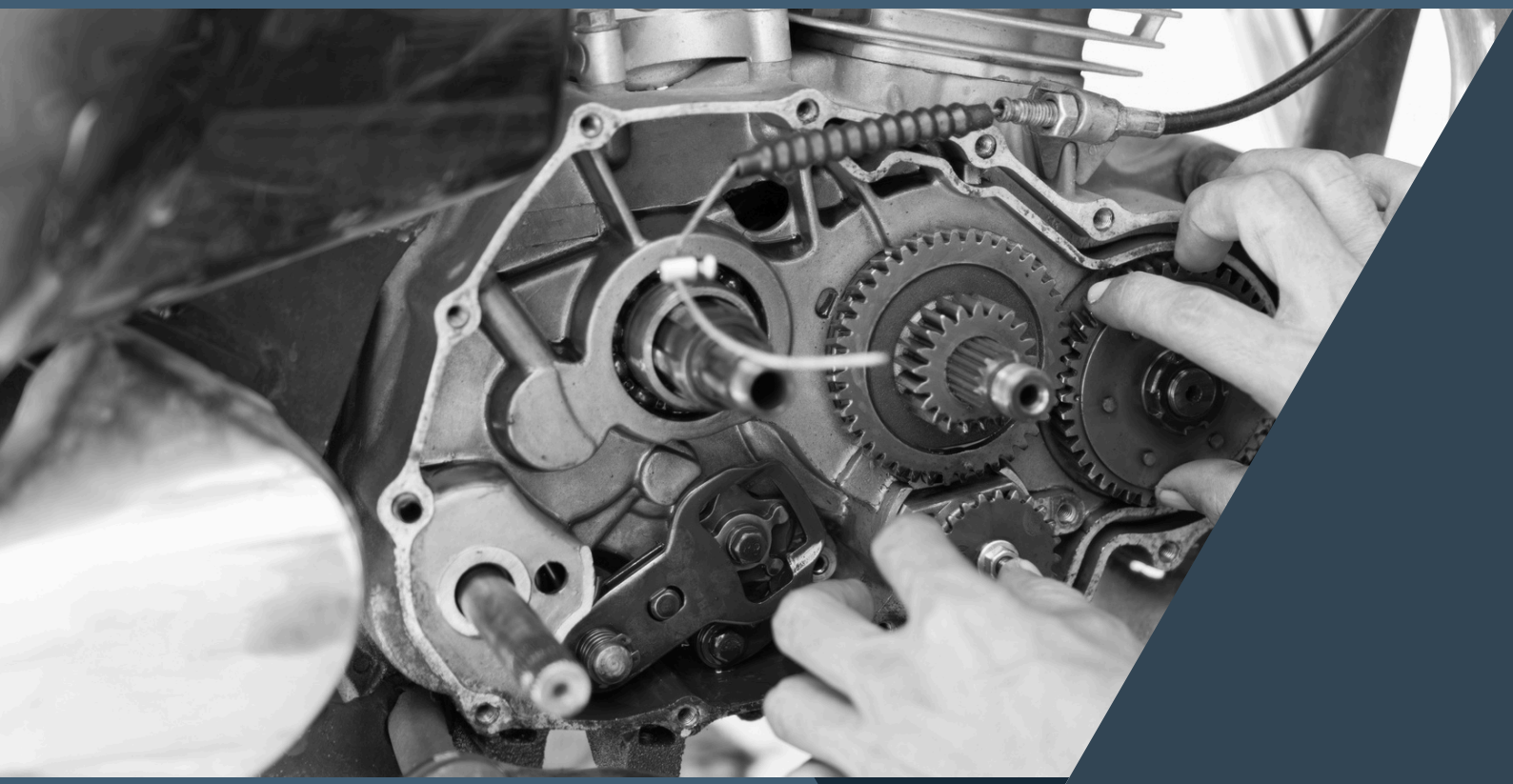
QUALITRAIN
ENGINEERING ACADEMY



Mechanical Fitting and Assembly

Apprenticeship Unit (AU0003)
Minimum learning hours: 70
Typical duration: 2 weeks (block release) to 3 months (day release).

The **Mechanical Fitting and Assembly Apprenticeship Unit** is a focused, high-impact training programme designed to equip existing employees with the **core knowledge and hands-on skills** needed to carry out mechanical fitting and assembly activities safely, accurately, and to specification.

Developed directly from employer-led apprenticeship standards, this unit delivers **job-ready capability** in a short, flexible format that fits seamlessly around production demands.

QUALITRAIN
ENGINEERING ACADEMY

What knowledge and expertise will learners develop?

This unit builds a strong technical foundation, ensuring learners understand **not just how tasks are performed, but why they are done that way.**

Learners will build knowledge of:

- **Health and safety legislation and regulations** relevant to mechanical engineering, including safe systems of work and risk control
- **Mechanical drawings, specifications, and technical documentation**, understanding symbols, conventions, and tolerances
- **Engineering quality requirements,** including inspection methods, acceptance criteria, and continuous quality control
- **Tools, equipment, and materials** used in mechanical fitting and assembly, including their correct application and limitations
- **Common mechanical faults and causes,** enabling informed diagnosis and effective correction

This underpinning knowledge allows learners to work with confidence, accuracy, and accountability in real engineering environments.

What practical skills will learners master?

The unit places strong emphasis on developing hands-on, workplace-ready skills that can be applied immediately on the job.

Learners will gain the ability to:

- Apply **safe working practices** consistently while carrying out mechanical fitting and assembly activities
- **Interpret drawings and specifications** to carry out work correctly first time
- **Plan and organise tasks efficiently,** managing time, priorities, and resources effectively
- **Select and use appropriate tools and equipment** safely and correctly
- **Measure and mark out materials accurately** to meet dimensional and tolerance requirements
- **Carry out mechanical fitting and assembly operations** in line with technical and quality standards
- **Identify and diagnose faults** in mechanical assemblies and take appropriate corrective action
- **Perform quality checks during and after assembly** to ensure final outputs meet required standards

These skills directly support improved build quality, reduced rework, and enhanced operational performance.

QUALITRAIN
ENGINEERING ACADEMY

Who is this unit designed for?

This apprenticeship unit is ideal for:

- **Employed engineering operatives and technicians**
- Staff aged **19 and over**
- Individuals with some existing engineering experience who need to **strengthen or refresh their mechanical fitting and assembly capability**

It is particularly valuable for employers upskilling staff into mechanical roles or standardising skills across engineering teams.

Why employers choose this unit

- Short, focused training with immediate workplace impact
- Skills aligned to your production and maintenance processes
- Improved safety, quality, and consistency in mechanical assembly work
- Flexible delivery to minimise disruption to operations

Why learners value this unit

- Clear, practical engineering skills they can apply straight away
- Greater confidence reading drawings and working to specification
- Enhanced competence in mechanical fitting and assembly tasks
- Nationally recognised training aligned to industry standards

QUALITRAIN
ENGINEERING ACADEMY

If you would like more information, please contact:

Leon Bowler: leon.bowler@qualitrain.co.uk
Adrian Cousins-Cuckson: Adrian.Cousins-Cuckson@Qualitrain.co.uk

CONTACT US:

info@qualitrain.co.uk

Genesis Business Centre, King Street,
Alfreton, Derbyshire. DE55 7DQ

www.qualitrain.co.uk