



## Engineering Fitter (Mechanical) Apprenticeship Standard

<b>Sector</b>	Advanced Manufacturing (England) EAL
<b>Level</b>	3
<b>Guided Learning Hours (Off the Job)</b>	750 hours = Development Knowledge
<b>Total Course length</b>	39 Months = Then 6 months for end point assessment
<b>Minimum age of learner</b>	16 years
<b>Cost / Funding</b>	£21,000 ( £0 age 18 under / 5% £1050 age19+)

**Potential Job Roles:** Mechanical Fitter; Electrical Fitter; Electronic Fitter; Instrumentation Fitter; Pipe Fitter; Controls and Systems Fitter

**Manufacturing Fitter:** This occupation is found in manufacturing and process sectors.

The broad purpose of the occupation is to produce complex high value, low volume components or assemblies in full or part, using machines, equipment or systems, to the required specification. Fitters may typically have a mechanical, electrical, electronic, control systems, pipe fitting or instrumentation bias or operate across multiple disciplines depending on the type of assembly. To produce or re-furbish the components fitters will interpret drawings/specifications and plan their work, for example ensuring they have the right tools, equipment and resources to complete the task to the required specification. Fitters are required to check their work against quality standards and make adjustments as required based on their knowledge. On completion of the task a fitter will hand over the product and prepare the work area for the next task by checking equipment meets the standards required to operate.

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.

An employee in this occupation will be responsible for completion of their work to the required specification and deadlines, in line with quality, health & safety and environmental regulations and requirements, with minimum supervision.

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

<b>Level 3 Development Knowledge – Mandatory 3 units = 195 GLH</b>				<b>Months 1 to 39</b>
<b>LEVEL</b>	<b>UNIT NO</b>	<b>GLH</b>	<b>UNIT TITLE</b>	
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	
<b>Level 3 Development Knowledge – Choose units to fill 555 GLH</b>				<b>Months 1 to 39</b>
3	AMEDK3/004	120	Engineering Project	
3	AMEDK3/007	60	Properties and Applications of Engineering Materials	
3	AMEDK3/010	75	Engineering Organisational Efficiency and Improvement	
3	AMEDK3/012	75	Computer Aided Design (CAD) techniques	
3	AMEDK3/015	75	Engineering Maintenance Procedures and Techniques	
3	AMEDK3/016	75	Maintenance of Mechanical Systems	
3	AMEDK3/050	75	General Engineering Maintenance Techniques	
<b>End Point Assessment</b>				<b>Months 39 to 45</b>

## Knowledge, Skills and Behavior (KSB)

<b>Additional Courses</b>				<b>Months 1 to 39</b>
NVQ 3 Extended / EAL Certification				
Level 2	QPEO2/005	64	Producing components using hand fitting techniques	
Level 2	QPEO2/006	68	Producing mechanical assemblies	
Level 2	QPEO2/019	64	Maintaining mechanical devices and equipment	

<b>Qualification Progression</b>	Advanced level 4 HNC apprenticeship.
<b>Job role progression opportunities:</b>	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.