

Manufacturing Engineering Technician (Level 4)

This occupation is found in large and small engineering and manufacturing organisations providing products and services throughout a wide range of sectors, such as Automotive, Aerospace/Airworthiness, Chemical Processing, Land Systems, Marine, Maritime Defence, Materials Manufacturers and their respective supply chains. Research indicates that the sector needs to recruit approximately 124,000 engineers and technicians every year.

The broad purpose of the occupation is to provide specialist technical support for engineers, so that organisations can develop, produce or test new/existing products, processes, or procedures to meet a customer specification in terms of quality, cost and delivery, as efficiently and effectively as possible. Engineering Manufacturing Technicians gather information and data from a range of sources and analyse the information/data. They will make decisions, solve problems and produce and/or update technical documentation, reports or specifications covering areas such as quality, reliability, production schedules/targets, costing or other technical documentation that informs others, either internally or externally what needs to be done such as how a product must be designed, manufactured, tested, modified, maintained, stored, transported, commissioned or decommissioned.

In their daily work, an employee in this occupation interacts with their line manager to confirm departmental programmes of work and to agree individual responsibilities. This in turn will align to an overarching organisational resource and delivery plan. Engineering Manufacturing Technicians can be office based, manufacturing/plant based or more commonly a combination of both, working with engineering and/or manufacturing teams at an operational level such as with production team leaders and/or management level working with specialist quality or design engineers. As well as liaising with internal colleagues, they may also be responsible for working directly with customers and/or suppliers or with representatives from appropriate regulatory bodies. Typically this would involve interaction with auditors to demonstrate compliance to specific organisational or regulatory requirements (such as Civil Aviation Authority). Their time will be spent between working in an office environment and working in the manufacturing environment or visiting customers or suppliers as and when required.

An employee in this occupation will be responsible for the quality, safety and delivery of the manufactured product or service, ensuring it is delivered to the customer on time at the agreed cost. They will typically report to an engineering or manufacturing manager as part of a cross functional team, the size of this team and responsibilities will vary depending on the size of the employer. Although working within defined quality processes and procedures, they are responsible for the delivery, quality and accuracy of the work they complete. They have the autonomy to use judgement when undertaking the occupational duties and applying their technical knowledge, skills and behaviours in a wide range of contexts and environments. They use a range of tools and techniques to support decision making and solve problems that are often complex and non-routine. They also have a responsibility to identify and contribute to making improvements such as business processes, procedures, ways and methods of working.

Typical job titles include:

Manufacturing Engineer Quality, Manufacturing Production Engineer, Manufacturing Procurement Engineer, Quality Engineer, Costing Engineer, Test and Commissioning Engineer, Installation Engineer, Process Engineer, Production Support Engineer.

The typical duration for this apprenticeship is 42 months. This does not include the EPA period.

Entry requirements: Individual employers will set the selection criteria for their Apprenticeships. In order to optimise success candidates will typically have 5 GCSE's at Grade C (Grade 4/5 in the new numerical GCSE grading system) or above, including Mathematics, English and a Science, Technology or Engineering related subject, or 90+ credits in an Engineering BTEC at level 3. *(As further guidance, the level of Mathematics has an advisory GCSE level of grade B (Grade 5/6 in the new numerical GCSE grading system))

For more information about the Higher Apprenticeship in Advanced Manufacturing Engineering (Level 4) apprenticeship, please contact engage@ucl Leeds.ac.uk or call 0113 235 4510.