

National 5 SfW Engineering Skills (Course Code: C253 75)

SCQF Level 5 (24 Credit Points)

Why study SfW Engineering Skills?

If you enjoy working with your hands, solving problems, and making or fixing things, Skills for Work Engineering could be the perfect fit for you! Engineers use science and technology to find solutions to practical problems. They design, build, and fix everything from gadgets to giant machines, working in all sorts of industries. In Scotland alone, around 97,000 people are employed in engineering – that's 4% of the workforce – and the sector offers loads of career opportunities.

By studying Engineering Skills, you'll gain practical skills in areas like:

Making and fixing things – Learn how to create and repair objects, from simple tools to complex machinery.

Problem-solving – Develop the ability to think critically and find solutions to real-world challenges.

Working with your hands – Get hands-on experience with tools, materials, and machinery.

Measuring and calculating – Learn how to accurately measure and calculate sizes, ensuring everything fits and works properly.

Using tools and machinery – Gain experience with a range of equipment, helping you build and fix projects safely and effectively.

This course will help you develop practical skills that are in high demand across a variety of engineering fields, setting you up for further study or work in a growing industry. Plus, you'll get to work with our industry partners to see how your knowledge can make a real difference in the world around you!

What do I need to get in?

- **Any D&T subject**

Space on this course is limited to 12 pupils, so you may need to take part in an interview. Come and speak with Miss Livingstone if you'd like to know more information!

What will I study?

The course is split into four key areas, each worth 6 SCQF credit points, and it takes about 40 hours of study for each unit. Here's a quick look at what you'll cover:

- **Mechanical and Fabrication**
- **Electrical and Electronic**
- **Maintenance**
- **Design and Manufacture**

You'll get hands-on experience in things like:

- Using tools, equipment, and materials to make metal products.
- Basic fitting skills such as measuring, marking, cutting, shaping, drilling, and tapping.
- Testing, evaluating, and reporting on products you've made and assembled.
- Learning welding and joining techniques to put things together.

You'll complete the practical work in the school workshops mostly, but will also have the opportunity to attend college and work with our industry partners. There's also the chance to get real-world experience by arranging work placements through your DHH, or by visiting companies and hearing from people in the industry.

One important thing: you'll need to wear proper safety gear (PPE) like steel-toe boots, safety glasses, and a boiler suit or overalls while you're working.

This course is perfect if you want to dive into the world of engineering and start developing skills that could lead to a great career in the field.

How will I be assessed?

In Skills for Work Engineering, you'll be assessed through a mix of practical activities, either in a real workplace or a simulated setting. Your teacher will watch and record your progress as you work on different tasks. Some of your assessments might also be done online using an e-portfolio, where you can upload your work and track how you're doing. It's all about showing what you can do, so you'll get plenty of chances to prove your skills in action.