the building construction.

Please note that this qualification is only suitable for those practising their trade in England and Wales due to there being different regulations in Scotland and Northern Ireland.

COST
£160 + VAT

DURATION
½ DAY

PRE-REQUISITE
None

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Overview- EAL 4337/4338 Combined Course

This EAL Level 3 award is an alternative to the City & Guilds 2391-50,51,52. The objective of which is to provide you with an understanding of the practices/theory involved in the initial verification and commissioning of electrical installations and will cover both single and three phase systems.

The EAL Combined 4337/4338 course is ideal for people with limited experience of initial inspection, testing and verification and/or periodic inspection and testing of electrical installations. If you already work as an electrician, but have not carried out inspection and testing since qualifying, or you require to update before moving onto other qualifications, then this may be the course for you.

COURSE SCOPE:

- Introduction to qualification
- Initial verification
- Inspection of installations
- Safe isolation and testing
- Certification
- Commissioning
- Dead and live testing
- System safety
- Complete safe isolation
- Inspection and testing requirements
- Completion of periodic inspection
- Contrast of initial verification and periodic inspection
- Test results interpretation
- Completion of EICR reports
- Dead and live testing

THE EXAMS

You will complete an EAL online multiple choice exams. The online exam is open book so you will be able to take your course book into the exam with you.

The Practical assessments will be:

- Practical Assessment with the date to be arranged after completion of the course
- Three phase installation commissioning assessment
- Earth loop impedance testing assessment
- Insulation resistance testing assessment
- Initial inspection assessment
- Periodic inspection assessment
- Periodic inspection and testing assessment

Recommended reading - can be loaned for duration of course:

- BS 7671:2018 IET 18th Edition Wiring Regulations

COST
£795 + VAT

DURATION
5 DAYS

PRE-REQUISITE
2382 (Highly recommended)

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

TECHNIQUE

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ELECTRICAL

We specialize in electrical qualifications from building regulations to industrial, commercial, and domestic total course packages. We take you from no previous knowledge to a fully qualified Domestic/Commercial and Industrial Electrical Installer.

The training courses are designed to be as PRACTICAL as they possibly can be, with over 50% of the course time being practical, because we believe that the best way to learn is to do it!

Our courses are inclusive of examination registration entry fees, buffet lunch, stationary, and a FREE tool kit. All test instrumentation required for the course will be available for use during the course, should you require to purchase your own, advice will be readily available to assist you with your selection. These items can either be pre-ordered or purchased during the course.

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This Electrical Installer Course is designed for people wishing to upgrade their existing skills to be able to offer customers further services.

The course is aimed at tradesmen like plumbers, kitchen fitters, bathroom installers, etc who no longer want to pay an electrician to add sockets, move existing systems or add an extra light switch etc.

Upon completing this 2 week Electrical Installer Course, the candidate will have the appropriate knowledge and qualifications to enable them to join one of the Approved Part P membership schemes. This will then enable them to sign off their own work without having to get others involved. Certification Upon successful completion of the course the candidate will obtain the following qualifications:

- City & Guilds 2382-18 18th Edition Wiring Regulations Courses
- City & Guilds 2393-10 Part P Applicable Building Regulations *Optional in Scotland*
- City & Guilds 2391-52 - Level 3 Certificate - Initial Verification - Inspection & Testing

The course contains both practical elements and theoretical elements. Prior to commencement of the course, a basic electrical manual will be sent out to allow the candidate to do some prior reading.

Please note this training course is NOT designed for beginners. If you are wishing to carry out 'major works' such as the installation of a new circuit, consumer unit changes, partial/whole house rewires, you will need to be a skilled person electrically (Good practical theory knowledge & good practical wiring skills). If you do not consider yourself to meet these criteria, please see our TEC20 or TEC30 training courses, which will add further training to allow you to do the above work

This course is available at all 4 of our UK training centres.

Pre-Requisites

It is essential you have a good understanding of BS7671 IET Building Regulations. The course is intended for installers who have a clear understanding of electrical principles and practices of electrical installations. Essentially you will have worked in the electrical industry with an understanding of 3 phase systems.

