

Maintenance engineers are a key feature of every manufacturing and production business in the engineering sector. Different levels of maintenance are required to keep factories, process plants, power stations, oil and gas rigs, wind farms and utilities services operating effectively and safely. At a basic level, maintenance tasks can be carried out by operators in addition to looking after their work equipment.

Maintenance is also carried out by advanced engineers trained in a range of multiple skills to be able to work on integrated engineering systems. Maintenance can be planned or reactive; it can involve servicing and repair and is based on essential fault diagnostic and problem solving skills. Work is sometimes required to be undertaken in challenging conditions or environments such as confined spaces or at height. The role of the maintenance engineer is broad, challenging and extremely dynamic.

MAINTENANCE ENGINEERING (MECHANICAL)

What's involved?

The range of skills Apprentices develop includes:

- The theory, principles and practices behind a variety of key activities surrounding the need for routine servicing, preventative maintenance and dynamic problem solving working with integrated systems
- Basic fabrication skills
- Basic welding techniques
- Understanding material properties and their characteristics
- Calibration and quality assured engineering principles
- Advanced mechanical, fluid power (hydraulics), air power (pneumatics) and basic electrical awareness
- Principles of quality assurance and validation of engineering data
- Advanced diagnostic and fault finding skills and principles
- Report writing skills

What qualifications will I achieve?

Apprenticeships are available at **Intermediate, Advanced and Higher Level** and are made up of the following five elements:

- A Competence Element
Such as NVQ level 2, 3 or 4
- A Knowledge Element
Underpinning knowledge / theory based qualifications at levels 2, 3 or 4
- Functional Skills
In English, Mathematics and ICT at the required level, which will require attendance at college
- Personal Learning and Thinking Skills
- Understanding the Employees Rights and Responsibilities through assignment based activities

Progression to Higher National Certificates may be an option for progressing your career.

