

Apprenticeship Standard – Science Manufacturing Technician

Occupation - Science Manufacturing Technician

Level - 3

Duration of Apprenticeship - Minimum of 18 months, average 24 – 36 months duration.

Role profile

Science manufacturing technicians work in a wide range of companies, including, but not exclusively, chemical, primary and secondary pharmaceutical, biotechnology, formulated products and nuclear manufacturing. A science manufacturing technician would operate the systems and equipment, involved in the production of products. They may work in varied conditions including wearing specialist safety equipment, shift work and on sites running 365 day operations. Many companies operate under highly regulated conditions and a premium is placed on appropriate attitudes and behaviours to ensure apprentices comply with organisational safety and regulatory requirements.

Science manufacturing technicians will be expected to work both individually and as part of a manufacturing team. They will be able to work with minimum supervision, taking responsibility for the quality and accuracy of the work they undertake. They will be proactive in finding solutions to problems and identifying areas for improving their work environment.

Occupational Skills & Knowledge

At the end of the apprenticeship the apprentice will be able to:

1. Both independently and within a team start-up a manufacturing batch or continuous process in line with appropriate Standard Operating Procedures, understanding the principles of operation.
2. Both independently and within a team operate a manufacturing batch or continuous process in line with appropriate Standard Operating Procedures, understanding the principles of operation.
3. Both independently and within a team shut down/complete a run of the manufacturing batch or continuous process in line with appropriate Standard Operating Procedures, understanding the principles of operation.
4. Work safely in a science manufacturing environment, understanding personal responsibility for Health, Safety and the Environment and principles of risk management
5. Understand and follow quality procedures to meet the requirements of quality standards relevant to the workplace.
6. Understand the internal and external regulatory environment pertinent to the sector and the sponsoring company and comply with regulations proficiently.
7. Control and monitor a process or plant and equipment, effectively, efficiently and securely, and resolve problems or correct abnormal conditions.
8. Complete documentation relevant to the manufacturing process including relevant calculations.
9. Understand the business environment in which the company operates including personal role within the organisation, ethical practice and codes of conduct.
10. Participate in continuous performance improvement.
11. Develop and apply theoretical knowledge of relevant science and technology and its application to the required sector & job role.

Behaviours

12. The apprentice must also demonstrate the required attitudes, behaviours and interpersonal skills associated with the professional workplace including:
 - communicate effectively using a full range of skills: speaking; listening; writing; body language; presentation
 - work and interact effectively within a team
 - work independently and take responsibility for initiating and completing tasks

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- understand impact of work on others, especially where related to diversity and equality
- time management and ability to complete work to schedule
- ability to handle change and respond to change management processes.

If not set as an entry criterion, apprentices will achieve English and Mathematics at level 2 by the end of the apprenticeship. For certain employers it may be necessary to achieve a minimum level 3 in English and/or Mathematics and this will be specified by the employer before the apprenticeship commences.

The apprenticeship is designed to be recognised by the relevant professional bodies at Registered Science Technician (RSciTech) level, for which there is a requirement that the apprentice will participate in subsequent continuing professional development on completion of the apprenticeship.

This standard has also been designed to meet the professional standards of the Engineering Council for registration as an Engineering Technician (EngTech). Registration is subject to candidates successfully completing the appropriate learning, developing the appropriate competence, and undergoing professional review.

Learning & Training

Employers will compile an Apprenticeship training plan that describes the training their apprentice will need to meet the standard. It may include a mixture of external and internal training that will ensure the apprentice is fully competent by the end of their programme and ready to take the assessment. It will show when each area of the standard must be acquired and assessed and which areas may be acquired off the job. An apprentice will receive a minimum of 20% of their training away from their day-to-day job.

The apprentice will gain transferable core skills and knowledge. In addition they will gain skills specific to the working practices of their place of employment. The requirements of the apprenticeship are designed to offer stretch and progression.

Review Date

This Apprenticeship standard will be reviewed by employers in September 2015.

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