



WORK INSPIRATION – Engineering

There are so many different areas of engineering to work in; however, most engineers choose to specialise in just one, such as chemical, automotive, robotics, aeronautical or electrical.

Careers in engineering are constantly evolving and new processes and technologies are being developed all the time. This allows engineers to stay on the ball and react to new problems and challenges in their chosen field.

General Careers Resources/Information

- [Careers in Engineering](#). The Engineer has a beginner's guide to information on a career in this field. The writer and STEM Ambassador Sarah Anderson looks at engineering, the variety of careers involved in the sector, and the first steps required to embark on a career in engineering.
- From **Brightbulb Engineering** the top 5 reasons why you should become a [Civil Engineer](#)
- **NEW** Interested in becoming an engineer. This article in **NEON Brilliant Inspiration** will explain "[What is Engineering?](#)" and explores [12 different disciplines](#) within the career
- An [article](#) on how the pandemic might change engineering education forever in the **Engineering and Technology Magazine**. When face to face teaching and laboratory experiments ceased and online teaching became the normal.
- If you fancy an engineering career in the **Armed Forces** links to the 3 Services are below:
 - [Royal Navy](#)
 - [Royal Air Force](#)
 - [Army](#)
- **Rhod Gilbert's** work experience series on the **BBC**. In this episode he explores a career path as a [Road Worker](#) with Wales largest civil engineering company Walters
- **All About Careers** - what engineering career is for me? Find out which one is for you [here](#).
- Engineering is one of the most fun and rewarding professions in the world. This [article](#) by **Interesting Engineering** gives you 10

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reasons why. Some of the reasons include being able to travel the world to be able to make awesome things.

- Do you want to know what type of Engineer you should be? Try this [quiz](#) by **Lockheed Martin**.
- **TED Talks** a [curated collection](#) of talks on careers in Engineering – fun and interactive
- **The Institution of Engineering and Technology** series of [Look At Me Now](#) videos
- **NEW** - If you have the ability to make decisions, have good people and communication skills, maybe a career as an [Apprentice Civil Engineer](#) is for you? In this **NI Jobfinder** blog, we find out who she became at apprentice civil engineer at **Lowry Building and Civil Engineering**.
- A comprehensive guide into the [engineering industry](#) from work experience to internships and more.
- Find out about Business in the Community (Northern Ireland) member **B P McKeefry** who have staff working in the [transport, services and engineering sectors](#).
- Find out about careers in engineering at one of the world's [global leaders in the transportation industry](#) **Spirit Aerosystems**.
- Why an [Engineering Career](#) at **Caterpillar** might be for you. Whether that be a chemical, electrical, material, mechanical and many more types of engineering, there could be a career path for you.
- **NEW** - **Royal Academy of Engineering - How to Engineer a sustainable world.** Watch this [webinar](#) to discover how engineers make a difference to our environment and help build a sustainable future. Find out more about developments in green energy, going carbon neutral, and what smart cities could look like.
- **NEW** – **Royal Academy of Engineering – How Technology is Changing the Way We Communicate.** Watch this [webinar](#) to discover more about virtual reality, augmented reality, the evolution of communication technology, and how engineers will shape the future of how we communicate.
- **NEW** – **Royal Academy of Engineering - How to respond to a global health crisis.** Learn more about how engineers make a difference in helping us fight a pandemic. Engineers have been at the forefront in providing new, fast, and safe ways to fight the COVID-19 crisis, from designing new ventilators and 3D printing PPE for healthcare workers, to creating apps to help distribute food. Watch this [webinar](#) to discover more about engineering in a health emergency.
- **NEW** – **Royal Academy of Engineering – How to get into Engineering.** Learn more about how to become an engineer. Engineering is a varied career that solves problems in everything from medicine to music, sports cars to sustainable energy. Watch this [webinar](#) to discover more about becoming an engineer.
- **NEW** – **Royal Academy of Engineering – The Engineering of Sport.** Learn more about how engineers make a difference in sport. From new materials for a tennis racket, kayak paddle or swimsuit, to designing prosthetic limbs for the Paralympics, engineers help athletes perform their best. Watch this [webinar](#) to learn more about how engineers shape sport with new development.
- **Top Universities** - [Who to follow](#) on Twitter if you are interested in a career in engineering
- **Mechanical engineers** are involved in the design of a component, a machine, a system and a process both on macro and micro scales, from largest systems like submarine navy and

satellites to the tiniest components such as switches and sensors. Find out all about this wide reaching career path [here](#).

