National 5 Practical Metalworking

# Course Rationale

This course is a broad-based qualification, suitable for learners with an interest in practical technologies. It is largely learner-centred, includes practical and experiential learning opportunities and is suitable for those wanting to progress onto further levels of study or a related career.

# Course Content

This course develops skills in three main areas. Each area provides opportunities for candidates to understand safe working practices, sustainability issues, and good practice in recycling within a workshop environment. Each area of study covers a different set of metalworking skills. All areas include skills and associated knowledge in measuring, marking out, cutting and joining techniques.

**Bench skills -** Candidates develop skills, knowledge and understanding in the use of metalworking hand tools, bench-fitting work, routine sheet-metal work, measuring and marking out, involving complex features. Candidates develop their ability to read and use drawings and diagrams depicting both familiar and unfamiliar metalwork tasks.

**Machine processes -** Candidates develop skills, knowledge and understanding in the use of metalworking machines, equipment, related processes, materials, measuring and marking out, involving complex features.

**Fabrication and thermal joining -** Candidates develop skills, knowledge and understanding in fabrication, forming and joining of metalwork components with some complex features. Candidates develop skills in thermal joining techniques and in measuring and marking out.

# Skills

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

* Knowledge and understanding of the properties and uses of a range of metalworking materials
* Adjusting tools where necessary, following safe practices
* Applying knowledge and understanding of safe working practices in a workshop environment
* Knowledge and understanding of sustainability issues in a practical metalworking context

# Course Assessment

Component 1: Question paper: 1 hour - 30% (SQA exam in May)

Component 2: Practical activity: Internally assessed - 70%

# Progression

Further levels of study (College/apprenticeship or a related career.

# Career Pathways

Engineering, Welding and Fabrication, Mechanic, Civil Engineering, Construction

**For further and more detailed information, please see:** [Practical Metalworking SWAY](https://sway.office.com/kEm4AaChOgF2NgHT?ref=Link)