

Apprenticeship standard (England only)

# Installation Technician/ Maintenance Technician

Industry: Electrotechnical

City & Guilds code: 5357

LARS number: 5



A City & Guilds Group Business

-  **Minimum duration: 42-48 months**
-  **Funding band: 15 (£27,000)\***
-  **Level 2 and 3**

\*Funding bands from May 2017

**On-programme learning:** Available

**End-point assessment (EPA):** This will be a specialised occupational competence test delivered by NET and open for reservations (AM2)

Electricians are trusted to safely install, maintain and repair electrical systems in industrial, commercial and domestic environments. Systems may include switchboards, motors, cables, fuses, thermal relays, fault current protection switches, heating, lighting, air-conditioning and metering equipment, as well as crime and fire alarm systems and renewable energy technologies.

The new standard replaces the 2357-13 and 2357-23 on the SASE framework.

## City & Guilds – helping you with an expert solution

There are four stages where we can work together to help your apprentices from the start through to successful completion of their training.



### Plan

Helping you plan and prepare for the new standards with a bespoke solution to make the most of your investment in apprentices.



### Attract

Simple online vacancy and candidate set up, TalentPortal can connect you to the talent you need to fill your apprenticeship vacancies.



### Deliver

High-quality, online and offline content to help draw out the skills, knowledge and behaviours to prepare apprentices for end-point assessment as well as tracking options to monitor performance.



### Assess

Support for you and your apprentices to prepare for end-point assessment by our first-rate, fully trained assessors. Our simple, flexible service meets the demands of your team and your partners.

## The apprentice journey



### 1 On-programme (deliver)

Training and development takes place during this part of the apprenticeship. It may include a qualification if set in the standard.

Formative assessment of skills, knowledge and behaviours is required in the delivery of the standard and this will be outlined in the assessment plan.

Apprentices have to reach a minimum level of maths and English set by the standard. If they've not previously achieved this, they'll need further study and support.

## 1 On-programme: what apprentices need to learn

On-programme is the learning phase for apprentices to pick up the skills, knowledge and behaviours set in the standard. Apprentices must complete 20% off-the-job training during on-programme. Specific rules govern this and it must take place in the apprentice's contracted hours. There is a mandatory Level 3 Electrotechnical Qualification and two occupational routes available in this apprenticeship.

### 1. Installation Electricians:

Will install, test understand and apply the principles of planning and selection for installing electrotechnical equipment and systems in buildings, structures and the environment.

### 2. Maintenance Electricians:

Will maintain electrical and electronic installations including automated production systems and apply the practices and procedures for planning and preparing to maintain electrotechnical systems and equipment.

As well as the skills needed for each routes, on-programme includes a wide variety of installation and maintenance tasks including: installing wiring systems; electrical principles in maintenance of electrical equipment; and legislation around testing and commissioning equipment.

Core behaviours for the standard are: team working; effective communications; a strong work ethic; and awareness of health and safety.

## Our resources and tools that support on-programme delivery

Our core content for this standard covers Prevent, British values, equality and diversity, and health and safety which gives you the basics to deliver the standard and satisfy regulators. It's a blend of e-learning and downloadable content.

We also have:



#### Mandatory qualification

Our Level 3 Electrotechnication Qualification (5357) includes online e-volve exams, which provide instant performance feedback for the learner and reduced administration for the provider.



#### Training manual

Give complete coverage of all core units, with a set of structured tasks, supported by clear, full-colour illustrations, minimised reflective writing and tick boxes, placing focus on capturing practical activities completed on site with step-by-step progression through the basic skills required by electricians.



#### Learning Assistant

Innovative and cost effective e-portfolio solution that lets you dramatically improve the delivery of their apprenticeship standards by tracking apprentices' progress online in real time. And helps authorise and evidences 20% off-the-job learning.



#### SmartScreen

Dedicated online resources that support tutors and assessors with delivery tools, and engaging materials for apprentices. The resource packs contain a range of materials including: schemes of work, lesson plans, handouts, worksheets, activity sheets, PowerPoint presentations and sample questions.



#### Guidance documents

- Handbooks containing the knowledge required for this occupation.
- Advice on gathering evidence for the practical standards and behaviours.
- Guidance on how to prepare evidence to contribute to the summative portfolio.

## Maths and English requirements

If your apprentices need to complete maths and English, our popular Functional Skills qualifications fit within apprenticeship programmes and cover the core maths and English requirement for the workplace and further study. We have an extensive support package available, including e-Functional Skills, and an online teaching and learning platform, which guides learners from an initial and a diagnostic assessment, through to being exam ready.

Find out more: [cityandguilds.com/functionalskills](https://www.cityandguilds.com/functionalskills)



## 2 Gateway

The employer and provider must sign off the apprentice as ready to move on to end-point assessment.



