

# **Electrical Engineering**

## What you'll do as an Electrical Engineer

Electrical engineers design, build and maintain electrical systems, machinery and equipment.

## As an Electrical Engineer you could:

- carry out feasibility studies for new technical developments
- draw up project plans and circuit diagrams using computer-assisted engineering and design software
- estimate costs and project timings
- coordinate the work of technicians and craftspeople
- test installations and systems, and analyse test data
- make sure projects meet safety regulations
- oversee inspection and maintenance programmes
- attend meetings, write reports and give presentations

## **Working Environment**

You could work in a factory, at a power station, in a workshop, at a research facility or in an office.

## How Will I Study?

You'll typically spend your full first year in a Gen2 Skills Centre for teaching and support sessions. In other years you will attend one day a week. You'll spend the rest of the time at your workplace.

#### **Duration**

36 - 42 months plus End Point Assessment, depending on the programme you study.

#### **Next Steps**

Following on from your level 3 apprenticeship you can move onto higher education. There is also the opportunity to apply for professional recognition with relevant professional institute.

## **Skills and Knowledge**

#### You'll need:

- Maths knowledge
- ICT skills
- design skills and knowledge
- to be thorough and pay attention to detail
- analytical thinking skills
- persistence and determination
- excellent verbal communication skills

# **Entry Requirements**

### You'll usually need:

5 GCSEs at grades 9 to 4 (A\* to C), or equivalent, including English and Maths, for an advanced apprenticeship.

You'll need to take a colour vision test.



# **Gen2 Apprenticeships**

Engineering Design and Draughtsperson Level 3 Advanced Apprenticeship
Engineering Fitter Level 3 Advanced Apprenticeship
Installation Electrician and Maintenance Electrician Level 3 Advanced Apprenticeship
Maintenance and Operations Engineering Technician Level 3 Advanced Apprenticeship
Science Industry Maintenance Technician Level 3 Advanced Apprenticeship