September 2014

City & Guilds

601/4168/2 Level 1 Certificate in Introductory Welding, Fabrication and Cutting Skills

OVERVIEW

What does the qualification cover?

The qualification allows you to develop your skills and knowledge in welding, metal fabrication and thermal cutting. You will need to complete a total of three units. This includes one welding unit, from a choice of four, a metal fabrication unit and a thermal cutting unit.

You will complete a series of practical assignments allowing you to demonstrate the following skills and knowledge:

- measure and mark out in preparation for metal fabrication and thermal cutting
- set up, prepare and shut down equipment for welding, metal fabrication and thermal cutting.
- produce a selection of components within a tolerance of +/- 3mm and material thickness of 6mm-12mm.
- make a selection of cuts using thermal cutting techniques
- produce welded joints in a variety of flat/horizontal positions
- produce flat plate or folded components
- understand the welding, metal fabrication and thermal cutting process requirements.

This is a Framework qualification.

Who could take this qualification?

This would be ideal for someone who has no experience of engineering as it provides an introduction to a broad range of engineering skills. It would also be suitable for someone who has a welding qualification, for example in MIG welding, and is looking to add TIG welding process coupled with new skills in metal fabrication and thermal cutting.

This qualification is suitable for all age groups and has no entry requirements.
What could this qualification lead to?

This may lead to a career as an engineering fitter welder or pipe fitter in the following sectors:

- Aerospace
- Automotive
- Fabrication industries
- Marine
- Defence
- Oil and Gas
- Energy

If you feel the Level 1 Certificate is too long or broad a programme, you may wish to consider one of the shorter individual Level 1 Awards in Introductory Welding or Metal Fabrication or Thermal Cutting.

There is also a Level 2 Certificate in Welding, Metal Fabrication and Thermal Cutting Skills. This will allow you to build on your skills at Level 1, where you will produce more complex components in different material thicknesses and tolerances and weld in vertical positions.

On completion of the Level 1 Certificate in Welding, Metal Fabrication and Thermal Cutting Skills you may wish to consider progression to an intermediate Fabrication and Welding apprenticeship, or onto other qualifications including:

- Level 2 Award in Welding Skills
- Level 2 Certificate in Introductory Welding, Fabrication and Cutting Skills
- Level 2 Certificate in Engineering
- Level 2 NVQ Diploma in Performing Engineering Operations
- Level 2 NVQ Diploma in Fabrication and Welding Engineering

Who supports this qualification?

It is supported by the following Colleges of Further Education:

- Hartlepool College
- Leeds City College
- Lincoln College