

SCIENCE



Apprenticeships

TEACHER & CAREER ADVISOR RESOURCES



EXAMPLES OF SCIENTIFIC APPRENTICESHIPS



The job roles apprentices perform can be varied as are the entry levels for students taking up these opportunities.

Laboratory Technician:

This occupation is found in a wide range of organisations, including but not exclusively, chemical, primary & secondary pharmaceutical, biotechnology, formulated products, nuclear companies; & analytical science services, dental laboratories & educational establishments. This apprenticeship standard has a vocational level of 3 & can be delivered to include an academic qualification such as a BTEC in Applied Science or delivered as a stand alone

apprenticeship with a focus on the Knowledge Skills & Behaviours (KSB's) only. This is the employers choice and gives them the flexibility to find the right candidate for the role without excluding those who already have A levels in science. Students need to be aware of the content of the apprenticeship as not all employers offer the same sets of qualifications. Typically this apprenticeship will last between 18 and 24 months.

Science Manufacturing Technician:

Apprentices on this level 3 program often work in the production areas of large scale manufacturing facilities. A science manufacturing technician

will operate the systems and equipment, involved in the production of products. Different pathways have been created for this apprenticeships to reflect the diverse focus of the role, these include Biotechnology Technician, Process Industry Technician and Pharmaceutical Technician.

Technician Scientist: At vocational level 5, a technician scientist carries out established laboratory based investigations & basic scientific experimentation using bench & instrumentation techniques typically over a 3 year period. They use a range of routine skills & some advanced and specialised skills following well

2



Science Manufacturing Technicians are often involved in the manufacture of pharmaceuticals, chemicals, or bespoke oncology drugs. Apprentices on this program helped to create the first COVID-19 vaccinations in the UK.

established principles associated with their organisation's science and technology, which may typically be within chemical, pharmaceutical, biotechnology, formulated products or analytical services. Job roles for students entering this apprenticeship may include, Analytical Support Chemist, Technical Support Scientist, Microbiology Support Scientist, Technical Laboratory Assistant, Laboratory Analyst, Laboratory Research Assistant. This apprenticeship is flexible for employers and may include a higher national qualification in a related subject such as Chemical or Biological Science. It will always include training and development of the level 5 knowledge, skills and behaviours contained within the apprenticeship standard.

Laboratory Scientist (Degree Level): An apprentice completing this program will apply specialist knowledge & a broad scientific understanding carrying out a range of technical & scientific activities in their job role. At degree level each apprentice will complete a Bachelor of Science degree alongside the knowledge, skills & behaviours for this apprenticeship over a 5 year period. Apprentices will be expected to carry out a research project for their employer that contributes

to the science they carry out. This will help to develop high level of scientific knowledge, problem solving & creative thinking skills as well as the ability to lead continuous performance improvement within the industry. The project will also be used as a major focus of the end point assessment for the apprentice as they look to complete the program.

Healthcare Science Assistant: Level 2 apprentices contribute to safe patient care across all care pathways from conception to end of life in job roles within hospitals, general practice and other settings in the healthcare sector. Apprentices perform a range of low risk, routine technical and scientific procedures usually within one broad area of healthcare science, following specific protocols and in accordance with health, safety, governance and ethical requirements.

Healthcare Science Associate: Supports the work of HCS Practitioners and Clinical Scientists in performing high quality, safe diagnostic, therapeutic and monitoring technical and scientific procedures. They perform a wide range of routine technical and scientific procedures, with minimal supervision, following specific protocols and in accordance with health, safety, governance and ethical requirements.

New apprenticeship standards are being developed to meet the needs of the industry all the time. Visit the IfATE site to find the latest details.

3



The vocational level that apprenticeships are assigned...

All apprenticeship standards are given a vocational level to help people understand the complexity of the duties that need to be carried out by the apprentice once all the training, development and learning has been achieved. This will be aligned to the knowledge, skills & behaviours developed by the Trailblazer group for the occupational standard. Only when the apprentice is consistently working at this level or above will they be ready to complete their apprenticeship and undergo their end point assessment. Apprenticeships range from vocational level 2, up to level 7.