COST
£1330 + VAT

DURATION
9 DAYS

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - Part 1 Module 4

Day 1 of the Industrial Electrical Maintenance Part 1 consists of:

- Electricity at Work Regulations 1989, requirements and implementation
- Working safely, including the importance of isolation procedures and lock out systems
- Switches and Push Buttons, an explanation of the various types of switches and push buttons, the terminology and electrical symbols which are used in industry today, along with practical testing of functionality
- Relays and Contactors, principles of operation, purpose and uses
- Circuit design using BS electrical symbols and ladder diagrams, simple retaining circuits
- Construction of the above circuit, demonstrating the techniques of cable termination.

Day 2 of the Industrial Electrical Maintenance Part 1 consists of:

- 3 phase induction motors, synchronous and asynchronous
- Description of the component parts of a 3 phase induction motor
- Demonstration of how a 3 phase rotating magnetic field is produced and how to reverse it
- Explanation of synchronous and asynchronous speed and slip
- Effect of the number of poles on motor speed
- Frame sizes
- Practical identification of various motors.

Day 3 of the Industrial Electrical Maintenance Part 1 consists of:

- Principles of 3 phase induction motor control systems
- Overload protection principles of operation and use
- Design and operation of a DOL (direct on line) starter
- Construction of a DOL starter
- Inspection and testing procedure for the above starter
- Motor testing procedures.

Day 4 of the Industrial Electrical Maintenance Part 1 consists of:

- DOL starter modifications
- Importance of updating documentation
- Design, construction and verification of reversing starter control and power circuits.

Day 5 of the Industrial Electrical Maintenance Part 1 consists of:

- Star delta starters, principles of operation and uses
- Design, construction and verification of star delta starter control and power circuits.

COST

£625 + VAT

DURATION

5 DAYS

PRE-REQUISITE

Understanding Of Basic
Electrical Principles (MOD1)

BOOKINGS:

Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - Total Electrical 20 (4 week) & Total Electrical 30 (6 weeks)

Overview

Our comprehensive Total Electrical 20 training course fully meets the certification requirements of Part P schemes and are aimed at non-electrical and electrical persons wishing to upskill or retrain. The aim of the Total Electrical 20 training courses is to provide a level of competence, which will allow work to be safely and efficiently carried out on Electrical Equipment and Systems all within a 4 week period. Should you wish to advance your knowledge even further, you can also opt for our 6 week course known as Total Electrical 30. This will provide you with additional modules to enhance your existing skills and therefore widen your market.

The 4 week Total Electrical 20 training course gives you the foundation knowledge you need to commence working as a domestic electrician. It is a mixture of both practical work and theoretical study, with the emphasis being put on as much practical as possible.

The Total Electrical 20 training courses are designed to be as PRACTICAL as they possibly can be, with over 50% of the course time being practical, because we believe that the best way to learn is to do it!

Total Electrical 20 - 4 week course composition

- City & Guilds – Fundamental Foundations Electrical Principles & Practices (MOD1)
- City & Guilds – Electrical Installation Practices for Domestic Dwellings (MOD2)
- City & Guilds 2377-22 Portable Appliance Testing
- City & Guilds 2382-18 18th Edition Wiring Regulations
- City & Guilds 2393 – Building Regulations
- City & Guilds 2392 – Fundamental Inspection & Testing
- City & Guilds 2391-52 – Inspection and Testing

Total Electrical 30 - Additional Modules

- LOGIC Essential Electrics
- LOGIC Central Heating Controls Wiring and Fault Finding
- Domestic Burglar Alarm Systems
- BS 5389 Fire/Smoke Alarm Systems
- BS 5266 Emergency/Escape Lighting
- Questions and Answers; Tooling and Business Strategy

The above courses are inclusive of examination fees, buffet lunch, stationery, course notes and a FREE tool kit for you to keep. Although all the publications and test instruments required for the course will be available for use during the course, should you wish you purchase your own, advice will be readily available to assist you with your selection.

COST

20 day: £2525 + VAT
30 day: £3535 + VAT

DURATION

20/30 DAYS

PRE-REQUISITE

None

BOOKINGS:

Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - 10 Days

This industrial electrical maintenance course is designed to enable candidates who have a small amount of electrical knowledge to gain recognised qualifications and skills to enable them to enter an industrial environment and work as a industrial electrician. The industrial electrical maintenance course will include a large amount of practical, enabling the candidate to install, fault find, design and wiring up control panels, using a variety of different methods.

