



Metal Fabricator Advanced Apprenticeship Standard

Sector	Advanced Manufacturing (England) EAL
Level	3
Guided Learning Hours (Off the Job)	750 hours = Development Knowledge
Total Course length	39 Months = Plus 6 months for end point assessment
Minimum age of learner	16 years
Cost / Funding	£27,000 (£0 age 18 under / 5% £1350 age19+)

Potential Job Roles: Fabricator and Welder, MIG, TIG, MMA AND MAG

Manufacturing Fitter: This occupation is found in the advanced manufacturing engineering and engineering construction sectors.

The broad purpose of the occupation is to carry out metal fabrication work using things such as rolled steel joists, columns, channels, steel plate and metal sheet etc. Work includes manufacturing bridges, oil rigs, ships, petro-chemical installations, cranes, platforms, aircraft, automotive and machinery parts, sheet metal enclosures, equipment supports, and anything that can be fabricated out of metal. Fabricators can work alone or in teams, in factories or on operational sites. In their daily work, an employee in this occupation typically interacts with line managers/supervisors; depending on the size of the employer and nature of the work they may work as part of a team of fitters or independently. They may interact with personnel in other functions for example installation and maintenance engineers, health & safety and quality assurance personnel, as well as internal or external customers.

Fabricators use a large range of metals including steel, aluminum and titanium at a range of thicknesses from 0.5mm up to over 20mm. The size and weight of the fabrications can range from components that can easily be picked up by hand, to massive structures that require several cranes to manipulate

In their daily work, an employee in this occupation interacts with planners, supervisors, inspectors, designers, welders, pipefitters, fitters, machinists, riggers, steel erectors, stores personnel, painters and many others involved in manufacturing, production, maintenance and repair.

An employee in this occupation will be responsible for the quality and accuracy of their own work whilst ensuring it conforms to a relevant specification such as an engineering drawing or an international standard. Fabricators are also responsible for the health, safety and environmental (HS&E) protection of themselves and others around them.

Mandatory requirements	Functional Skills	Level
	Math's English	2 2
Qualification and Skills	GCSE 4 and above in Math's & English	
Knowledge, Skills and Behavior (KSB)	Level 3 Engineering Fitter Apprenticeship ST0432	
Employer Rights and Responsibilities	Employer Rights and Responsibilities	
Personal Learning and Thinking Skills	Creative thinking Reflective Learning Self-management	Independent enquiry Team Working Effective participation

Level 3 Development Knowledge – Mandatory 3 units = 195 GLH				Months 1 to 39
LEVEL	UNIT NO	GLH	UNIT TITLE	
3	AMEDK3/001	60	Health and Safety in the Engineering Workplace	
3	AMEDK3/002	60	Communications for Engineering Technicians	
3	AMEDK3/003	75	Mathematics for Engineering Technicians	
Level 3 Development Knowledge – Choose units to fill 555 GLH				Months 1 to 39
3	AMEDK3/010	75	Engineering Organisational Efficiency and Improvement	
3	AMEDK3/012	75	Computer Aided Design (CAD) techniques	
3	AMEDK3/028	75	Fabrication and welding Principles	
3	AMEDK3/030	75	Pattern Development	
3	AMEDK3/031	75	Manual Metal-Arc (MMA)Welding	
3	AMEDK3/032	75	Metal Inert Gas, Metal Active Gas (MIG/MAG) Welding	
3	AMEDK3/033	75	Tungsten Inert Gas (TIG) Welding Process	
3	AMEDK3/038	75	Producing Plate Fabrications	
3	AMEDK3/058	75	Workplace Improvement	
End Point Assessment				Months 39 to 45

Knowledge, Skills and Behavior (KSB)

Additional Courses				Months 1 to 39
NVQ 3 Extended / EAL Certification				
Level 2	QPEO2/005	64		
Level 2	QPEO2/006	68		
Level 2	QPEO2/019	64		

Qualification Progression	Advanced level 4 HNC apprenticeship.
Job role progression opportunities:	Apprentices will start off by carrying out semi-skilled job roles within manufacturing and engineering industry. It is likely that a period of consolidation will be required in these roles before progression can take place. Most will aspire to a combination of internal promotion within their companies to team leader or supervisor level, while at the same time this affords the opportunity to undertake Further Education qualifications or an Advanced Apprenticeship to upgrade their competence and knowledge to fully skilled status.