



WESTON  
COLLEGE



**CEH**  
CAREER EXCELLENCE HUB

**ENGINEERING**

# WELCOME

**Engineering is a fast-moving and rapidly expanding industry, with many opportunities within the region.**

We have decided to launch brand new Career Excellence Hubs, which gives a greater focus on preparing our learners for industry and we would be delighted to welcome you along to our new Engineering Career Excellence Hub.

Whether it's liaising with businesses in the industry to make sure we're teaching you relevant and up-to-date skills, creating the best facilities and digital platforms in the region for you to study in, or selecting the top teachers with current industry experience - our Engineering Career Excellence Hub is focused on providing you with the right learning environment to help you reach your potential.

We are about preparing you for a career - what we offer is far more than just a course. Weston College is a diverse and inclusive learning environment, and we reward our students when they go above and beyond their abilities and expectations.

This guide will introduce you to our Engineering Career Excellence Hub.

I look forward to welcoming you soon.

**Dr Paul Phillips CBE, PhD, DLit, EdD**  
Principal and Chief Executive

**20%** of engineers are due to **retire by 2026**

Engineering generated  
**£1.2 trillion**  
in 2018

Engineering makes up for  
**19%** of the UK's total  
employment

There are over **5.7 million** jobs in  
engineering in the UK

# WHAT IS THE CAREER EXCELLENCE HUB?

**As a Weston College student you will become part of our exciting new Career Excellence Hub in Engineering.**

This means you will take part in a study programme with lots of career boosting benefits, all with the aim of giving you the opportunity to become career ready!

Our mission statement is 'creating brighter futures' and we passionately believe in helping you reach your

ultimate goal, focussing on your future employability and developing the skills you need to have a successful career.

So, whether you're a school leaver or looking to study a full-time programme, our Career Excellence Hubs will help you stand out from the crowd and get ahead!



# WHAT'S IN IT FOR ME?

You'll get to study in **state-of-the-art** learning spaces in the **Future Tech Building at South West Skills Campus**, using the latest **industry standard** equipment, with concepts and ideas delivered by lecturers who have a wealth of industry experience.

We will equip you with 21st Century **employability skills** to progress you onto your next career destination. This will include, working on **'real world learning'** using employer briefs and real-life case studies and scenarios to encourage up to the minute workplace problem solving.

Upskilled with the latest digital tools and technologies as a **Microsoft Showcase College**.

In a rapidly changing world of work, your identity, professional networks, and digital capability will increasingly influence your **future career opportunities**. We'll prepare

you to stand out by showcasing your work and achievements.

If competitions are in your sights, you will also have the option to compete against the best in the UK through our links with **WorldSkills UK**.

You will be supported with outstanding wrap-around pastoral support via our **Wellbeing@Weston** model which provides all learners with access to highly qualified teams of welfare and mental health practitioners and resources all designed to support you **achieve** your **career** goals.

Inspired with personalised **1:1 Careers** Education Information Advice and Guidance, helping you look at all the options available to you for progression to the next step on your career journey.

Regardless of what your **career goal** is or whether you simply need to know what your options are - our team of highly trained careers advisors (Level 6 and above) offer relaxed, impartial advice to get you where you want to be helping you figure out the **best route to achieve your dream career**.

Empowered to learn more about your own **mental health and wellbeing** as part of your journey with us. Our ethos of **Body and Mind** will help you learn to develop coping strategies, build resilience, and access the proven benefits of exercise for wellness.

As well as all of the above benefits of being part of one of our Career Excellence Hubs, Weston College also offers you a fun, social experience designed for you to meet like-minded people, as well as being the only **OUTSTANDING COLLEGE IN THE REGION!**

**OUR ENGINEERING CAREER EXCELLENCE HUB IS ENDORSED BY:**

**AIRBUS**



We will provide you with **unrivalled exposure** to these employers with enhanced work experience, employer visits, simulation, as well as understanding what it means to be truly inclusive in a **modern** workplace, through valuing other people's diversity and ideas based on the principles of Fairness Respect Equality Diversity Inclusion and Engagement.