- If you think that a university course is not for you, have a look at the wide range of [Engineering/Electrical Engineering](#) courses on offer at **Belfast Metropolitan College**.
- At **Northern Regional College**, they offer students a range of [engineering courses](#) which allow you access to Higher Level Apprenticeships, HND/HNC, BTEC and an Access to University Course, to name a few options that you can look into, to find the perfect course.
- Fancy studying at **South West College's** new Erne Campus? Find out about what engineering courses are on offer [here](#)
- Find out what Level [3/4/5 Engineering courses](#) are on offer at **Southern Regional College**.
- Did you know that **South Eastern Regional College** has [116 different Engineering courses](#) from level 1 to 5, also full and part-time for you to have a look at?
- Have a look at the range of [engineering courses](#) on offer at **North West Regional College**.
- **BBC Bitesize Careers** on Engineering
 - [Meet Jasmine](#) an Apprentice Civil Engineer on the HS2 project
 - [How to become](#) a Civil Engineering technician
 - Meet [Amy](#) a Formula 1 Design Engineer
 - [How to become](#) a Wings Designer
 - Find out about a [Naval Architect](#)
 - Explore full selection of Engineering [videos](#)

New: National Careers Service

National Careers Service have a section on [Engineering and Maintenance](#) careers and also careers in [manufacturing](#) with a wide range of options, including amongst others:

- Career as an [Aerospace Engineer](#)

- Career as an [Auto Electrician](#)
- Career as a [CAD technician](#)
- Career as a [Chemical Engineer](#)
- Career as a [Helicopter Engineer](#)
- Career as an [Energy Engineer](#)
- Career as a [Wind Turbine Technician](#)

Studying at University

- [What type of Engineering should I study?](#) This article from **Top Universities** might give you an idea.
- On the **Oxford Institute of Biomedical Engineering** website, a first-year student describes how his hospital placements enhanced his learning in the field of [Biomedical Engineering](#)
- A guide from **UCAS** on why you should study [Aerospace Engineering](#)
- **UCAS** guide on the career path to becoming an [Electrical and Electronic Engineer](#)
- Explore on the **UCAS** website the skills and qualities needed to be a [Biomedical Engineer](#)
- Find out why studying [Engineering and Technology](#) is a good career option as shown by this **UCAS** article which tell you about number of specialist courses in this area.
- Have a look at the **UCAS** guide on the career path to work as a [Nuclear Engineer](#).
- **Ulster University** - study engineering at [Ulster University](#) Their courses will provide students with a strong aptitude for analysing and solving problems using their scientific, mathematical and engineering skills.
- **QUB** - the School of Mechanical and Aerospace Engineering at [QUB](#) has great links with industry.
- Did you know that the UK has 37 of the Top 502 Engineering and Technology schools in a recent March 2020 [article](#) by **Top Universities**. The rankings are based on 4 criteria academic reputation, employer reputation, research

citations per paper and the H-index (a way of measuring the productivity and impact of published work).

- An engineer is a problem solver – find out what engineering courses there are to study at [University of Southampton](#). To find out about studying here – book a slot on our [Virtual Open Days](#) in July now.
- **University of Sheffield** - Are you good with numbers, have great communication skills, a team player and lastly creative? If so, an [engineering career](#) might be for you.
- Maybe a traditional degree route is not for you, find out more about this [Civil & Infrastructure Engineering Apprenticeship](#) the **University of Warwick**, where you get paid and learn at the same time.
- **Tomorrow's Engineers** have [a guide](#) to which types of engineering you could study.
- **Engineering and Technology** encompasses a huge range of disciplines which is reflected in the number of specialist courses at university – [see the latest UCAS guide here](#).

Speakers for Schools – Virtual Careers Talks

- This talk led by **Dina Gillespie, Lead Operations Manager at Thames Water** celebrates [Women in Engineering](#) and how you can support a more diverse workforce, challenge stereotypes and provide greater opportunities for women and girls in engineering.

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To find out more about our Work Inspiration programme, please contact joanne.mehaffy@bitcni.org.uk, or visit www.bitcni.org.uk/programmes/work-inspiration/ or www.workinspiration-ni.com

- **Alison Delahunty**, the first President of the **National Grid's Electricity Transmission** business talks about Green Skills and why they are important in the safe and efficient operation of [electricity transmission](#) in England and Wales.
- **NEW** - Why choose Engineering as a career? John, a graduate who works at BP, [interviews BP's Group Head of Engineering, Aleida Rios](#) on how she got into Engineering and how students can build a career they enjoy.
- **NEW** - **Tamara Holmgren, Engineer and Project Manager at BP** on International Women in Engineering Day for an [interview](#) that focusses on STEM careers and Tamara's career journey to date.