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City & Guilds

601/0081/3 Level 3 NVQ Extended Diploma in Mechanical Manufacturing Engineering

<u>OVERVIEW</u>

What does this qualification cover?

It covers a wide range of mechanical manufacturing engineering disciplines related to the Advanced Manufacturing and Engineering sector. It allows you to demonstrate your occupational competence through the development of hand-skills and gaining of knowledge.

You have the option of selecting one of nine pathways which include machining, CNC machining, machine tool setting and fitting and assembly.

For each pathway you will complete the following mandatory units:

- Complying with Statutory Regulations and Organisational Safety Requirements
- Using and Interpreting Engineering Data and Documentation
- Working Efficiently and Effectively in Engineering.

You must then select units from either the Engineering Practices or the Technical Support groups. For the 'Engineering Practices' group you will complete a minimum of three optional units covering a wide range of engineering disciplines including:

- Producing Components using Hand Fitting Techniques
- Producing Aircraft Detail Assemblies
- Preparing and Using Milling Machines
- Preparing and Using Manual Metal Arc Welding Equipment

For the 'Technical Support' group you will complete a minimum of five optional units covering a range of engineering disciplines which include the following:

- Producing CAD Models (Drawings) using a CAD System
- Conducting Business Improvement Activities
- General Maintenance Engineering Applications









Then dependant upon the overall pathway chosen you will complete a number of optional units which include:

- Machining components using centre lathes
- Setting gear cutting machines for production
- Setting CNC milling machines for production
- Producing turbine assemblies.

• Who could take this qualification? OR who is this qualification designed for?

It is a work-related, stand alone competence-based qualification suitable for anyone aged between 16 and 25. There are no formal entry requirements.

This may suit you if you are currently in employment and looking to have your competence within the Engineering sector recognised. It is also suitable for someone who has no formal mechanical engineering background and is looking to start a career in engineering.

WHAT COULD THIS QUALIFICATION LEAD TO?

• Will the qualification lead to employment, and if so, in which job role at which level?

You can be employed in a variety of mechanical manufacturing engineering job roles including:

- Skilled machinist
- Toolmaker
- Skilled fitter
- Composite technician

• Will the qualification support progression to further learning, if so, what to?

You could also progress onto a higher apprenticeship in Engineering or other qualifications such as:

Level 4 Diploma in Mechanical Manufacturing Engineering Level 4 Diploma in Aeronautical Engineering Level 4 Diploma in Electrical and Electronic Engineering Level 4 NVQ Extended Diploma in Engineering Manufacture

• If there are larger and/or smaller versions of this qualification at the same Level, why should a learner take this particular one?

You would select this qualification over the Level 3 NVQ Diploma in Mechanical Manufacturing Engineering if you are aged between 16 and 25 and have not previously completed the Level 2 NVQ Diploma in Performing Engineering Operations.

Who supports this qualification?

It is supported by the British Business and General Aviation association.