

National 4 Practical Metalworking (Course Code: C761 74)

SCQF Level 4 (24 Credit Points)

Why study Practical Metalworking?

This course will give you a broad introduction to practical metalworking skills. You will learn the correct use of tools and equipment, and a range of materials, processes and techniques. And, you will be able to read and interpret diagrams, and work safely in a workshop-based setting. You will get to use some creative skills, and plan your activities through to completing a finished product in metal.

The skills you learn in this course will help you move into career areas such as craft, design, engineering and graphics.

Career Pathways

To see what career areas this subject could lead to and the routes to get there, download and view these career pathways:

[Art and Design](#)

[Communications and Media](#)

[Construction](#)

[Engineering](#)

[Garage Services](#)

[Property and Facilities](#)

[Manufacturing Industries](#)

[Performing Arts](#)

[Transport and Distribution](#)

What do I need to get in?

The school or college will decide on the entry requirements for the course. You would normally have achieved:

- **National 3 Practical Craft Skills**
- **National 3 Design and Technology**

What will I study?

In this course you will develop manual dexterity and control skills in a specialist craft. You will learn about the

correct use of a range of tools, equipment and materials. The skills you learn in this course are also useful to other areas such as woodworking. And, you will learn how to work effectively alongside others in a workshop environment.

In all three units you will develop an appreciation of safe working practices in a workshop setting. And, you will look at how metals are made and recycled and how this impacts the environment.

The course has **three** compulsory units, plus an **added value** unit that assesses your practical skills.

Practical Metalworking: Bench Skills (6 SCQF credit points)

In this unit you will:

- learn a range of metalworking hand tool skills including simple bench-fitting work, basic sheet-metal work and simple measuring and marking out work
- develop the ability to read and interpret simple drawings and diagrams.

Practical Metalworking: Machine Processes (6 SCQF credit points)

In this unit you will:

- build measuring and marking out skills
- develop skills in using common metalwork machines, equipment and related processes
- work with an appropriate range of metals.

Practical Metalworking: Fabrication and Thermal Joining (6 SCQF credit points)

In this unit you will:

- develop skills in fabrication, forming and joining of simple metalwork components
- develop skills in thermal joining techniques
- build skills in measuring and marking out.

Added Value Unit: Making a Finished Product from Metal (6 SCQF credit points)

In this unit you will:

- produce and apply a finish to a product in metal.

How will I be assessed?

Your teacher or tutor will assess your work on a regular basis throughout the course. Items of work might include:

- practical work – operating machinery or checking tools
- written or oral work – identifying tools in short tests.

You must pass both units plus the added value unit to gain the course qualification.

Study Materials

What can I go on to next?

If you complete the course successfully, it may lead to:

- **National 5 Practical Metalworking**

Further study, training or employment in:

- Art and Design
- Communications and Media
- Construction
- Engineering
- Garage Services
- Manufacturing Industries
- Performing Arts
- Property and Facilities
- Transport and Distribution