Performing Engineering Operations

Apprenticeship Level 2

Recruiting an apprentice can be a smart, cost-effective way of bringing fresh young talent into your team, helping to train up the next generation of your workforce.

The Improving Operational Performance framework, previously known as the Industrial Applications framework, has been available to train apprentices for twelve years and addresses the fundamental skills needs of a wide variety of engineering, manufacturing, assembly and process operators through the provision of two pathways, Performing Engineering Operations and Performing Manufacturing Operations.

The Performing Engineering Operations Level 2 pathway gives apprentices working in engineering a basic all-round grounding in engineering operations and techniques. The competence element is designed to be tailored to operations in any given specific engineering sub-sector. On completion they will be of semi-skilled status; typical job roles would include metal working operatives, plant and machine operatives, quality control, routine inspection and testing, production of parts using computer controlled equipment and basic maintenance activity.

Quick Information:

Modern Apprenticeships designed with employers

Sector:

Engineering, Manufacturing and associated industrial sectors

Who is it for?

New recruits

Start date:

Flexible to suit employers

Level:

Level 2

Duration:

Up to 2 Years

How does it work?

Delivered in your workplace with day release to College over 2 years, along with assessor visits to the work place every 6 weeks

Content:

Menu of options that can be tailored to your business

Assessment:

On programme assessment

Qualification:

Level 2 City & Guilds Certificate in Engineering; Level 2 NVQ Diploma in Performing Engineering Operations







Key Areas of Study

There are two vocational qualifications to this apprenticeship: firstly, a Level 2 City & Guilds Certificate in Engineering; secondly, a Level 2 NVQ Diploma in Performing Engineering Operations.

Your trainee will cover essential knowledge, skills and competencies in both the technical certificate and the NVQ, together with optional units. The menu of mandatory and optional units is detailed below from which you and your trainee can select the areas of most importance to your organisation.

Technical certificate units

Mandatory units

201 Computers and the Engineering Industry 202 Introduction to Engineering Design

Optional units

Your trainee will complete further units from the example list below; which is dependent on their specialism. Other units are available to tailor the qualification to the training requirement of the trainee.

203 Engineering Workshop Practice

204 Product Lifecycle in Engineering

205 Engineering Manufacturing Processes

206 Engineering Maintenance

207 Practical Electronics

208 Engineering Mathematics and Measurement

210 Application of Science in Engineering

212 Principles of Fabrication and Welding

221 Principles of Electrical Technology

After completing the designated knowledge qualification trainees should be able to:

- Understand health and safety requirements
- Be able to communicate in an engineering manufacturing environment
- Be able to work effectively in an engineering manufacturing environment
- Understand basic engineering manufacturing principles and processes

NVQ units

Mandatory units

- Working safely in an engineering environment
- Carrying out engineering activities efficiently and effectively
- Using and communicating technical information

Trainees also cover a number of optional units dependent on the type of work they are doing:

Optional units Group B Engineering practices pathway with a minimum of 3 units to be completed (the list below are an example of units that could be completed):

- Producing Components using Hand Fitting Techniques
- Producing Mechanical Assemblies
- Preparing and Using Lathes for Turning Operations
- Preparing and Proving CNC Machine Tool Programs
- Maintaining Mechanical Devices and Equipment
- Wiring and Testing Electrical Circuits and Equipment

Training, Tutoring and Assessment

The whole programme takes a minimum of 12 months to complete, although a standard duration period of 24 months is normal. The apprenticeship is delivered in your workplace with on-the-job training four days a week and day release to College for the duration.

For the Certificate, assessment involves a synoptic assignment and a series of external tests.

For the NVQ, assessment involves building a portfolio of evidence gathered in the workplace which demonstrates that trainees cover the range of skills required for their qualification.

We will support you and your trainee through regular one-to-one visits by a trained assessor every six to eight weeks. These visits will cover one-to-one support and individual learning, as well as observations to assess your trainee's competencies in the workplace and a review of their portfolio of evidence.

Apprentice Entry Requirements

Apprentices will be required to have $4 \times GCSEs$ with minimum Grades D / 3, including English and Maths, prior to being accepted onto the apprenticeship. We will provide any English and Maths tuition required. Experience in the industry would be beneficial but is not essential.

Future/Other Opportunities

Manufacturing Engineering Apprenticeship Level 3

Engineering Technician Apprenticeship Level 3

Career opportunities could include working in a wide variety of engineering roles.

The general nature of the Performing Engineering Operations Level 2 NVQ can allow for apprentices to move between and across sectors.

More information

To find out more about the opportunities and financing of apprenticeships and to discuss your particular requirements, please email **employer@sheffcol.ac.uk** or call **0114 260 2600** to speak to one of our friendly employer advisors.

Why choose The Sheffield College?

As one of the region's largest providers of apprenticeships, The Sheffield College is more than just your local provider; we deliver the dedicated support you need to source, train and get the best out of your apprentice.

We appreciate how difficult and time consuming it can be to recruit staff. That's why, when you recruit an apprentice with us, our dedicated apprenticeship recruitment service, Job Connect, will advertise the vacancy, engage your candidates and even pre-screen them to make the process as easy as possible for you.

We help you get the best deal by finding the right funding and we handle the paperwork to make the process of arranging an apprenticeship training programme as smooth as possible. Our employer partnership team, apprenticeship tutors and assessment staff are experts, and we invest time and money in training and upskilling them regularly so their knowledge is upto-date and industry standard.

We have undertaken significant capital investment in supporting our Engineering provision. Staff are fully qualified and have extensive experience within the industry. We stay up to date with the latest industry techniques and any new materials that come on to the market.

At The Sheffield College we go above and beyond; we know that every business is different and we help to develop apprentices who will meet the needs of your business.

Get In Touch

Email:

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0114 260 2600

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