The aim of the industrial electrical maintenance course is to provide solid foundations upon which the participant will be able to build and develop. Emphasis is given to providing the necessary skills, which will allow the participant to carry out routine electrical tasks. It is also made clear that a participant needs to identify and know their own limitations, allowing tasks to be carried out in a safe manner, not giving rise to danger.

Level 3 National Certification is included with the first 10 days of the course, it enables the candidate to identify the principles applied to, the processes involved and the components used in the construction of Electrical Panels for Engineering Applications and the techniques used in inspection, testing, and commissioning, of electrical panels and associated equipment. You will gain knowledge in the following areas:

- Understand the relevant statutory and non-statutory legislation associated with design, construction & application of electro technical panels
- Understand safe systems of working on electro technical panels
- Understand how to interpret drawings, diagrams, specifications & manufacturers data to locate, position, install & connect wiring systems, components, wiring enclosures & equipment
- Understand how to select the appropriate tools & equipment to carry out the panel build
- Understand how to interpret drawings, diagrams, specifications & manufacturers' data & to select appropriate working methods & procedures using tools, equipment & instruments to refurbish, maintain & repair electro technical panels
- Understand how to select appropriate working methods & use tools, equipment & instruments for the testing & commissioning of electro technical panels

Summary

On successful completion of the TIEM 10 training course, candidates will have obtained the Level 3 Electrical Panels for Engineering Applications & the Techniques Used in Inspection, Testing & Commissioning of Electrical Panels & Associated Equipment qualification, which is ideally suited for candidates wishing to enter the Industrial Maintenance Electrical Environment.

COST
£1250+ VAT

DURATION
10 DAYS

PRE-REQUISITE
Basic Electrical Knowledge

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - 15 Days

This industrial electrical maintenance course is designed to enable candidates who have a small amount of electrical knowledge to gain recognised qualifications and skills to enable them to enter an industrial environment and work as a industrial electrician. The industrial electrical maintenance course will include a large amount of practical, enabling the candidate to install, fault find, design and wiring up control panels, using a variety of different methods.

The aim of the industrial electrical maintenance course is to provide solid foundations upon which the participant will be able to build and develop. Emphasis is given to providing the necessary skills, which will allow the participant to carry out routine electrical tasks. It is also made clear that a participant needs to identify and know their own limitations, allowing tasks to be carried out in a safe manner, not giving rise to danger.

Level 3 National Certification is included with the first 10 days of the course, it enables the candidate to identify the principles applied to, the processes involved and the components used in the construction of Electrical Panels for Engineering Applications and the techniques used in inspection, testing, and commissioning, of electrical panels and associated equipment. You will gain knowledge in the following areas:

- Understand the relevant statutory and non-statutory legislation associated with design, construction & application of electro technical panels
- Understand safe systems of working on electro technical panels
- Understand how to interpret drawings, diagrams, specifications & manufacturers data to locate, position, install & connect wiring systems, components, wiring enclosures & equipment
- Understand how to select the appropriate tools & equipment to carry out the panel build
- Understand how to interpret drawings, diagrams, specifications & manufacturers' data & to select appropriate working methods & procedures using tools, equipment & instruments to refurbish, maintain & repair electro technical panels
- Understand how to select appropriate working methods & use tools, equipment & instruments for the testing & commissioning of electro technical panels

City & Guilds 2392

After completion of the 2 weeks of industrial electrical maintenance training, the candidate will have obtained a level 3 qualification, within the electrical wiring sector, this qualification is ideally suited for a candidate wishing to enter the Industrial Maintenance Electrical environment.

City & Guilds 2391-50

The City & Guilds 2391-500 electrical course has been designed to meet the needs of the electrical installation industry, and is aimed at practicing electricians who have not carried out

COST
£2045 + VAT

DURATION
15 DAYS

PRE-REQUISITE
Basic Electrical Knowledge

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - 20 Days

This industrial electrical maintenance course is designed to enable candidates who have a small amount of electrical knowledge to gain recognised qualifications and skills to enable them to enter an industrial environment and work as an industrial electrician. The industrial electrical maintenance course will include a large amount of practical, enabling the candidate to install, fault find, design and wiring up control panels, using a variety of different methods.

