



Installation and maintenance electrician

Key information

Reference: ST0152

Version: 1.2

Level: 3

Typical duration: 54 months

Typical assessment period: 6 months

Minimum hours for compliance: 1066

Route: Construction and the built environment

Integration: None

Maximum funding: £23000

Date updated: 25/07/2025

Approved for delivery: 10 September 2015

Lars code: 5

EQA provider: National Electrotechnical Training (NET)

Review: this apprenticeship will be reviewed in accordance with our change request policy.

Apprenticeship summary

Occupational standard

EPA plan

Apprenticeship summary

Overview of the role

Install, maintain and repair electrical systems in industrial, commercial and residential environments.

Occupation summary

This occupation is found in the industrial, commercial, and residential construction, engineering, and power industries. The broad purpose of the occupation is to install, maintain and repair electrical systems in industrial, commercial and residential environments including communal areas.

Electricians may work on the installation, initial verification and testing, commissioning, and maintenance of low voltage (up to and including 1000 V or AC 1500 V DC) electrical and electronic equipment. Electricians can also work on the maintenance of electrical and electronic installations including automated production systems.

Once qualified, some electricians may choose to become self-employed contractors.

The broad purpose of the occupation is to install, maintain and repair electrical systems in industrial, commercial and residential environments including communal areas.

The scope of an Electrician's work encompasses using engineering knowledge and understanding to apply technical and practical skills. They contribute to the design, development, construction, commissioning, operation and maintenance of products, equipment, processes, of electric systems or services. Electrical equipment and systems may include switchboards, motors, cables, fuses, thermal relays, protective devices, heating, lighting, air conditioning and metering equipment as well as property and life safety installations and renewable energy technologies plus the installation and maintenance of electrical connections of new and emerging technologies supporting low carbon targets. The new technologies will include enhanced connectivity, green and renewable technologies including heating and cooling technologies, using where appropriate, Modern Methods of Construction including offsite and prefabricated components.

Electricians may work in both indoor and outdoor settings on a range of electrical equipment and systems. They can work on their own proficiently and work without immediate supervision in the most efficient and economical manner.

They may contribute to the design of electrical systems. They can set out jobs from drawings and specifications and requisition the necessary installation materials.

Electrical safety is an important area of Electricians' work. On completion of their work the electrical installation must be safe to use. Electricians must comply with statutory and non-statutory requirements including the Health and Safety at Work Act and the Electricity at Work Regulations (EAWR), the Waste Electrical and Electronic Equipment Regulations (WEEE), and Working at Height Regulations, BS 7671 and related codes of practice and industry guidance including but not limited to the Building Safety Act.

In their daily work, a worker in this occupation interacts with:

- Their customers who are usually the contracting company or they may be the end user of the services.
- The Team Leader or Area Manager as well as personnel responsible for materials storage and supply if they work in an organisation.
- Workers in other construction trades who may be working on the same site at the same time.
- Building materials suppliers, merchants, small business support, and others if they are self-employed.
- An electrician will sometimes work within a team or supervise a small team and may often be accompanied an apprentice.

An employee in this occupation will be responsible for completing their own work to specification, with minimal if any supervision, ensuring they meet set deadlines. They may be solely responsible for company property such as tools and work vehicles for transporting materials such as company vans. They will know how to operate within the limits of their own competence and when and from whom to seek help when needed.

Key requirements for successful electricians include professionalism, high regard for client satisfaction and safety prioritisation throughout the job from inception, proposing solutions including design, providing quotations, undertaking work, commissioning and handover.

Typical job titles include:

Electrician

Installation electrician

Maintenance electrician

End-point assessment summary

ST0152, Installation and maintenance electrician level 3

This is a summary of the key things that you – the apprentice and your employer need to know about your end-point assessment (EPA). You and your employer should read the EPA plan for the full details. It has information on assessment method requirements, roles and responsibilities, and re-sits and re-takes.

What is an end-point assessment and why it happens

An EPA is an assessment at the end of your apprenticeship. It will assess you against the knowledge, skills, and behaviours (KSBs) in the occupational standard. Your training will cover the KSBs. The EPA is your opportunity to show an independent assessor how well you can carry out the occupation you have been trained for.

Your employer will choose an end-point assessment organisation (EPAO) to deliver the EPA. Your employer and training provider should tell you what to expect and how to prepare for your EPA.

The length of the training for this apprenticeship is typically 54 months. The EPA period is typically 6 months.

The overall grades available for this apprenticeship are:

- fail
- pass

When you pass the EPA, you will be awarded your apprenticeship certificate.

EPA gateway

The EPA gateway is when the EPAO checks and confirms that you have met any requirements required before you start the EPA. You will only enter the gateway when your employer says you are ready.

The gateway requirements for your EPA are:

- achieved English and mathematics qualifications in line with the apprenticeship funding rules
- passed any other qualifications listed in the occupational standard

For the installation and maintenance electrician, the qualification required is:

Electrotechnical Apprenticeship Qualification

Assessment methods

Behaviours validated by employers

Behaviours will be validated by employers on programme.

Observation with questions

You will be observed for an independent assessor completing your work. It will last at least 17 hours.

Multiple-choice test

You will complete a multiple-choice test. It will be open book, meaning you can have access to some books or reference materials.

The test will have 45 multiple-choice questions. You will have 90 minutes to complete it.

Who to contact for help or more information

You should speak to your employer if you have a query that relates to your job.

You should speak to your training provider if you have any questions about your training or EPA before it starts.

You should receive detailed information and support from the EPAO before the EPA starts. You should speak to them if you have any questions about your EPA once it has started.

Reasonable adjustments

If you have a disability, a physical or mental health condition or other special considerations, you may be able to have a reasonable adjustment that takes this into account. You should speak to your employer, training provider and EPAO and ask them what support you can get. The EPAO will decide if an adjustment is appropriate.

Professional recognition

This apprenticeship aligns with Institution of Engineering and Technology (IET) for Technician Member (TMIET)

Please contact the professional body for more details.

This apprenticeship aligns with The Electrotechnical Joint Industry Board for ECS Gold Card. As part of the application process the appropriate Health and Safety components will be recognised.

Please contact the professional body for more details.

Version log

Version	Change detail	Earliest start date	Latest start date
1.2	Standard, End-point assessment plan and funding band revised	21/07/2025	Not set
1.1	Standard, End-point assessment plan and funding band revised	03/09/2023	20/07/2025
1.0	Approved for delivery. The funding band for this standard has been reviewed and remains at £18000 (May-2018).	10/09/2015	02/09/2023

Crown copyright © 2026. You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. Visit www.nationalarchives.gov.uk/doc/open-government-licence