



University of Central Lancashire

# Training 2000

INFORMATION FOR EMPLOYERS



# Engineering and Advanced Manufacturing

## Training and Apprenticeships

With nearly 60 years' experience in developing and delivering high quality Engineering training programmes, Training 2000 has helped many companies to remain competitive by creating a 'World Class' multi-skilled workforce.

Proud to be  
part of the



University of  
Lancashire

[www.training2000.co.uk](http://www.training2000.co.uk) | 01254 54659  
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# Apprenticeship information

We deliver an extensive range of accredited courses in Technical Services, Electrical & Mechanical Maintenance, Welding & Fabrication, Manufacturing Processes and can develop bespoke skills improvement programmes to meet your specific requirements.

**Commitment:** Your apprentice is required to spend an average of 6 hours per week completing 'off the job' training. This could include their lessons at Training 2000, online training, industry visits, competitions and shadowing.

**Duration:** Some of our Apprenticeships give you the option to have your apprentice based at Training 2000 in Blackburn full time for their first year. Full time at Training 2000 could be for a minimum of 6 months to a maximum of 12 months.

If you choose block training in year 1, this could take between 12 and 18 months to complete.



## LEVEL 2 FOUNDATION APPRENTICESHIP

### General Engineering and Manufacturing Operative

**Duration:** 8 months

#### Entry requirements:

A minimum of two GCSEs at grade 4 (C) or above in English and Maths

Foundation Apprenticeships are for learners aged 16-21

#### Funding your Apprenticeship:

**Levy paying employers:** £4,500

**Non-levy:** £0

PLUS £2,000 incentive payment

#### Topics covered:

##### Health, Safety & Environment

- Understand and comply with employee responsibilities under health, safety and welfare regulations.
- Follow workplace safety procedures and environmental requirements.
- Use, store and maintain personal protective equipment (PPE).
- Apply sustainable practices, including safe waste disposal and recycling.

##### Workplace Preparation & Maintenance

- Prepare and maintain the work area to required standards.
- Use and care for tools, equipment and machinery, including basic maintenance and correct storage.

##### Engineering Information & Communication

- Interpret and use job specifications, engineering drawings, and technical documentation.
- Communicate effectively using verbal, non-verbal, written, and digital methods.

##### Hand & Machine-Based Engineering Tasks

- Perform basic hand-based tasks: measuring, marking out, bench fitting, and hand tool use.
- Carry out machine-based tasks: drilling, turning, milling, grinding, basic CNC operations, and additive manufacturing.

##### Components, Fastenings & Assistance

- Identify and use common engineering components, connections, and fast, holding, positioning materials, and pre-assembly activities.

##### Quality Control

- Perform simple quality checks, including visual inspection and operational testing of own work.

##### Teamwork & Professional Conduct

- Work collaboratively with colleagues to achieve team goals.
- Demonstrate professionalism, timekeeping, and appropriate conduct in the workplace.

##### Personal Development

- Apply feedback and new learning to improve performance.
- Adapt to changes and overcome workplace challenges.
- Manage personal wellbeing, health, and finances using available support.

**End-point assessment methods:** A knowledge test and a practical assessment

## Welder

**Duration:** 18 months

**Commitment:** x1 four week block

**Entry requirements:**

A minimum of two GCSEs at grade 3 (D) or above in English and Maths.

**Topics covered:**

- Welding safety
- Welding documentation and data
- Quality standards
- Plan and prepare welding activities
- Setting up equipment
- Identifying issues
- Welding components
- Inspect welds produced for dimensional and surface weld quality to ensure compliance prior to release

**Coded welder:** After 12 months a test piece will be submitted for inspection to an external organisation and if successful the apprentice will be coded to ISO-9606 or BS-4872.

