## Engineering, Manufacturing and Maintenance Apprenticeships

# UNLOCK YOUR Potential



## WHAT IS ENGINEERING?

Engineering is behind everything, from your mobile phone to the clothes that you wear and even the can which contains your favourite drink. Every product has been researched, designed, developed, tested and in some cases made by an engineer.

Engineering plays a major part in a wide variety of industries such as automotive, medical, electronics and space exploration to name a few!

## WHAT IS AN ENGINEER?

An engineer is a problem solver who uses maths and science to build things, maintain things and turn things into reality.

Engineering can be an excellent career choice for someone that has the aptitude, a keen interest and a logical approach to problem solving. It will enable you to create, test and design things that solve the world's problems and it will offer endless growth opportunities. "I thoroughly enjoy my role working at the MRC in the estates team where the diversity of the work and the systems we maintain have enabled me to develop a broad understanding of Engineering theory whilst feeling like I am making a difference to the operation of the highly complex life science research unit."

Hareet – Building Maintenance Engineer – Level 3 Apprenticeship





"My role involved me fixing helicopters. They are really interesting machines and I am constantly learning new ways of solving problems and I meet very knowledgeable and interesting people. My ambition is to be an air crash investigator and so my apprenticeship is an excellent way to help me work towards that."

Alice – Mechanical Engineer – Level 3 Apprenticeship

## WHAT IS AN APPRENTICESHIP?

An apprenticeship is a brilliant way to kick-start your career and allows you to learn, gain experience and get paid. As an apprentice you would be employed by a company who commits to train you as part of your job or organisation in order to build your skills and knowledge.

An apprenticeship can take between one and four years to complete depending on the level of the qualification and your previous experience.

## WHO WE ARE AND WHAT WE DO

We are a training provider who works alongside employers across the UK to deliver apprenticeships within their businesses. We specialise in the delivery of engineering, manufacturing and maintenance apprenticeships working within a number of different sectors.

## See the back cover for more information about the recruitment process.

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## WHERE CAN AN APPRENTICESHIP TAKE YOU?

The engineering and manufacturing sectors have a rich history of using apprenticeships to bring talented people into the industry. Many apprentices progress into more senior roles using the skills and knowledge they gained during their training to make an impact, not only within the business they start in, but in the wider industry too.

## **JOB EXAMPLES**

#### MACHINIST - Apprentice Level: 2



Role detail: A machinist is someone who operates manual and CNC machine tools in order to produce a component or product. Equipment such as gear cutting machinery, vertical and horizontal

machining centres, lathes, multi-axis multifunctional machines and grinding machines might be used as part of their work.

**Industries:** Precision engineering, motorsport teams and their supply chain, manufacturing.

#### COMPOSITE TECHNICIAN - Apprentice Level: 3

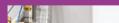


Role detail: Composite technicians produce highly detailed components or products using state of the art techniques from materials such as carbon fibre or resin. Their work includes

tooling, moulding, laying-up, curing, trimming, finishing, inspecting and testing the items produced, some of which may be one-off specialist pieces or large runs of multiple products.

**Industries**: Motorsport teams and their supply chain, medical, automotive, aerospace.

#### SCIENTIFIC INSTRUMENT TECHNICIAN - Apprentice Level: 4



Role detail: A Scientific

## THE Apprenticeship Journey

**STARTING AN** 

**APPRENTICESHIP** 

**AFTER YOUR** 

GCSES

**Companies** will typically

begin to recruit from January

with the intention to take on the apprentice once they

have finished school

in August.

**STARTING AN** 

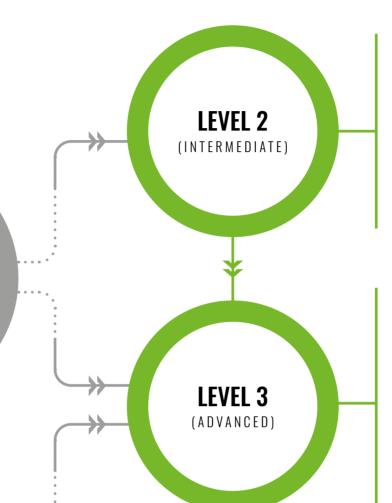
**APPRENTICESHIP** 

**AFTER YOUR** 

**A-LEVELS OR** 

**COLLEGE COURSE** 

Apprenticeships are an awesome way to progress your learning whilst also earning. You can start at a level 2 and work your way up or jump on at any point, depending on your prior learning and the role a company has employed you to do.



#### Minimum entry requirements: GCSE's 3-1 (D to G) OR BTEC L1 OR NVQ L1

**Example Apprenticeships:** 

Lean Manufacturing Operative / Science Manufacturing Process Operative / Engineering Operative

#### Minimum entry requirements:

L2 Apprenticeship (Engineering, Construction, Built Environment, IT, Manufacturing) **OR** GCSE's 9-4 (A\* to C) (Maths / Science (ideally triple science) / D&T / ICT / Computing / Engineering) **OR** BTEC L2 / NVQ L2 (Engineering, Construction & Built Environment, Science, ICT).

**Example Apprenticeships:** Engineering Fitter / Engineering Technician / Maintenance & Operations Engineering Technician

#### Entry requirements:

L3 Apprenticeship (Engineering, Construction, Built Environment, IT, Manufacturing) **OR** A levels (Maths / Physics / D&T / IT / Chemistry / Further Maths) **OR** BTEC L3 / NVQ L3 (Engineering / Construction & Built Environment / Science / ICT).

#### **Example Apprenticeships:**

Engineering Manufacturing Technician

**Similarly,** companies will start to recruit from January. However, there is more flexibility as people aged 18+ do not have to be in education

LEVEL 4

(HIGHER)

Level 5 is a Foundation degree with the



Instrument Technician is responsible for the assembly and testing of components, sub-assemblies and final product to agreed specifications, quality, and time frames.

They also manufacture components, fixtures and test equipment with the ability to read and understand technical drawings in order to deliver work to the correct specifications.

**Industries:** Scientific machinery manufacturing, additive manufacturing & 3D printing, space, medical, pharmaceutical, research.

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and therefore can start an apprenticeship at any time of the year.



ability to progress to higher education, including university degrees. Degree apprenticeships sit at level 6 or 7.

WHAT YOU NEED TO BE AN APPRENTICE

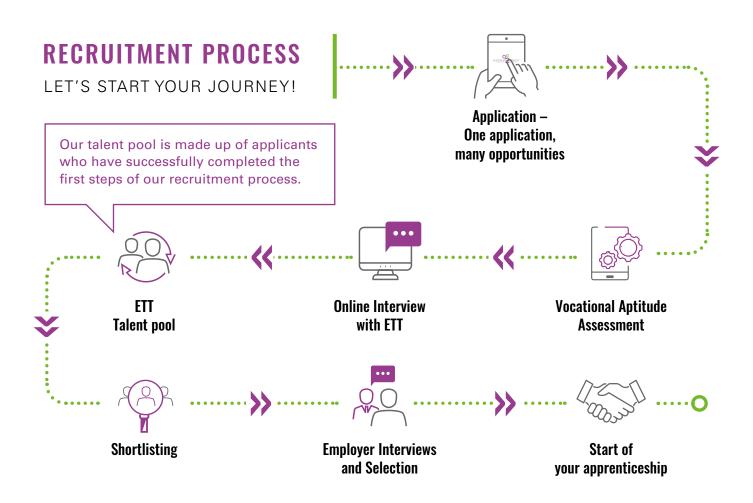




to learn



Commit to a full time Job





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