

Engineering Fitter (ST0432) Level 3 Apprenticeship

This occupation is found in manufacturing and process sectors.

The broad purpose of the occupation is to produce complex high value, low volume components or assemblies in full or part, using machines, equipment or systems, to the required specification. For example, turbines, cranes, gearboxes, production lines, rigs and platforms. Fitters may typically have a mechanical, electrical, electronic, control systems, pipe fitting or instrumentation bias. To produce or re-furbish the components fitters will interpret drawings/specifications and plan their work, for example ensuring they have the right tools, equipment and resources to complete the task to the required specification.

Expected course duration

4 years.

College attendance

2 years Day release attendance- Wednesday first year, second year TBC

When can the apprenticeship training start?

September delivery start at College.

Course content

- AME Level 3 Units
- Health and safety in the engineering workplace
- Communications for engineering technicians
- Mathematics for engineering technicians
- Engineering project
- Mechanical principles of engineering systems
- Electrical and electronic principles in engineering
- Maintenance of fluid power systems and components
- Computer Aided Design (CAD) techniques
- Applications and principles of Programmable Logic Controllers (PLCs)
- Engineering maintenance procedures and techniques

Entry requirements

Grade requirements

- Grade 3 Maths and English

Other requirements

- To be working within an Engineering environment

Essential:

- Grade 3 Maths and English

Desirable:

Grade 4 Maths and English

What training is required in the workplace?

Skills:

- Reading, interpreting and understanding the component/assembly specification, diagrams, drawings and work instructions
- Planning component/assembly task – materials, tools and equipment
- Preparing work area for component/assembly task; sourcing required resources, tools/equipment
- Carryout relevant planning and preparation activities before commencing work activity and know how to source required resources and interpret detailed drawings, specifications and job instructions
- Checking tools during and after task completion; identifying and reporting defects
- Measuring and testing, checking/inspecting component/assembly for example; use of micrometers, verniers, multimeters, volt meter
- Problem solving; analysing the issue and fixing the issue where appropriate
- Applying improvement techniques; recommending/implementing solutions where appropriate
- Communicating with colleagues and/or customers (internal or external)
- Completing component/assembly documentation for example job instructions, drawings, quality control documentation
- Reporting work outcomes and/or issues
- Restoring the work area on completion of the activity; returning any resources and consumables to the appropriate location and house-keeping
- Disposing of waste in accordance with waste streams; re-cycling/re-using where appropriate
- Operating within limits of responsibility
- Operating in line with quality, health & safety and environmental policy and procedures; identifying risks and hazards and identifying control measure where applicable

Further study and career options

Course progression:

Level 4 Engineering Standard to fulfil additional job role/responsibilities on completion of Level 3 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:

- Central Bedfordshire College, Leighton Buzzard Campus

For more information, please visit here:

<https://www.instituteforapprenticeships.org/apprenticeship-standards/engineering-fitter-v1-3>