

# CAREERS ACTIVITIES LINKED TO KEY INDUSTRY SECTORS

ENGINEERING CAREERS ACTIVITY (KS3)





## SECTION 2 ROUTES INTO ENGINEERING

Watch this short video to help you understand the 3 x different entry routes you could take to join the ENGINEERING sector.

Lets us explore these routes in more details.

Known as Tech levels or T-levels, these include qualifications such as BTECs and NVQs in engineering, ICT and construction & the built environment.

Vocational courses prepare you for a particular job, industry or sector. They are often very practical and may include coursework assignments related to real-work scenarios, as well as links with employers. Vocational courses are o ered at di erent levels and can lead onto apprenticeships, higher education (university) and employment

Research and answer the following questions about the TECHNICAL route into Engineering.

1	Using the internet can you research and list the local colleges or training providers who o	er:
	T'level opportunities in Worcestershire?	

2. Can you read the document by following the link below and list 5 x <u>vocational qualifications</u> which might be of interest to you?

3.



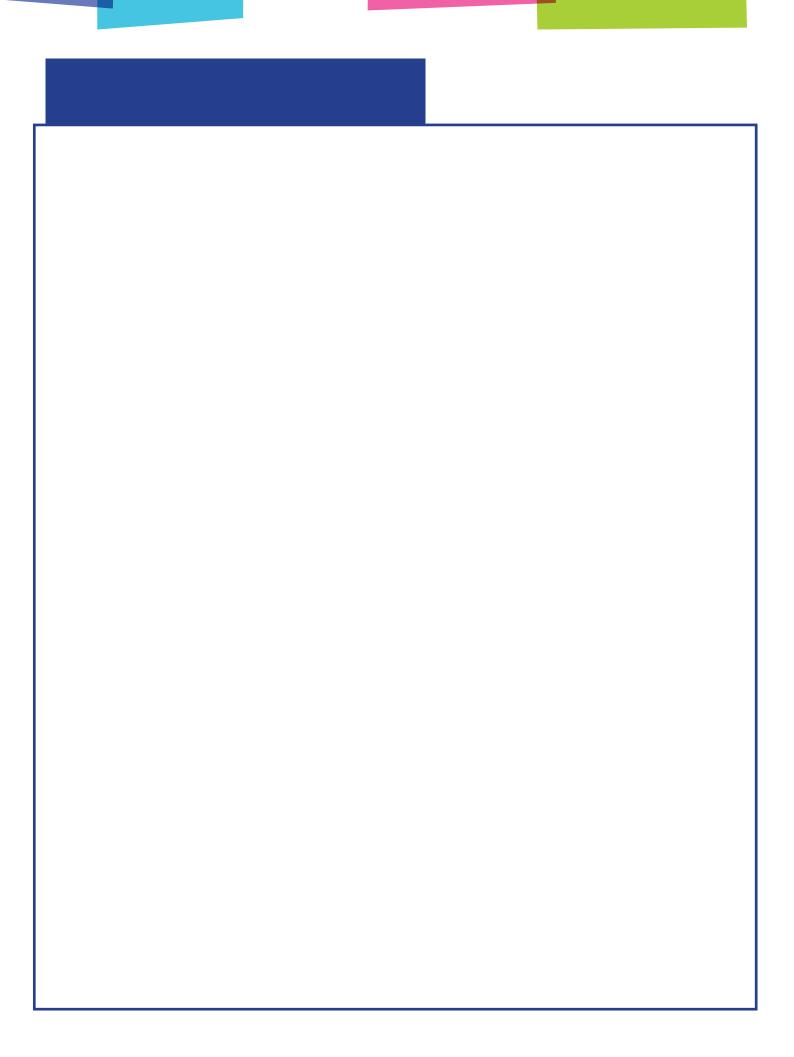
#### THE APPRENTICESHIP ROUTE

Apprenticeships allow you to earn money, combining on-the-job training with study. They can open doors to a wide variety of engineering jobs and can be taken at dierent levels, including intermediate, higher and degree apprenticeships.

You will generally need a minimum of five GCSEs (or equivalent) including English, maths and science or technology subjects, often at grades 9 to 4 (A\* to C) due to competition for places.

Research and answer the following questions about the APPRENTICESHIP route into Engineering.

1.	Using this <b>document</b> can you explore and list 5 key facts about engineering apprenticeships?
<b>2.</b>	Using the internet can you research and list some companies in Worcestershire that o er
	Engineering Apprenticeships?
	Can you also provide details of what they produce?
<b>3.</b>	What do you think are the benefits of choosing the APPRENTICESHIP ROUTE into
	Engineering?



#### **SECTION 2**

#### **EXPLORING JOB PROFILES**

To help you understand and obtain more information about a variety of these job roles you can begin to explore their "Job Profiles".

A job profile should give you key information about the role including entry routes, qualifications, potential earnings and the tasks the job involves.

Using this link can you explore the following <u>JOB PROFILES</u> and then answer these questions for each of the job roles?

#### **DESIGN ENGINEER**

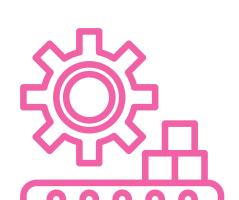
1. How many hours per week would you expect to work as a DESIGN ENGINEER?

2.

#### MANUFACTURING ENGINEER

1.	How many hours per week would you expect to work as a MANUFACTURING ENGINEER?
2.	Can you name the qualifications which might help you become a MANUFACTURING ENGINEER?
3.	What would the starting salary be for a fully qualified MANUFACTURING ENGINEER?
4.	Can you write a paragraph about the tasks you might be required to undertake as a MANUFACTURING ENGINEER?
5.	Can you list 3 x employers in Worcestershire where you could be employed as a MANUFACTURING ENGINEER?

Why not watch this short video about Craig Johnstone who is a Manufacturing Engineer working for Rolls-Royce.



### **STRUCTURAL ENGINEER**

1.	How many hours per week would you expect to work as a STRUCTURAL ENGINEER?
2.	Can you name the qualifications which might help you become a STRUCTURAL ENGINEER?
3.	What would the starting salary be for a qualified STRUCTURAL ENGINEER?
4.	Can you write a paragraph about the tasks you might be required to undertake as a STRUCTURAL ENGINEER?
5.	C