## 3 Assess

The end-point assessment must demonstrate that the apprentice can perform in the occupation in a fully competent, holistic and productive way.

The assessment will be graded if required by the standard.

The assessment organisation and assessor must be independent of, and separate from, the training provided by the provider and employer.



## 4 Apprenticeship certificate

On successful completion, the end-point assessment organisation will apply to the Education and Skills Funding Agency (ESFA) for the apprenticeship certificate. The certificate is sent to the apprentice's employer.

## 2 Gateway

To move on to EPA, the apprentice must pass the assessment for Level 3 Electrotechnical Qualification, (Installation) or (Maintenance), show evidence of having the relevant knowledge, skills and behaviours and achieve maths and English Level 2 (or equivalent) if not already achieved.

## 3 End-point assessment (EPA): how apprentices demonstrate their learning

EPA is the final stage that an apprentice goes through to complete their apprenticeship. The apprentice must demonstrate their learning to an independent end-point assessor.

For this standard, all apprentices must complete the AM2 (Electrotechnical Assessment of Occupational Competence). This single common assessment is externally set and marked by an independent body within an independent assessment structure. It must be taken at an approved AM2 test centre with specific test booths and /or test rigs used only for AM2 assessment.



### AM2

The AM2 will assess the apprentice's skills, knowledge and confirm behaviours against the theory and performance criteria within the standard. In the practical part, apprentices will perform a set of common tasks and procedures that a full-scope electrical operative might face when working in commercial or industrial premises as well as dwellings. In the theory section, there are 40 multiple-choice questions. Find out more at [netservices.org.uk](https://www.netservices.org.uk).

**Duration:** 16.5 hours, typically over 2.5 days.

## Our resources and tools that support end-point assessment

We are on the register of end-point assessment organisations and our EPA service includes support resource as well as flexibility around assessment delivery and a dedicated EPA team to support you.



### EPA preparation tool

Online content to help the apprentice feel ready for their EPA experience. Personalised to their confidence levels and the standard, they're sent free access details once they're registered with us for EPA.



### EPA team

Our dedicated EPA team is on hand to help with bookings and questions on anything from the assessment process to evidence portfolios.



### EPA pack and guidance

Let our support, including short videos and how to guides help you get to grips and stay on track with the EPA process.

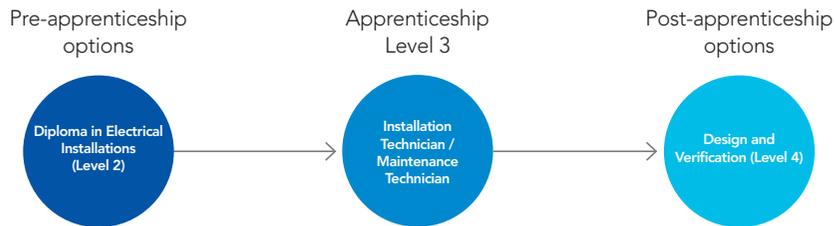


## 4 Apprenticeship certification

On successful completion of the AM2, National Electrotechnical Training Ltd (NET) will apply to the ESFA for apprenticeship certification.

## Progression with City & Guilds Group

This apprenticeship is part of our wider offering in the sector and you can develop new and existing talent with ILM management apprenticeships including: Team Leader/ Supervisor Level 3; Operations/Departmental Manager Level 5; Chartered Manager Degree Level 6 and the Senior Leader Master's Degree Level 7.



Developed with an employer group including: Institution of Engineering and Technology, Balfour Beatty, Barlows Electrical, Daly Limited, Darke & Taylor Ltd, Joint Industry Board for the Electrical Contracting Industry, National Grid, UPM Shotton Paper and SJD Associates Ltd.

## How our offer supports you:

### Supportive payment structure

When you choose us for EPA you pay a small registration fee and the balance once the EPA has taken place and results submitted.

### Personal support

Our Technical Advisors, Business Managers and Customer Service teams are on hand to help you with all aspects of apprenticeships.

### Specialist online tools

Our e-Functional Skills can boost maths and English; Skills Zone develops workplace behaviours and skills; and our e-portfolio, Learning Assistant, lets you manage assignments and track the 20% off-the-job training requirement.

### Events and webinars

We deliver a range of events and webinars run by industry specialists to advise and guide you, including regional networking and CPD events.

### More information

If you're a City & Guilds centre, visit Walled Garden or contact your Business Manager to find out prices and if any elements are extra to the package. If you're a new customer, contact [apprenticeships@cityandguilds.com](mailto:apprenticeships@cityandguilds.com) to find out more.

Or visit [cityandguilds.com/apprenticeships](https://cityandguilds.com/apprenticeships) for full information on our apprenticeship products and services. Visit [i-l-m.com/apprentice](https://i-l-m.com/apprentice) for information on management apprenticeships.