The aim of the industrial electrical maintenance course is to provide solid foundations upon which the participant will be able to build and develop. Emphasis is given to providing the necessary skills, which will allow the participant to carry out routine electrical tasks. It is also made clear that a participant needs to identify and know their own limitations, allowing tasks to be carried out in a safe manner, not giving rise to danger.

Level 3 National Certification is included with the first 10 days of the course, it enables the candidate to identify the principles applied to, the processes involved and the components used in the construction of Electrical Panels for Engineering Applications and the techniques used in inspection, testing, and commissioning, of electrical panels and associated equipment. You will gain knowledge in the following areas:

- Understand the relevant statutory and non-statutory legislation associated with design, construction & application of electro technical panels
- Understand safe systems of working on electro technical panels
- Understand how to interpret drawings, diagrams, specifications & manufacturers data to locate, position, install & connect wiring systems, components, wiring enclosures & equipment
- Understand how to select the appropriate tools & equipment to carry out the panel build
- Understand how to interpret drawings, diagrams, specifications & manufacturers' data & to select appropriate working methods & procedures using tools, equipment & instruments to refurbish, maintain & repair electro technical panels
- Understand how to select appropriate working methods & use tools, equipment & instruments for the testing & commissioning of electro technical panels

Programmable Logic Controllers - 10 Days

During this part of the course, you will learn skills on programming, fault finding, modifying and using PLC programs. The course is designed to be as practical as possible, enabling the candidate to gain the maximum amount of exposure to 'real life' equipment. During the course we cover the manufacturers listed below, which are the most popular brands currently in use within the UK. (We can accommodate other manufacturers if required)

Level 3 National Certification is included within the PLC element of the course by enhancing the introductory week (PLC01) with a second week of the study and undertaking assessments. To achieve unit certification, candidates must be able to:

- Demonstrate an understanding of the internal architecture of PLCs, their applications and knowledge of the number systems they use
- Demonstrate an understanding of typical input and output devices used with PLCs, their selection and how they are interfaced to the PLC
- Investigate and display an understanding of the basic programming techniques used with PLCs
- Produce a correctly developed program for a PLC to control a specified process and document the completed program to a satisfactory standard
- Demonstrate an understanding of how to monitor PLC operation, force devices and fault find PLC controlled processes

COST
£2995 + VAT

DURATION
20 DAYS

PRE-REQUISITE
Basic Electrical Knowledge

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

TECHNIQUE

For **ALL** your engineering training needs

PROGRAMMABLE LOGIC CONTROLLERS

We offer first class PRACTICAL plc training courses using state of the art PLC systems and the latest software. These PLC's have been carefully selected to match the latest current trends in the industry.

We DO NOT use simulator software, our training is very much hands-on, allowing you the confidence when completing the course to work in the real world. You cannot gain this with simulators.

Presently 90% of the industry run with either Allen Bradley or Siemens S7 plc training, Why learn on something which isn't used in the real world? Don't get ridiculed in the real world, by having unusable theoretical skills. ALL our trainers are industry leaders, who are time served, experienced and highly qualified in the subject field, with a minimum of 20 years each in the industry.

We are the ONLY accredited centre to also offer industry recognized, City & Guilds qualifications in PLC, which is run in tandem to the EAL qualification. We are ISO 9001, ISO 14001 and OSHAS 18001 approved.



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Technical4Group

Course Overview - 10 Days

Our 10 day Programmable Logic Controllers courses are designed for new entrants into the PLC arena, whether you're looking to become a PLC engineer, maintenance engineer with PLC knowledge or currently working in an environment which utilises PLCs.

Our typical 10 day level 3 course usually covers 2 or 3 of the major manufacturers; Siemens S7, Allen Bradley and Mitsubishi (this can be amended to other manufacturers if you have a particular requirement).

The course aims to be 90% practical, as we believe the easiest way to learn is to do it! Every student works on their own dedicated training rig and computer, enabling you to get the most from the course. A full set of course notes and a USB drive full of other manuals is provided at the end of the course.

