# Maintenance & Operations Engineering Technician

# Apprenticeship Level 3

An apprenticeship is a smart, cost-effective way to recruit a new engineering technician or to upskill your existing staff. Above all, it means you can train someone to work in the way that suits your operation.

This apprenticeship will help you to develop trainees in any of the following roles: Electrical Technicians; Mechanical Technicians; Control & Instrumentation Technicians; Electrical System and Process Control Technicians; Electromechanical Technicians and Plant Operations Technicians. They will be able to maintain the safety, integrity and effective operation of plant and equipment in a variety of industries.

Above all, they will know how to work safely and will be capable of taking responsibility for the quality and accuracy of the work they undertake for you. By the time they complete the apprenticeship, they should be capable of joining your team as a valuable member of staff.

# **Key Areas of Study**

Your trainee will follow one of the following occupational pathways:

- Electrical Technician
- Mechanical Technician
- Control & Instrumentation Technician
- Electrical System & Process Control Technician
- Electromechanical Technician
- Plant Operations Technican

All pathways will cover the essential knowledge, skills and behaviours your trainee will need to succeed in the workplace, as set out below.

## **Quick Information:**

# New Apprenticeship Standard designed by employers for employers

#### Sector:

All Manufacturing and Engineering Environments

#### Who is it for?

New recruits and existing staff

#### Start date:

Flexible to suit employers

#### Level:

Level 3

#### **Duration:**

Typically 36-42 months

#### How does it work?

Delivered in your workplace with training 1 day a week at College and tutor visits to your workplace every 6 weeks

#### **Content:**

Core knowledge, skills and behaviours and specialist training dependent on role

#### **Assessment:**

Knowledge assessment, practical observation and technical interview

#### **Qualification:**

Maintenance & Operations Engineering Technician Apprenticeship

#### **Additional qualifications:**

This standard will meet the professional standards of the Engineering Council for registration as Engineering Technician (Eng Tech) by an appropriate Professional Engineering Institution







#### **Core Knowledge:**

A Technician will understand:

- First principles relating to the operation and maintenance of appropriate plant and equipment
- Relevant industry health and safety standards, regulations, and environmental and regulatory requirements
- Maintenance and operational practices, processes and procedures covering a range of plant and equipment
- The relevant engineering theories and principles relative to their occupation

#### **Core Skills:**

A Technician will apply their knowledge of plant and systems to safely perform maintenance and operational activities with minimum supervision. This will require them to:

- Comply with industry health, safety and environmental working practices and regulations
- Locate, and rectify faults on plant and equipment
- Communicate with and provide information to stakeholders in line with personal role and responsibilities
- Read, understand and interpret information and work in compliance with technical specifications and supporting documentation
- Prepare work areas to undertake work related activities and reinstate those areas after the completion of the work related activities
- Inspect and maintain appropriate plant and equipment to meet operational requirements
- Assess and test the performance and condition of plant and equipment
- Communicate, handover and confirm that the appropriate engineering process has been completed to specification

#### **Core Behaviours:**

- **Health & Safety** follows health & safety policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with appropriate supervision
- Quality focused ensures that work achieves quality standard both occupationally and personally
- Working with others works well with people from different disciplines, backgrounds and expertise to accomplish an activity safely and on time
- Interpersonal skills gets along well with others and takes into account their needs and concerns
- **Critical reasoning** uses resources, techniques and obtains facts to develop sound solutions while recognising and defining problems
- **Sustainability and ethical behaviour** behaves ethically and undertakes work in a way that contributes to sustainable development
- **Risk awareness** demonstrates high concentration, the desire to reduce risks, ability to be compliant and awareness of change, through regular monitoring and checking of information

Please note: Your trainee will also be required to gain additional knowledge, skills and behaviours relevant to their specific occupational pathway outlined above. Details of these can be found in the Apprenticeship Standards documentation.

The following qualifications may also be included in the programme, in consultation with you as the employer:

- Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence)
- Level 3 BTEC Diploma in Engineering
- Level 3 BTEC Diploma in Electrical Engineering

# **Training, Tutoring and Assessment**

The whole programme typically takes from 36 to 42 months to complete, at which point your trainee can start their final assessment. The pace at which your trainee progresses will be driven by you and the trainee. We will work closely with you to plan and deliver appropriate support and training. Your trainee will mainly learn on the job, but training at College and one-to-one tutoring are a key part of the new apprenticeship standards, not just assessment, with more time on tutoring as part of the 20% off-the-job training.

We will carry out joint reviews with you at regular intervals to discuss progress. You can use your normal performance management processes to monitor the progress of your trainee, provide feedback and guide development. Your trainee will be expected to keep a portfolio to track their learning and development throughout the apprenticeship.

### **End Point Assessment**

In conjunction with the College, you will be asked to formally sign-off that the apprentice has met the minimum requirements for knowledge, skills and behaviours within the apprenticeship standard and confirm they are ready to move on to the final assessment. This will be taken in the final six months of the apprenticeship and will be measured as follows, in this order:

- **Knowledge assessment (weighting 20%)** apprentices will be required to complete a standardised, scenario-based knowledge assessment consisting of 45-minute paper of 30 multiple choice questions, taken under examination conditions.
- Final observation of practical work (weighting 40%) apprentices will complete a practical observation relating to the specific role they are working towards. The observation will typically be no longer than one day and will be managed and marked by an independent technical expert. This observation will provide the opportunity for the apprentice to demonstrate core and specific knowledge, skills and behaviours on actual plant and equipment in a realistic work situation.
- **Technical interview (weighting 40%)** this will be based upon the contents of the evidence portfolio which has been compiled throughout the apprenticeship and finalised during the End Point Assessment period, including all evidence of practical observations, progress reviews and work activities. The interview will be conducted by two independent technical experts and will consist of three scenario question areas lasting typically two to two and a half hours.

The End Point Assessment may be completed over a six month period to accommodate work scheduling and cost effective planning of resources.

Successful achievement of the assessment will lead to final certification of the apprenticeship and demonstrate that the apprentice is a fully competent Technician.

For more information on the assessment for Engineering Technician Apprenticeship please see the full assessment plan in the Apprenticeship Standard documentation. We will arrange the End Point Assessment.

# **Apprentice Entry Requirements**

As the employer you will set the recruitment and selection criteria for your apprentice. Typically candidates will have 3 GCSEs at Grade C/4 or equivalent, including Maths, English and a science. If tuition in Maths and English is required, we will provide this.

# **Future/Other Opportunities**

Higher Apprenticeship that includes the completion of an HNC/HND plus an NVQ Level 4 competency qualification.

#### 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.

#### **Get In Touch**

#### **Email:**

employer@sheffcol.ac.uk

#### Call:

0114 260 2600

#### **Twitter:**

@sheffcol

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facebook.com/thesheffieldcollege

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linkedin.com/company/the-sheffield-college







# 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 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.

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 prescreen 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 up-to-date and industry standard.

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.