**End-point assessment methods:** A multiple choice test, two practical tests with questions and a professional interview

**Funding your Apprenticeship:**

<b>Levy paying employers:</b>	£13,000
<b>Non-levy - 22+ years old:</b> (5% contribution)	£650
<b>Non-levy - 16-21 years old:</b>	£0

**Choose two from the following:**

**Level 2 EAL certified blocks:**

- MIG (2 weeks)
- TIG (2 weeks)
- MMA (2 weeks)
- Stages of welding activity
- Restore the work area and equipment to a safe and reliable condition
- Ensure tools, consumables, unused materials and equipment are returned to a safe, clean and approved condition on completion of welding work

## Plate Welder

**Duration:** 3 years

**Commitment:** x1 eight week block (covering MMA, TIG and MAG welding processes)

**Entry requirements:**

A minimum of two GCSEs at grade 4 (C) or above in English and Maths.

**Topics covered:**

- Prepare for welding.
- Verify material specifications.
- Inspect weld prep and cleanliness.
- Assemble and position components.
- Set up and maintain equipment.
- Monitor welding parameters.
- Follow technical specs and drawings.
- Weld accurately using proper techniques.
- Remove defects as needed.
- Inspect alignment, distortion, and welds.
- Remove and finish bracings and aids.
- Manage and return consumables.
- Restore work area and equipment.
- Complete documentation.

**End-point assessment methods:** A multiple choice test, practical tests covering two welding procedure specifications (WPSs) (two material types and two welding processes), an oral examination and a professional interview/portfolio of evidence showing components conforming to international standards

**Funding your Apprenticeship:**

<b>Levy paying employers:</b>	£27,000
<b>Non-levy - 22+ years old:</b> (5% contribution)	£1,350
<b>Non-levy - 16-21 years old:</b>	£0

## Engineering Fitter

**Duration:** 3-4 years (depending on employers needs)

**Commitment:** Year 1 - full time at Training 2000

OR - x3 five week blocks plus one day per week to complete the Technical Certificate (if required)

Year 2 - 1 day per week

Year 3-4 - assessment in the workplace

**Entry requirements:** A minimum of four GCSEs at grade 4 (C) or above including English and Maths.

### Funding your Apprenticeship:

**Levy paying employers:** £21,000

**Non-levy - 22+ years old:** £1,050  
(5% contribution)

**Non-levy - 16-21 years old:** £0

### Pathways available:

#### Electrical Level 2

#### EAL certified blocks:

- Fitting
- Wire and test
- Electrical maintenance

#### Mechanical Level 2

#### EAL certified blocks:

- Fitting
- Mechanical maintenance
- Milling

Extra blocks available at an additional cost

### Topics covered:

- Interpreting and following drawings or diagrams or specifications for required component or assembly
- Planning work activity, including resources, equipment and tooling.
- Producing individual components, for example keys, pipework, threading, wiring looms, interfacing parts, motors, wiring cables.
- Re-furbishing components
- Assembling components to produce equipment, machine or system - in full or part.
- Quality checking and adjusting components or assembly against required specification; for example testing and calibrating.
- Identifying and resolving problems with components or assembly; fault diagnosis.
- Handing over completed components or assembly, this may include storage and commissioning.
- Re-instating work area and equipment
- Contributing to continuous improvement in component production or assembly

**End-point assessment methods:** A knowledge test, a practical test and a technical interview (including portfolio review)

## Metal Fabricator

**Duration:** Up to 4 years

**Commitment:** Year 1 - x1 eight week block plus one day per week to complete the Technical Certificate (if required)

Year 2 - 1 day per week to complete the Technical Certificate (if required) / assessment in the workplace

Year 3/4 - assessment in the workplace

**Entry requirements:**

A minimum of four GCSEs at grade 4 (C) or above including English, Maths, Science and Technology is desirable.

### Funding your Apprenticeship:

<b>Levy paying employers:</b>	£27,000
<b>Non-levy - 22+ years old:</b> (5% contribution)	£1,350
<b>Non-levy - 16-21 years old:</b>	£0

### Blocks:

- MIG (2 weeks)
- TIG (2 weeks)
- Plate work (2 weeks)
- Sheet metal (2 weeks)

### Topics covered:

- Work safely, following regulations.
- Plan and prepare for fabrication.
- Verify material specifications.
- Handle and move materials properly.
- Set up and maintain equipment.
- Interpret drawings to assemble products.
- Shape and form metal using proper tools.
- Monitor processes and identify improvements.
- Cut, drill, and prepare metal.
- Join metal using fasteners or welding.
- Inspect and test joins for compliance.
- Perform quality checks.
- Address fabrication issues.
- Restore work area and equipment.
- Complete documentation.
- Weld per approved procedures.

