

# **Mechanical Engineering**

## What you'll do as a Mechanical Engineer

Mechanical engineers design, build and install machinery used in industries like power, engineering, transport and manufacturing.

## As a Mechanical Engineer you could:

- turn research ideas into technical plans, using computer aided design software
- test mechanical systems and analyse data to make improvements
- assess the safety of mechanical machinery and equipment
- oversee maintenance programmes in buildings, power stations and production plants

#### **Working Environment**

You could work in a factory, in a workshop, in an office or visit sites.

## 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**

With experience, you could move into senior project management roles, specialise in research and development or become an engineering consultant.

Following on from your apprenticeship you can move onto an Advanced or Higher-level apprenticeship. There may also be the opportunity to apply for professional recognition with relevant professional institute.

#### **Skills and Knowledge**

#### You'll need:

- maths knowledge
- knowledge of physics
- ICT skills
- design skills and knowledge
- to be thorough and pay attention to detail
- analytical thinking skills
- the ability to work well with others
- the ability to come up with new ways of doing things
- 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.



# **Gen2 Apprenticeships**

Engineering Operative - Mechanical Manufacturing Pathway Level 2 Intermediate Apprenticeship

Engineering Design and Draughtsperson Level 3 Advanced Apprenticeship

Engineering Fitter Level 3 Advanced Apprenticeship

Machining Technician Level 3 Advanced Apprenticeship

Maintenance and Operations Engineering Technician Level 3 Advanced Apprenticeship

Science Industry Maintenance Technician Level 3 Advanced Apprenticeship