



Science careers

Cogito ergo sum



Engineer

You could work in a variety of roles developing new products or solutions to technical challenges.

What do they do?

Depending on the area you specialise in, you could be working on jet engine fan blades or developing new cyber security tools.

Summary:

Engineers use maths and science to solve different technical problems. Their main duties include developing new products for companies or individuals to use, providing maintenance to current products to enhance use and designing new machines to improve an organisation's efficiency.



Do I need to go to College?



[Bolton Sixth Form College](#)

[Thornleigh Salesian College](#)

[Turton Sixth Form College](#)

[Runshaw College](#)

If you don;t want to go to College, Rolls Royce have opportunities for those leaving school at 16:

<https://careers.rolls-royce.com/united-kingdom/students-and-graduates/apprenticeships-and-school-leavers/#our-programmes-tabs>

College courses:

A-level Maths and [Physics](#) for those wanting to study at degree level.

T-level [Engineering course](#).

How do I get into College?

A grade 6 or above in Maths and Science and a 5 in English is needed for A-levels (aim for the highest possible).

The T-level course requires a minimum of five GCSEs at Grade 4 or above, including Maths, English and Science. In addition, you will be required to attend a formal interview.

Can I get work experience?

<https://www.baesystems.com/en/careers/careers-in-the-uk/gaining-experience>

<https://careers.rolls-royce.com/united-kingdom/students-and-graduates/graduates-and-interns/#our-programmes-uk>

<https://gmcareershub.nhs.uk/learners/plan-your-career>

University degree? 👍✅

BEng/MEng (Bachelors/Master of Engineering)



Providers:

<https://www.whatuni.com/degree-courses/search?subject=engineering>

For foundation year courses (check that the course states foundation year).

North west only courses are [here](#).

How do I get onto the degree course?

Complete three A-levels and gain at least BBB (including two sciences).

Some courses with a foundation year will accept lower grades.

How long is the course and what work experience will I gain?

BEng (Hons) is 3 years and MEng (Hons) is four years.

Degree apprenticeship? 👍✅



Providers (list not exhaustive):

Manchester Metropolitan University is a leading provider. See [here](#).

How do I get onto the degree course?

[Rolls Royce](#)

[BAE Systems](#)

Also look on the NHS [apprenticeships website](#).

Enter your postcode on the website and search for [live](#) vacancies.

National vacancies for degree apprenticeships [here](#).

How long is the course and what work experience will I gain?

A mix of work based skills development and University study days will allow you to develop.

Most courses last between 3 and 6 years depending on your specialism.