**End-point assessment methods:** A practical observation and a professional discussion



# Mechatronics Maintenance Technician

**Duration:** 3-4 years (depending on employers needs)

**Commitment:** Year 1 - full time at Training 2000

OR - x4 five week blocks plus one day per week to complete the Technical Certificate (if required)

Year 2 - 1 day per week

Year 3-4 - assessment in the workplace

**Entry requirements:** A minimum of four GCSEs at grade 4 (C) or above including English and Maths.

## Funding your Apprenticeship:

**Levy paying employers:** £27,000

**Non-levy - 22+ years old:** £1,350  
(5% contribution)

**Non-levy - 16-21 years old:** £0

## Level 2 EAL certified blocks:

- Fitting
- Wire and test
- Electrical maintenance
- Mechanical maintenance

Extra blocks available at an additional cost

## Topics covered:

- Accept responsibility for the task and complete any preparatory documentation or opening of electronic recording that may be required to commence the task.
- Plan and prepare the maintenance activities to cause minimal disruption to normal working, agree planned actions and obtain any required permits or permissions required to carry out the task. Communicate and report issues affecting equipment availability that may impact on operations
- Select, obtain and prepare all resources required to carry out the task for example: tools, materials, documentation, permits. Carry out pre-use checks of equipment, tools and other resources.
- Set up safe systems of work ensuring that statutory regulations and organisational compliance requirements are met.
- Manufacture, repair or refurbish components using a range of hand and machine tools.
- Perform mechatronics maintenance activities ensuring all parts and consumables used in the maintenance activity comply with manufacturers specifications.
- Revise, edit, update and store documentation. Comply with organisational policies and legislation regarding document and electronic storage.
- Carry out planned preventative maintenance including functional, static and operational checks on complex equipment and assets.
- Apply condition monitoring techniques or use condition monitoring results (for example oil, vibration, thermal, NDT) to determine equipment condition.
- Use a range of test and measuring equipment (including both electrical and physical measures) and appropriate calculations required to carry out the task and to aid in fault diagnosis.
- Return equipment to operational condition, re-connect any ancillary equipment and services, and carry out required functional, static, quality and operational checks to confirm equipment serviceability and fitness for purpose.
- Restore workplace and leave in a safe condition. Hand over completed work to responsible parties confirming completion of maintenance activities.

**End-point assessment methods:** An observation with questions and interview based on a portfolio of evidence

# Engineering and Manufacturing Support Technician

**Duration:** 3-4 years (depending on employers needs)

**Commitment:** Year 1 - full time at Training 2000

OR - x2 five week blocks & x1 six week block plus one day per week to complete the Technical Certificate (if required)

