National 4 Practical Metalworking

# Course Rationale

The Course is largely workshop-based, providing a broad introduction to practical metalworking, 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.

# Skills

Course Structure/Assessment *-*The Course comprises four mandatory Units including the Added Value Unit. Each of the Units of the Course is designed to provide progression to the corresponding Unit at National 5.

**Bench Skills *-***This Unit helps learners develop a range of metalworking hand tool skills including simple bench-fitting work, basic sheet-metal work and simple measuring and marking out work. The ability to read and interpret simple drawings and diagrams is developed in this Unit.

**Machine Processes *-***This Unit helps learners build measuring and marking out skills and to develop skills in using common metalwork machines, equipment and related processes. Learners will work with an appropriate range of metals.

**Fabrication and Thermal Joining *-***This Unit helps learners develop skills in fabrication, forming and joining of simple metalwork components. Learners will develop skills in thermal joining techniques. They will also build skills in measuring and marking out.

**Added Value Unit: Making a Finished Product from Metal *-***This Unit requires learners to draw on and extend their range of practical metalworking experiences and skills in order to produce an effective overall response to the task. The practical activity will be sufficiently open and flexible to allow for personalisation and choice.

# Course Assessment

To achieve the National 4 Practical Metalworking Course, learners must pass all of the required Units, including the Added Value Unit. National 4 Courses are not graded.

# 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)