We can also cover a wide range of manufacturers including, but not limited to:

- Siemens Step 5 PLC Training (Using Step 5, Quadriga or Others)
- Allen Bradley PLC 3; 5 Training (AB6200 Software)
- RSLogix 5 PLC Training
- SLC PLC Training (RSLogix 500)
- ControlLogix PLC Training (RS Logix5000)
- MicroLogix PLC Training (RSLogix 500)
- S7-200 PLC Training (Step 7 Micro)
- S7-300 PLC Training (Step 7 or TIA Portal)
- S7-400 PLC Training (Step 7 or TIA Portal)
- Kuhnke PLC Training (Kubes)
- Omron PLC Training (Syswin)
- Modicon PLC Training (ProWorx and Others)
- Mitsubishi PLC Training (Medoc, GX Developer, GPP & Others)
- Toshiba PLC Training
- GE Fanuc PLC Training
- GEM 80 PLC Training
- Telemecanique PLC Training

Most other PLC manufacturer training undertaken.

We also cover a wide range of SCADA systems to enable engineers to modify and add to existing screens, fault find through systems, setup communications etc. We have a dedicated, purpose built training suite which is packed with the latest PLC technology and equipment. Every candidate will work on their own rig as we don't believe in sharing. All class sizes are kept small (8 maximum) to emphasize 1 on 1 time with the tutor.

To achieve unit certification, candidates must be able to:

- Demonstrate and understanding of the internal architecture of PLCs, their applications and knowledge of the number
- Demonstrate and understanding of typical input and output devices used with PLCs, their selection and how they are
- Investigate and display an understanding of the Basic Programming Techniques used with PLCs
- Produce a correctly developed program for a PLC to control a specified process and document the completed program to a satisfactory standard
- Demonstrate an understanding of how to monitor PLC operation, force devices and fault find PLC controlled processes

COST
£1784 + VAT

DURATION
10 DAYS

PRE-REQUISITE
None

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - 13 Days

We have an extensive range of PLC 13 training courses available covering all PLC manufacturers and levels of expertise from the complete novice to the advanced. All of our PLC 13 training courses can be tailored to your own requirements.

ALL our PLC 13 courses will be based on the relevant software and hardware. We aim to make ALL our courses as practical as possible, leading to 'real world' skills and not just theoretical skills.

We can also cover a wide range of manufacturers including, but not limited to:

- Siemens Step 5 PLC Training (Using Step 5, Quadriga or Others)
- Allen Bradley PLC 3; 5 Training (AB6200 Software)
- RSLogix 5 PLC Training
- SLC PLC Training (RSLogix 500)
- ControlLogix PLC Training (RS Logix5000)
- MicroLogix PLC Training (RSLogix 500)
- S7-200 PLC Training (Step 7 Micro)
- S7-300 PLC Training (Step 7 or TIA Portal)
- S7-400 PLC Training (Step 7 or TIA Portal)
- Kuhnke PLC Training (Kubes)
- Omron PLC Training (Syswin)
- Modicon PLC Training (ProWorx and Others)
- Mitsubishi PLC Training (Medoc, GX Developer, GPP & Others)
- Toshiba PLC Training
- GE Fanuc PLC Training
- GEM 80 PLC Training
- Telemecanique PLC Training

Most other PLC manufacturer training undertaken.

We also cover a wide range of SCADA systems to enable engineers to modify and add to existing screens, fault find through systems, setup communications etc. We have a dedicated, purpose built training suite which is packed with the latest PLC technology and equipment. Every candidate will work on their own rig as we don't believe in sharing. All class sizes are kept small (8 maximum) to emphasize 1 on 1 time with the tutor.

18th Edition Overview

The 18th edition course is a 3 day long course intended to introduce the candidate to a working knowledge of the Wiring Regulations along with a brief overview of the Electricity at Work Regulations covering their statutory duties. Previous knowledge of the regulations is not assumed, however a fundamental knowledge of electrical principles is assumed.

Certification

Upon successful completion of the course the candidate will obtain the following qualifications:

- EAL Level 3 - Programmable Logic Controllers
- City & Guilds 2382-18 18th Edition Wiring Regulations Courses

COST	DURATION	PRE-REQUISITE
£2050 + VAT	13 DAYS	None

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - 18 Days

We have an extensive range of PLC 18 training courses available covering all PLC manufacturers and levels of expertise from the complete novice to the advanced. All of our PLC 18 training courses can be tailored to your own requirements.