Year 2 - 1 day per week

Year 3-4 - assessment in the workplace

## Funding your Apprenticeship:

**Levy paying employers:** £27,000

**Non-levy - 22+ years old:** £1,350  
(5% contribution)

**Non-levy - 16-21 years old:** £0

**Entry requirements:** A minimum of four GCSEs at grade 4 (C) or above including English and Maths.

## Pathways available:

### Machining Level 2 EAL certified blocks:

- BIT & Project control (6 weeks)
- Milling
- Turning

### Fabrication Level 2 EAL certified blocks:

- BIT & Project control (6 weeks)
- TIG/MIG
- Sheet metal

### Mechanical Level 2 EAL certified blocks:

- BIT & Project control (6 weeks)
- Mechanical Maintenance
- Fitting

### Electrical Level 2 EAL certified blocks:

- BIT & Project control (6 weeks)
- Wire and Test
- Electronics

Extra blocks available at an additional cost

## Topics covered:

- Comply with statutory, quality, organisational, environmental, and health and safety regulations.
- Receive, read, and interpret engineering data and documentation.
- Identify problems within the engineering or manufacturing activity and contribute to the resolution and suitable solutions.
- Organise engineering or manufacturing workflow, communicating with internal and external stakeholders.
- Plan work, and resources to enable implementation of engineering or manufacturing tasks and projects.
- Use appropriate technical software supporting the operation of processes or equipment.
- Provide technical support operations in line with specific safe working practices and specification requirements.
- Complete technical support activities for equipment, components, systems or processes and contribute to their product output.
- Produce technical documentation, data and information to support engineering or manufacturing activities.
- Carry out quality checks during and after the technical support operation.
- Handover and provide technical advice to stakeholders for engineering equipment and services.
- Support continuous improvement activities to address business needs.

**End-point assessment methods:** A work-based report with presentation and questioning and interview based on a portfolio of evidence

# Engineering Technician: Toolmaker and Tool and Die Maintenance Technician

**Duration:** Up to 4 years

**Commitment:** Year 1 - full time at Training 2000

OR x6 five week blocks & x1 two week block plus one day per week to complete the Technical Certificate (if required)

Year 2 - 1 day per week to complete the Technical Certificate (if required) / assessment in the workplace

Year 3/4 - assessment in the workplace

## Entry requirements:

A minimum of four GCSEs at grade 4 (C) or above including English, Maths, Science and Technology is desirable.

## Funding your Apprenticeship:

**Levy paying employers:** £26,000

**Non-levy - 22+ years old:** £1,300  
(5% contribution)

**Non-levy - 16-21 years old:** £0

## Blocks:

- BIT (2 weeks)
- Fitting
- Mechanical Maintenance
- Manual milling
- Manual turning
- Sheet metal
- Grinding

## Topics covered:

- Importance of complying with statutory, quality, organisational and health and safety regulations
- General engineering/manufacturing mathematical and scientific principles, methods, techniques, graphical expressions, symbols formulae and calculations used by engineering technicians
- Diagnostic methods and techniques used to help solve engineering/manufacturing problems
- Relevant engineering/manufacturing data and documentation
- The importance of only using current approved processes, procedures, documentation and the potential implications for the organisation if this is not adhered to
- Different roles and functions in the organisation and how they interact
- Dealing promptly and effectively with engineering/manufacturing problems within the limits of their responsibility using approved diagnostic methods and techniques and report those which cannot be resolved to the appropriate personnel

## Toolmaker and Tool and Die Maintenance Technician pathway:

- Mathematical techniques
- Characteristics of common materials
- Hand tools
- Workshop machinery
- Set up and operate machinery
- Individual components/systems
- Application of systems
- Data and documentation
- Produce, assemble, disassemble
- Manufacture components
- Testing
- Preventative planned maintenance
- Fault diagnosis and repair activities
- Maintaining mechanical equipment
- Maintaining fluid & pneumatic power equipment
- Maintaining electrical & electronic equipment
- Maintaining process control equipment
- Continuous improvement

**End-point assessment methods:** A creation of a portfolio, a competence interview and application for professional recognition (EngTech)



# Machining Technician

**Duration:** 3-4 years (depending on employers needs)

**Commitment:** Year 1- 20 weeks full time at Training 2000 OR x3 five week blocks and x1 two week block plus one day per week for the Technical Certificate

Year 2 - 1 day per week to complete the Technical Certificate / assessment in the workplace

Year 3/4 - assessment in the workplace

## Entry requirements:

A minimum of four GCSEs at grade 4 (C) or above including English and Maths.

