



## Engineering Operative (ST0537) Level 2 Apprenticeship

Engineering Operatives are predominantly involved in engineering operations which are key to the success of the Manufacturing and Engineering sector allowing employers to grow their business while developing a work force with the relevant skills and knowledge to enhance the sustain the sector.

The role covers a wide range of common and job specific skills sets that can be transferred across the manufacturing engineering industry sectors during the course of their careers. Dependent on the sector that they are employed in there may be subtle differences in terms of composition and application of the job role specific skills and knowledge they will require, however the core skills and knowledge will be the same regardless of the sector/area they work in.

### Expected course duration

18 months delivered over 24 months – 2 academic years.

### College attendance

Year 1: Thursday.

Year 2: Tuesday.

### When can the apprenticeship training start?

Training will start throughout the year, with the college attendance starting in September.

### Course content

#### Foundation Competence Units Level 2 – Mechanical route

- Complying with statutory regulations and organisational safety requirements
- Working efficiently and effectively in an engineering environment
- Using and communicating technical information
- Conducting business improvement activities
- Producing components using hand fitting techniques
  
- Producing mechanical assemblies Preparing and using lathes for turning operations
- Preparing and using milling machines
- Preparing and using semi-automatic MIG, MAG and flux cored arc welding equipment
- Producing sheet metal components and assemblies Engineering environment awareness
- Fitting and assembly techniques
  
- Engineering manufacturing techniques
- Engineering design techniques

## Electrical Route

- Complying with statutory regulations and organisational safety requirements
- Working efficiently and effectively in an engineering environment
- Using and communicating technical information
- Conducting business improvement activities
- Producing components using hand fitting techniques
- Wiring and testing electrical equipment and circuits
- Wiring and testing programmable controller-based systems
  
- Assembling and testing electronic circuits
- Maintaining electronic equipment/systems
- Forming and Assembling Electrical Cable Enclosure and Support Systems
- Engineering environment awareness
- Engineering environment awareness
- Fitting and assembly techniques
- Engineering manufacturing techniques
- Engineering design techniques

## Entry requirements

### Grade requirements

#### Essential:

- Grade 3 Maths and English or equivalent.

#### Other requirements:

- To be working within an Engineering environment.

## What training is required in the workplace?

### Knowledge of:

- Specific machinery, equipment and tooling required for the technical support operation
- Different technical support techniques
- Specific safe working practices, procedures and quality requirements that need to be observed

### Skills:

- Plan the technical support operation before they start
- Prepare equipment, tooling, materials, etc. and complete set up activities before carrying out the technical support
- Carry out the technical support operation in line with specific safe working practices and specification requirements
- Carry out quality checks during and after the technical support operation

## Further study and career options

### **Course progression:**

Level 3 Engineering Standard to fulfil additional job role/responsibilities on completion of Level 2 outcomes and EPA.

## **Additional information**

The following PPE/Equipment is required:

- Safety boots
- Overalls (Fire Retardant – for Welding delivery)

## **Campuses**

Study is available at the following campuses:

- Bedford College Campus

**For more information, please visit here:**

<https://www.instituteforapprenticeships.org/apprenticeship-standards/engineering-operative/>