ALL our PLC 18 courses will be based on the relevant software and hardware. We aim to make ALL our courses as practical as possible, leading to 'real world' skills and not just theoretical skills.

We also cover a wide range of SCADA Systems to enable engineers to modify and add to existing screens, fault find through systems, set up communications etc.

What is Obtained/Achieved?

- Level 3 EAL award in Programmable Logic Controllers
- City & Guilds – Programmable Logic Controllers
- City & Guilds 2391-52 – Inspection and Testing
- City & Guilds 2382-18 – 18th Edition Wiring Regulations

We also cover a wide range of SCADA systems to enable engineers to modify and add to existing screens, fault find through systems, setup communications etc. We have a dedicated, purpose built training suite which is packed with the latest PLC technology and equipment. Every candidate will work on their own rig as we don't believe in sharing. All class sizes are kept small (8 maximum) to emphasize 1 on 1 time with the tutor.

Most other PLC manufacturer training undertaken.

18th Edition Overview

The 18th edition course is a 3 day long course intended to introduce the candidate to a working knowledge of the Wiring Regulations along with a brief overview of the Electricity at Work Regulations covering their statutory duties. Previous knowledge of the regulations is not assumed, however a fundamental knowledge of electrical principles is assumed

City & Guilds 2391-52 Inspection & Testing Overview

The City & Guilds 2391-52 Inspection & Testing electrical course has been designed to meet the needs of the electrical installation industry, and is aimed at practicing electricians who have not carried out inspection and testing since qualifying or who require some update of training before going on to other City & Guilds qualifications. Level 3 is ideal for people with limited experience of periodic inspection of electrical installations. if you are already working as an Electrician, but have not carried out inspection and testing since qualifying, or you require to update before moving into other qualifications, then this course will be right for you.

COST	DURATION	PRE-REQUISITE
£2400 + VAT	18 DAYS	None

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - Beginner

This Programmable Logic Controllers Beginner course aims to enable maintenance personnel to be able to understand the Programmable Logic Controller program, make minor modifications to the program and to fault find quickly using both software and printouts.

- Introduction to PLC Hardware
- Shortcuts Keys
- Format of Ladder Diagrams, CSF and Statement Lists
- Introduction to IEC 1131
- User of Timers & Counters
- Connection of field devices
- Special Functions & Blocks
- Program uploading and downloading
- Addressing and Device Number Systems
- Commonly used instructions
- Diagnosing faults using forced addressing
- Configuration, Addressing & Performance Criteria of CPU's
- PRactical Excercises on Plant Simulation Systems

COST
£875 + VAT

DURATION
5 DAYS

PRE-REQUISITE
None

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - Intermediate

This Programmable Logic Controllers Intermediate training course is aimed at personnel who already have some general experience of Programmable Logic Controllers but who wish to learn the idiosyncrasies of a specific model, or modify & expand existing programme codes.

- Networking protocols and configuration
- Programming Techniques
- Advanced Diagnostic Applications
- Analogue I/O
- High Level Instructions
- Special Modules i.e. High speed counters etc.
- Control Registers
- Practical Exercises on Plant
- Simulation Systems

COST
£875 + VAT

DURATION
5 DAYS

PRE-REQUISITE
Basic PLC Knowledge

BOOKINGS:
Website: www.LearnTechnique.com
Telephone: 01246 802222
Email: enquiries@LearnTechnique.com

Course Overview - Advanced

The following areas are designed to allow personnel to quickly determine the locations of faults on a PLC controlled plant, to develop their own programmes, and to monitor and fault find plant operation on both stand alone and networked systems.

The Programmable Logic Controllers Advanced course is designed for candidates who have specific objectives in mind.

- Local Area Networks
- Remote I/O Racks
- Interconnection with Scada
- Advanced Programming Instructions
- Communications Protocols
- Remote Monitoring & Control via modem etc
- Shift Register & Sequencer
- Register Read Write Commands
- Analogue I/O
- Error Codes, diagnosis
- Device Time Scans
- Network Interface Modules
- Alarm & Error Messages & Checking
- Interrupt & Fault Handling Routines
- Message & PID Control & Handling.



COST
£875 + VAT

DURATION
5 DAYS

PRE-REQUISITE
None

BOOKINGS:
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