## Funding your Apprenticeship:

<b>Levy paying employers:</b>	£27,000
<b>Non-levy - 22+ years old:</b> (5% contribution)	£1,350
<b>Non-levy - 16-21 years old:</b>	£0

## Pathways available:

### Turning Level 2 EAL certified blocks:

- Manual turning
- Manual milling
- Fitting
- CNC turning (2 weeks) Training 2000 appreciation award (optional)

### Milling Level 2 EAL certified blocks:

- Manual milling
- Manual turning
- Fitting
- CNC turning (2 weeks) Training 2000 appreciation award (optional)

Extra blocks available at an additional cost

## Topics covered:

- Conduct safety checks and performance monitoring for machining, associated equipment and surrounding work area.
- Receive, read and interpret engineering data and documentation, engineering drawings and technical data. Contribute to or plan the days machining schedule.
- Check and inspect materials to be machined to ensure that they conform to quality standards. Identify and report any issues or faults such as incorrect grades, dimensions and thicknesses.
- Plan and prepare sequence for the machining activities. Ensure that the correct tooling, work holding, and materials are used. This applies to conventional Machine high-quality complex components using a broad range of processes. For example, internal or external thread cutting, slots and pockets, internal or external under cutting. Also profile forms, tapered and eccentric diameters, bored holes, and tee slots.
- Inspect components produced. Adjust the machining equipment or program and tooling to ensure components meet quality requirements.
- Identify, communicate and report issues affecting machining component quality, quantity and deadlines.
- Complete machining documentation at all stages of the work activity. For example, standard operational procedures, control documentation and contribution to audits.
- Maintain and restore the machining work area, performing housekeeping and waste management as appropriate. Ensure tools, unused materials and equipment are returned to a safe, clean and approved condition on completion of machining work.
- Keep stakeholders for example, customers, colleagues and line managers informed about machining work.
- Perform scheduled daily inspection and machine shut down or safe isolation.
- Support continuous improvement activity to address business problems.

**End-point assessment methods:** A knowledge test, a practical demo with questions and an interview, underpinned with portfolio evidence

# Engineering Manufacturing Technician

**Duration:** Up to 4 years

**Commitment:** Year 1/2 - 1 day per week to complete the HNC in Advanced Manufacturing at Training 2000 (see page 11 for details)

Year 3/4 - assessment in the workplace

## Entry requirements:

Applicants must already be employed in a suitable engineering role.

In addition, they will need one of the following:

- A minimum of two A-Levels at grade C or above, including a mathematical-based subject and a science, technology, engineering or an additional mathematics-related subject
- An Engineering BTEC Level 3 with at least 120 credits at MM (Merit Merit) level
- An EAL Diploma in an Engineering-based subject at M (Merit) or above
- Equivalent qualifications such as Technical Levels at MM (Merit Merit) or above.

## Funding your Apprenticeship:

<b>Levy paying employers:</b>	£21,000
<b>Non-levy - 22+ years old:</b> (5% contribution)	£1,050
<b>Non-levy - 16-21 years old:</b>	£0

## Topics covered:

- Be able to ensure the safe and efficient performance of every production task in compliance with company procedures, approved engineering data and local Health and Safety requirements.
- Produce and review engineering or manufacturing documentation such as, Build Manuals, Engineering drawing, Standard Operating Instructions and processes, Bill of Materials, to aid and ensure consistent, compliant and cost-effective manufacturing processes.
- Ensure processes and current methods of engineering and manufacturing are as efficient and cost effective, such as, utilising time and motion analysis, line balancing and flow to achieve the required level of production output, whilst maintaining quality standards.
- Carry out new product introduction or existing product modifications within engineering or manufacturing by contributing to activities such as facilitation of quality activities (including any testing or commissioning requirements), supplier approvals, gate reviews.
- Liaise with appropriate internal and external stakeholders at all levels to ensure that engineering and manufacturing operations are completed in line with the agreed time scales. Examples of stakeholders could include production managers, production operatives, auditors, suppliers, customers.
- Be able to resolve identified engineering or manufacturing problems such as, contributing to the root cause analysis exercise applying appropriate levels of containment and corrective action.

