# Brechin High School Careers Fair



Lecture Theatre 03/02/2025 3pm - 5pm







# **Engineering Sector**

Modern engineering comprises many subfields which include designing & improving infrastructure, machinery, vehicles, electronics, materials, products and energy production and supply.

## Engineering - A Diverse Sector

Engineering Subfields to consider include Civil, Electrical, Mechanical, Structural, Modern Technology, Energy and Water Systems.

# New Energy Source Solutions

Wind is used to generate electricity by converting the kinetic energy of air in motion into usable electricity.



Solar panels are used to convert light and heat from the sun to produce usable electricity.



## New Wave/Tidal Technology

As part of the Scottish Governments action on climate change, Wave Energy Scotland is driving the biggest research and development programme ever seen in the sector.



How it works

2023 - 2050

There are 95,400 people employed in the energy sector in Scotland.



The future of this industry is vibrant. 21,000 new jobs expected by 2050.

# Manufacturing

From aerospace to pharmaceuticals to food and fast moving consumer goods production, it's a global industry, hence an engineering/manufacturing career can take you all across the world.

## Employment



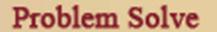
In 2023, there was around 135,700 people employed in engineering across Scotland.

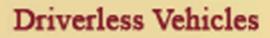


Between 2023 and 2026, it's expected there will be 5,400 people needed to fill job openings in Scotland.



As of October 2023, there are 4501 modern apprentices acoss Scotland training in engineering.



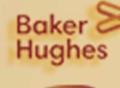






The Scottish Space Agency will need more than 3000 engineers in the next 10 years as we prepare for the first European Space Launch.

#### Local Engineering Companies



Provides products & services for onshore/offshore oilfield, industrial & energy technologies.



A global biopharma company, uniting science, technology & talent to get ahead of disease.

# Design the Future

Below are some links to some of the most popular engineering jobs for you to explore.

## **Engineering Sector** What Can I Do?

#### Robotics Engineer



Revolutionise the way people live and work by designing new systems that can save time, money and change lives.

#### Mechanical Engineer

Design/test components and machines like wind turbines, water pumps and medical prosthetics helping assist people with mobility difficulties.



### Design Engineer

Come up with products of the future, making things that people use everyday more efficient, reliable and useful.

### Organisations Making A Difference







# Job Profile Automotive Engineer

Design, test and develop the cars and motor vehicles of the future.

## Salary Expectations

An automotive engineer commands good entry level and experienced salaries, and with high growth predicted is considered a good career choice.



# Top Meta-Skills





Adaptability

Focussing

# Career Pathways

From school, career pathways to consider include different types of apprenticeships, further education as well as internships and work based placements.

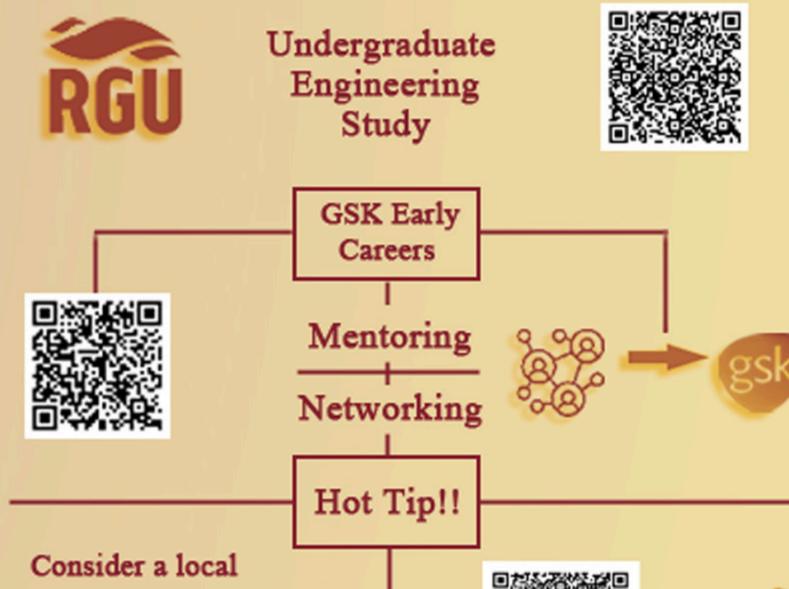
## Useful school subjects

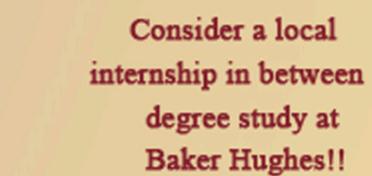






### **Education Routes**





Sense Making