*Proud to be part of the WorldSkills UK Innovation Network*



# STUDY PROGRAMMES

We have a range of programmes available in our Construction Career Excellence Hub, which will prepare you for a life in the industry.

Whether you want to specialise in aerospace, or composites, we have a course for you - **just click on the course**, and it will take you to the course page on our website:

**CEH** | ENGINEERING  
CAREER EXCELLENCE HUB

## Engineering

CLICK  
ON A  
COURSE



# INDUSTRY SKILLS

Through our Career Excellence Hubs you will develop skills for life, which will help you gain employment once you have completed your study programme. We will help you to gain both hard skills, and soft skills, which employers have highlighted as keys skills in this sector, but what exactly are they?

Hard skills are the measurable ones that you list on your CV, and that you may hold certification in. Whereas soft skills are interpersonal, and help you to develop your character, which will benefit you in building relationships with co-workers and customers.

Alongside input from our Career Excellence Hub employer partners and advisory boards, we as a college have invested in powerful Labour Market Intelligence tools

to further guarantee that our curriculum meets employer need. Not only do we use all this information to inform our curriculum design, but it is also used to inform our skills and individual development programme called ID that's purpose is to accelerate your progress towards your career goal and next steps by equipping you with the complete package of knowledge, experiences and skills.

We have built them into your study programme, meaning you will learn and develop these skills with us:

## Hard Skills

- Health and Safety Skills
- Practical and Technical
- Team Orientated
- Communications
- Analytical Skills

## Soft Skills

- Problem Solving
- Planning
- Professionalism
- Time Management
- Trustworthiness

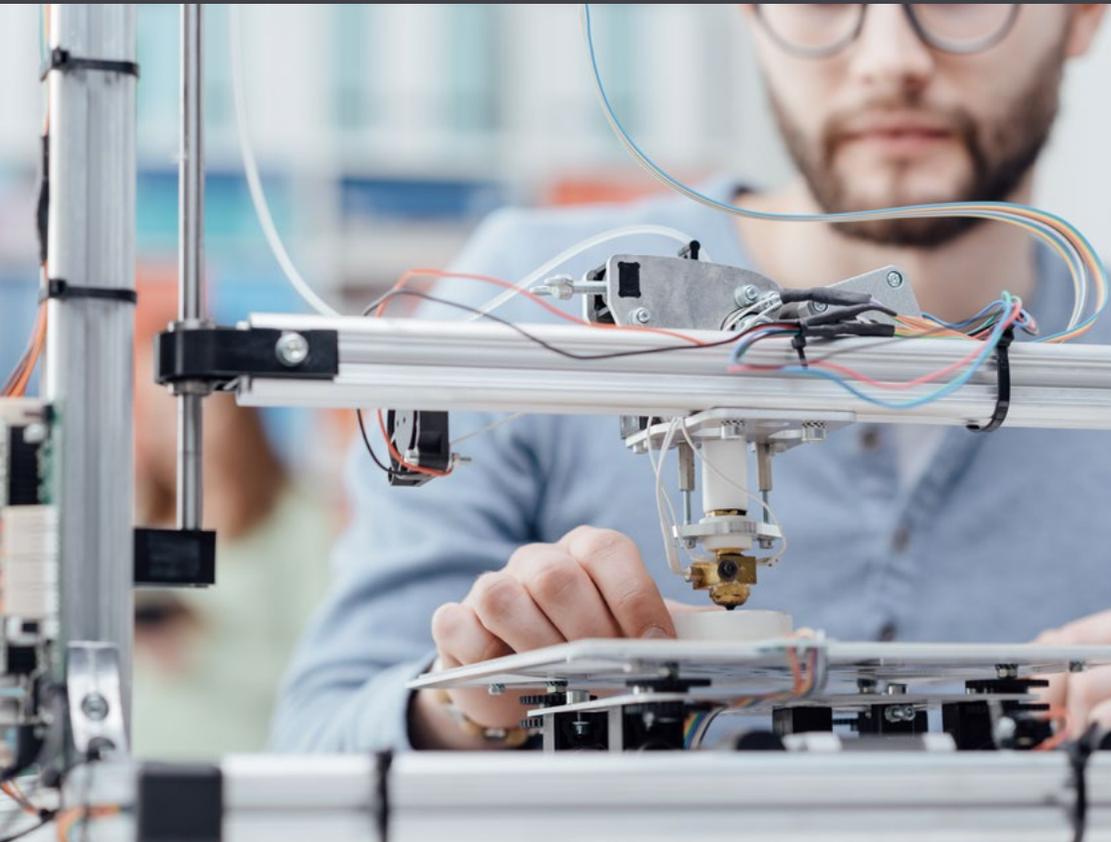
English and maths are also a very important part of Engineering, here are some of the key skills they provide:

## English

- Speaking, listening and communication skills
- Analysing and evaluating designs
- Writing communication briefs
- Interpreting and following instructions accurately
- Writing detailed reports
- Technical terminology
- Advertising and promotional materials

## Maths

- Accurately measuring using mm, cm, m. For example, tolerance levels are crucial for most machinery to operate safely
- Reading from plans. Using scale drawings
- Extracting information from specifications and charts
- Using equations. For example, forces, density, pressure, resistance etc
- Using geometry. Angles, Trigonometry, Area and Volume
- Problem solving is an essential part of engineering and maths.



# PROGRESSION ROUTES

Once you've completed your course, there are several options for you to further develop your skills and knowledge...



If you completed a Level 1, or Level 2 course, you can continue to progress to the next level course. Click here to go back to our course page, and discover the relevant course route, for you.



An apprenticeship is a fantastic way of entering the engineering industry. Not only will you get the opportunity to get your foot in the door with a local or national company, you will also be able to earn while you learn.

Through apprenticeships you will work closely with an experienced engineer to develop and practice your skills, all whilst receiving the benefits that being a student brings.



We have several degree options on offer at UCW, which will allow you to further develop your knowledge. UCW is rated as Gold in the Teaching Excellence and Student Outcomes Framework, meaning the teaching, learning and opportunities we provide are of the highest quality in Britain.

There are several degree options available in engineering, which could lead you on to a career specialising in aerospace, CAD, mechanics, electrical or more. You can find the full UCW course list, here.

# CAREER IDEAS

Engineering is an exciting and varied industry, so you might not know exactly which route you'd like to take yet. Here are a few different career options for you, with one of them potentially becoming your future career...

## AEROSPACE ENGINEER

Aerospace engineers research, design, develop, maintain and test the performance of elements such as satellites and aircraft, using cutting-edge technology.

**Average salary:** £32,000

## BIOMEDICAL ENGINEER

Biomedical engineers apply engineering principles and materials technology to healthcare equipment, that can be used for treatments, diagnoses and rehabilitation.

**Average salary:** £32,000

## CAD TECHNICIAN

Computer-aided design (CAD) technicians use their engineering, IT and mathematical knowledge and skills to design buildings, machinery, products and parts.

**Average salary:** £28,000

## ELECTRICAL ENGINEER

Electrical engineers design, develop and maintain electrical control systems and components to required specifications.

**Average salary:** £35,000

## MANUFACTURING ENGINEER

Manufacturing engineers improve manufacturing processes and ensure that goods such as food and drink, pharmaceuticals and plastics are produced efficiently and, in a cost-efficient way.

**Average salary:** £30,000

## MECHANICAL ENGINEER

Mechanical engineers create solutions and solve problems, playing a central role in the design and implementation of moving parts in a range of industries.

**Average salary:** £28,000

## WATER ENGINEER

Water engineers are responsible for the supply of clean water, the disposal of wastewater and sewage and the prevention of flood damage.

**Average salary:** £28,000

# CONTACT US

Got a question about our **Career Excellence Hubs** or one of our programmes or just need to get in touch?

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