**End-point assessment methods:** Practical observation and professional discussion

## HNC in Electrical and Electronic Engineering

**Duration:** 2 years - starts in September each year

**Commitment:** One day per week

**Cost:** £2,625 (+VAT) per year

**Entry requirements:**

Ideally completed a Level 3 qualification in engineering or equivalent

**Topics covered:**

- Engineering Design
- Engineering Mathematics
- Managing a Professional Engineering Project
- Production Engineering for Manufacture
- Quality and Process Improvement
- Automation, Robotics, PLCs
- Electrical & Electronic Principles
- Electrical Machines

## HNC in Mechatronics

**Duration:** 2 years - starts in September each year

**Commitment:** One day per week

**Cost:** £2,625 (+VAT) per year

**Entry requirements:**

Ideally completed a Level 3 qualification in engineering or equivalent

**Topics covered:**

- Engineering Design
- Engineering Mathematics
- Managing a Professional Engineering Project
- Production Engineering for Manufacture
- Quality and Process Improvement
- Engineering Mechanics and Materials
- Analogue and Digital Electronics
- Mechatronic Systems in Manufacturing

## HNC in Manufacturing Engineering

**Duration:** 2 years - starts in September each year

**Commitment:** One day per week

**Cost:** £2,625 (+VAT) per year

**Entry requirements:**

Ideally completed a Level 3 qualification in engineering or equivalent

**Topics covered:**

- Engineering Design
- Engineering Mathematics
- Managing a Professional Engineering Project
- Production Engineering for Manufacture
- Quality and Process Improvement
- Computer Aided Design and Manufacture (CAD/CAM)
- Industry 4.0
- Industrial Robots

## HND in General Engineering

**Duration:** 1 year - starts in September each year

**Commitment:** One day per week

**Cost:** £2,625 (+VAT)

**Entry requirements:**

Our one year top up from HNC to HND is obtained by studying a further six units at Level 5

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**Topics covered:**

- Professional engineering management
- Further mathematics
- Research project

Topics are subject to change

- Advanced mechanical principles
- Further thermodynamics
- Sustainability

# Our engineering and advanced manufacturing training courses

We deliver an extensive range of accredited courses and can develop bespoke skills improvement programmes to meet your specific requirements.

Course title	Duration	Price
18th Edition Wiring Regulations BS7671 (City and Guilds 2382-22)	5 Days	£475.00
Abrasive Wheels	Half Day	£80.00
Basic Electrical Maintenance	5 Days	£805.00
Basic Mechanical Maintenance	5 Days	£805.00
CNC Turning (AUEC2-034) & CNC Programming (AUEC2-021) Block	4 Weeks	£1,050.00
Electrical Maintenance Block (AUEC2-009)	4 Weeks	£1,050.00
Electronics Block (AUEC2-016)	4 Weeks	£1,050.00
Fitting Block (AUEC2-005)	6 Weeks	£1,575.00
Grinding Block (AUEC2-033)	5 Weeks	£1,315.00
Mechanical Maintenance Block (AUEC2-006)	4 Weeks	£1,050.00
MIG Welding Block (AUEC2-015)	5 Weeks	£1,315.00
Milling Block (AUEC2-014)	5 Weeks	£1,315.00
MMA Welding Block (AUEC2-067)	5 Weeks	£1,315.00
Platework Block (AUEC2-071)	2 Weeks	£525.00
PLCs Block (AUEC2-011)	4 Weeks	£1,050.00
Principles of Measurement and Metrology Techniques	1 Day	£160.00
Safe Isolation	Half Day	£135.00
Sheet Metal Block (AUEC2-022)	5 Weeks	£1,315.00
TIG Welding Block (AUEC2-042)	5 Weeks	£1,315.00
Turning Block (AUEC2-013)	5 Weeks	£1,315.00
Welding Principles	3 Days	£475.00
Wire & Test Block (AUEC2-010)	4 Weeks	£1,050.00
Coded Welding: ISO 9606 series or BS 4872 Butt & Fillet	1 Day	£555.00
Coded Welding: ISO 9606 series or BS 4872 - Butt Welds	1 Day	£325.00
Coded Welding: ISO 9606 series or BS 4872 Fillet Weld	1 Day	£295.00

**If you have any specific training needs that are not listed above, please get in touch**  
**For prices and further information, please contact [businessdevelopment@t2000.co.uk](mailto:businessdevelopment@t2000.co.uk)**

