### Engineering

"With a little bit of skill and some imagination, you can build anything!

#### Course Structure:

Pupils will follow broad areas of mechanical, fabrication, electrical, electronic, maintenance, manufacture, and an element of design. This will allow the learners to gain transferable skills which can be applied to any of the above engineering areas.

More specifically, pupils will:

- Select tools and equipment to mark-out, cut, shape, form and finish models/products independently.
- Identify potential health and safety risks in the manufacture of engineering products and plan the safe working practices required.
- Produce accurate prototypes, in scale, by reading drawings and sketches to retrieve dimensional and material information.
- Apply their knowledge and understanding of engineering by using skills of evaluation and problem solving in a vocational context..
- Use and select the correct tools and components to construct a basic functional extra low voltage electrical circuit.
- Use and select the correct tools materials and equipment required to test, disassemble, repair, and assemble an engineering part.
- **Develop Computer Aided Draughting skills to** design, manufacture/construct, test, evaluate and engineering product.
- Extract dimensions from a drawing and transfer these onto materials to create a model/product

### Careers & Opportunities:

Engineering Skills course has been designed to provide a basis for progression into further education or for moving directly into training in employment within an engineering sector:

**MECHANICAL** 

**FABRICATION** 

**AUTOMOTIVE** 

**ELECTRONIC** 

**MARINE** 

OIL / GAS

**MANUFACTURE** 

**ELECTRICAL** 

**MAINTENANCE** 

WELDING



**N5 Engineering Skills** 

# Engineerin Skills



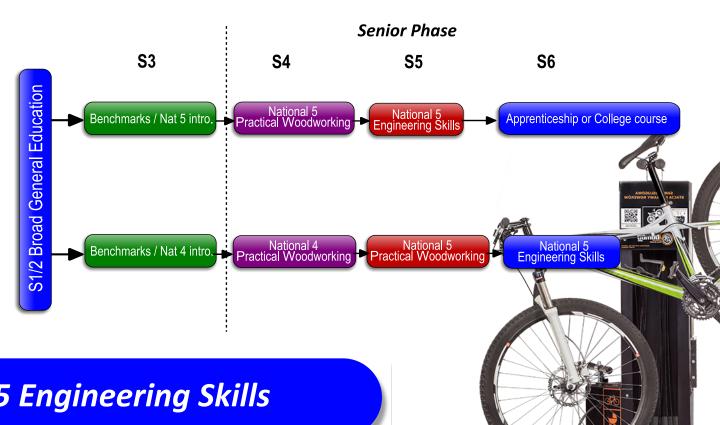
### Course information:

The content of the course focuses on the development of hand skills across the disciplines of mechanical, fabrication, electrical, electronic, control, maintenance, and manufacture.

Central to the content are the generic employability skills valued by employers in an engineering sector.

These skills are developed in each of the four main blocks of the course, they are assessed at least twice during the course. These add value to the development of the specific vocational skills.

## The Learner Journey for Engineering Skills



**N5 Engineering Skills**