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1 Giltspur Street  
London  
EC1A 9DD  
T +44 (0)20 7294 2468  
F +44 (0)20 7294 2400  
[www.cityandguilds.com](http://www.cityandguilds.com)

## City & Guilds

601/4169/4 Level 1 Award in Introductory Thermal Cutting Techniques

### OVERVIEW

What does the qualification cover?

This single unit qualification allows you to demonstrate the following skills and knowledge through the completion of assignments in producing a flat profile plate, an angle bracket and a curved profile plate:

- measure and mark out in preparation for thermal cutting
- set up, prepare and shut down equipment for thermal cutting
- make a selection of cuts using thermal cutting techniques
- understanding of the thermal cutting process requirements.

Components produced can be from a variety of materials and must be between 6mm-12mm thick. All tolerances will be +/- 3mm.

This is a Framework qualification.

Who could take this qualification?

This would be ideal for someone who has no experience of thermal cutting or engineering as it provides an introduction to a specific engineering skill where there are shortages. It would also be suitable for someone who is looking to increase their range of engineering skills, such as a welder or fabricator.

What could this qualification lead to?

It could lead to thermal cutting or semi-skilled sheet metal worker job roles across a number of sectors including:

- General engineering
- Automotive
- Energy
- Construction

Again if you are a newcomer to Engineering you may also want to consider a longer programme in the Level 1 Certificate in Welding, Fabrication and Cutting skills, which will allow you to develop a broader range of skills. This may lead to a career as an engineering fitter welder or pipe fitter, or progression onto an intermediate apprenticeship in Engineering.

There is also a Level 2 Award in Thermal Cutting Techniques. This will enable you to develop your practical skills further as you will work within tolerances of +/- 2mm, material thickness will be between 1.6mm-12mm and you will produce more complex components such as a manifold bracket and a flanged pipe.

On completion of the Level 1 Award in Introductory Thermal Cutting Techniques you may wish to consider progression to an intermediate Engineering apprenticeship, or onto other qualifications including:

Level 2 Award in Thermal Cutting Techniques  
Level 2 Certificate in Welding, Metal Fabrication and Cutting Skills.  
Level 2 Certificate in Engineering.  
Level 2 NVQ Diploma in Performing Engineering Operations

Who supports this qualification?

It is supported by the following Colleges of Further Education:

- Hartlepool College
- Leeds City College
- Lincoln College

