

EC 1 2



E G I E E I G

[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



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 different levels, including intermediate, higher and degree apprenticeships.

You will generally need a minimum of five GCSEs (or equivalent) including English, maths and



After completing your A-Levels, T-levels or equivalent, you may decide to go on to study engineering at university.

Undergraduate degree courses (BEng) normally last for 3 or 4 years while Masters courses (MEng) last for 4 or 5 years. Some courses involve a period of working in industry or a year abroad. Students can take a 'general engineering' degree or they might decide on a particular type of engineering, for example civil engineering, electronic engineering, design engineering, mechanical engineering or one of the many other types of engineering.

You normally need to have studied maths and physics (or chemistry for chemical and biomedical engineering), or a related vocational course to Level 3, in order to apply to engineering degrees at university

Research and answer the following questions about the **UNIVERSITY route into Engineering.**

1. Using this [document](#) can you explore and list the different Engineering disciplines you could study at University?

2. What are the different degree types you could study if you wish to follow the University route into Engineering?

3. Using the internet can you research and list some local, regional and nationally based universities where you could study Engineering?

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E I G B F E

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 [JOB PROFILES](#) 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. Can you name the qualifications which might help you become a DESIGN ENGINEER?

3. What would the starting salary be for a fully qualified DESIGN ENGINEER be?

4. What "Work Experience" could you undertake before looking to become a DESIGN ENGINEER?

5. Can you write a paragraph about the tasks you might be required to undertake as a DESIGN ENGINEER?

[Why not watch this short video about Lee Tabis who is a Senior Design Engineer working for NG Bailey.](#)



MANUFACTURING ENGINEER

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

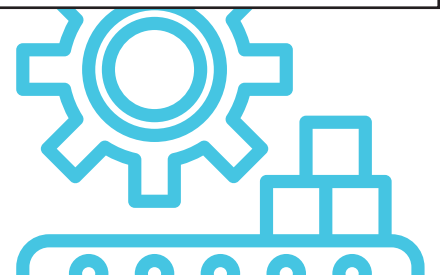
2. Can you name the qualifications which might help you become a MANUFACTURING ENGINEER?

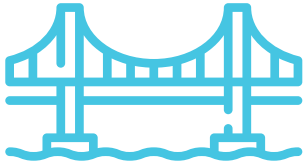
3. What would the starting salary be for a fully qualified MANUFACTURING ENGINEER?

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. Can you list 3 x employers in Worcestershire where you could be employed as a STRUCTURAL ENGINEER?

[Why not watch this short video about Roma Agrawal who is a Structural Engineer working for WSP.](#)



