

# Engineering

## Electrician: Installation Electrician/Maintenance Electrician Level 3 Apprenticeship

### In Brief

#### Start Date / Duration

You can start an apprenticeship programme at any time throughout the year. This programme will take a minimum of 42 months to complete.

#### Entry Requirements

- You will need to be at least 16 years of age
- Four GCSEs at grade 4/C or above plus GCSE English (grade 4 or above) and Maths (grade 5 or above)
- You will need to find an employer to employ you as an apprentice. Please see our **Apprenticeship vacancies**. <https://www.barnsley.ac.uk/our-departments/apprenticeships/apprenticeship-vacancies/>

#### You will achieve

You will achieve:

- Level 3 NVQ in Electrical Installation Certificate (Standard)
- Achievement Measurement Certificate of Competency (AM2)
- Advanced Apprenticeship Certificate

### Course Overview

Electricians install, maintain and repair electrical systems in industrial, commercial and domestic environments. Electricians might work in both indoor and outdoor settings. Electrical equipment and 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. They are able to 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 are able to 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 systems must be safe to use. They must adhere to safe working practices without endangering themselves or others.

Installation Electricians work on the installation, testing, commissioning and maintenance of low voltage (less than 1000v) electrical and electronic devices and appliances.

Maintenance Electricians work on the maintenance of electrical and electronic installations including automated production systems. Duties include the supervision of the equipment, its maintenance and necessary repairs.

Please click [<https://www.instituteforapprenticeships.org/apprenticeship-standards/installation-electrician-maintenance-electrician/>] here for more information regarding the standard apprenticeship.

## Course Content

### Knowledge and Skills

Electricians will use engineering knowledge and understanding to apply their technical and practical skills. They will contribute to the design, development, manufacture, construction, commissioning, operation or maintenance of products, equipment, processes, systems or services. Electricians must

- Understand and apply the principles, practices and legislation for the termination and connection of conductors, cables and cords in electrical systems
- Understand and apply the practices and procedures for the preparation and installation of wiring systems and electrotechnical equipment in buildings, structures and the environment
- Understand and apply the principles, practices and legislation for the inspection, testing, commissioning and certification of electrotechnical systems and equipment in buildings, structures and the environment
- Understand and apply the principles, practices and legislation for diagnosing and correcting electrical faults in electrotechnical systems and equipment in buildings, structures and the environment
- Understand and apply the electrical principles associated with the design, building, installation and maintenance of electrical equipment and systems
- Oversee and organise the work environment.

In addition,

Installation Electricians must:

- Understand and apply the principles of planning and selection for the installation of electrotechnical equipment and systems in buildings, structures and the environment.

Maintenance Electricians must:

- Understand and apply the practices and procedures for planning and preparing to maintain electrotechnical systems and equipment.

In all of these activities, Electricians must;

- understand and apply health and safety and environmental regulations, guidance notes and relevant codes of practice and the requirements of the current edition of the Wiring Regulations.

## How will I be assessed?

You will be assessed in college and in the workplace.

- Knowledge units: You will be assessed in college for your practical work and will take exams for all units.
- Practical units: You will be assessed in the workplace by your assessor to generate a portfolio of evidence to prove your competency

## What Equipment Will I Need?

You will be required to provide paper, writing materials, A4 ring binder file, extra wide dividers and clear plastic wallets.

## Where will I study?

You will study within the workplace and attend classes at Barnsley College's (STEM Centre) Science Technology Engineering and Maths Centre, Old Mill Lane, Barnsley, S70 2LA. The Achievement Measurement Certificate of Competency (AM2) will be held at an External Assessment venue.

## What can I do next?

Upon completion you could progress onto further study relating to your job role.

## How much does the course cost?

There is no cost to being an apprentice. All costs associated with your apprenticeship, including the cost of training and your salary, will be paid by your employer.

## Financial support

You may be eligible for assistance with expenses such as travel, books, equipment and childcare. For further information please contact the Student Services Team on +44 (0)1226 216 267.

## Extra information

### Contact the Apprenticeship Team

For further information please contact the team on 01226 216166 or email: [apprenticeships@barnsley.ac.uk](mailto:apprenticeships@barnsley.ac.uk) [mailto:apprenticeships@barnsley.ac.uk]

## Want to join Barnsley Sports Academy and the Sports Village?

Barnsley College has a range of sports opportunities for all students to take part in, gain

professional training and compete nationally and internationally. We also have a state-of-the-art fitness village, Honeywell Sports Village [<https://www.barnsley.ac.uk/shops-services/honeywell-sports-village/>] where students can make use of our fitness suite, spinning studio and classes for competitive rates. You don't have to be studying sport to get involved in the Sports Academy [<https://www.barnsley.ac.uk/our-departments/sport/sports-academy/>].

## **Additional Learning Support**

Our Additional Learning Support team can provide you with the support you need. Please contact them on +44 (0)1226 216 769.

## **Disclaimer**

Please note we reserve the right to change details without notice. We apologise for any inconvenience this may cause.

**Last updated:** 3rd August 2022

### **Want to apply?**

Visit <https://www.barnsley.ac.uk/apply> to get started

Call us on **01226 216 123**