## Level 3

## Science Manufacturing Technician (SMT) - Biotechnology Apprenticeship Programme



# Welcome

Becoming a Science Manufacturing Technician (SMT) in Biotechnology is more than just a qualification — it's a chance to develop life-changing skills, grow your confidence, and build a career in a vital healthcare field. This programme is designed with you in mind, offering the tools, knowledge, and handson experience to help you thrive. Along the way, you'll be supported by dedicated tutors and a network of professionals who want to see you succeed. Every step brings new challenges, achievements, and opportunities to grow.



## **About us**

Skills4Science is a Science Apprenticeship Training Provider dedicated to initiating and furthering the careers of Science Apprentices. We take pride in delivering high-quality training programmes to Apprentices and have a team of tutors ready to guide and support Apprentices on their journey to certification.

Our Level 3 Apprenticeship Standard for Science Manufacturing Technicians is recognised by the Science Council. We offer a bespoke service to ensure that we are meeting the needs of our employers and learners.

## Course Information

## Course Information



#### Who is the course for?

Learners who participate in the manufacture of products using scientific and industrial processes; this may include biotechnology, chemical, or materials-based manufacturing such as plastics or polymers. Learners will work with specialist equipment, prepare materials, and follow regulated procedures. This course is ideal for new or experienced individuals working in science-based manufacturing and can lead to opportunities as:

- Science Manufacturing Technician
- Materials Processing Technician
- Chemical Process Technician
- Polymer Processing Technician

#### **Course duration:**

18 months plus EPA period.

#### At Level 3, there are various topics that apprentices will learn including:

- Biotechnology Manufacture and Preparation Processes
- Legislation, Regulations and Standards in Biotechnology Principles
- Maintenance and Calibration in Biotechnology
- Clean Room Design and Behaviours

Completion of the Skills4 SMT - Biotech apprenticeship programme gives learners the eligibility for professional registration with the Science Council as a Registered Science Technician (RSciTech).



## **How will Apprentices be taught?**

## Weekly live online sessions

Learn directly from experienced technical professionals via Microsoft Teams. Stay connected and grow your skills!

## On-demand, one-to-one support

Need help? Get personalised support whenever you need it, no waiting around.

## Quarterly reviews

We'll track your progress and keep you on the right path with regular check-ins every three months.

## 24/7 online training platform 'Bud' access

Access all your learning resources anytime, anywhere – learning on your terms!

## Support from Your Team Leader

Your Team Leader ensures you have the guidance and resources to succeed, supporting your training every step of the way.

## Dedicated support in the workplace

Your Educational Supervisor is there to help, guide, and mentor you every step of the way.

#### What is covered?

The sequence of teaching and learning is planned to provide a knowledge and skills framework to build progressive steps from induction to module endpoints and apprenticeship standard end-point assessment. The apprenticeship aims to build an increasing body of knowledge that enables learners to perform increasingly complex skills in assisting in the manufacture and preparation process, stock management and quality control. British Values are integral to encouraging learners to voice their opinions through various avenues such as online teaching, workbook activities and discussions during the learning programme

## What are the Entry Requirements?

To enrol onto this course, English and Maths requirements differ depending on the learner's age:

**For learners aged 16–18:** It is mandatory to either already hold, or be able to work towards and achieve, the required English and Maths qualifications as part of the apprenticeship. These must be completed prior to gateway.

**For learners aged 19 and over:** It is recommended that applicants hold GCSE English and Maths at Grade C/4 or above (or an equivalent qualification). If evidence of prior achievement is not available at enrolment, learners may choose to complete these subjects separately through Skills4, with full funding and support provided.

While English and Maths are optional for adult learners to enrol onto this apprenticeship, completing them is strongly advised – particularly for those intending to progress to a higher-level qualification in the future.

# Your Learner Journey

## **Your Learner Journey**





#### **Skill Scan and Initial Assessment**

Once Apprentices have commenced the enrolment process, they will be asked to submit any evidence of prior learning/GCSE results. They will receive a link to complete a BKSB English & Maths initial assessment which must be done prior to a sign-up meeting being arranged between themselves, the employer and the enrolment team. It is important that time is taken with this and the BKSB is completed to the best of their ability so that we can offer tailored support whilst completing the apprenticeship. During the enrolment meeting, Apprentices will be required to undertake a skills scan to establish their starting point on the programme and help us to individualise their learning with Skills4Science.





#### Induction

Apprentices will receive a detailed induction onto their apprenticeship, which will include key information needed to start the programme. This also includes welcome activities such as careers, advice and guidance information. Furthermore, Apprentices will attend a live and interactive induction where they will learn:

- Key information concerning the apprenticeship
- How to develop Maths, English and digital skills
- The apprentice role and responsibilities in Safeguarding, Prevent and British Values
- The expectations and requirements of the The Science Council

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## **Tutor Support**

Apprentices will be allocated a tutor who will coach, support and guide them throughout their apprenticeship. They will have full access to Bud, our online training platform, so that on day 1 of their apprenticeship they will be able to review activities, live sessions and coursework immediately.

Completing these activities will contribute to off-the-job learning. Apprentices can book a 1:1 with their tutor to discuss Bud in detail, exempting activities where relevant and also setting their personalised activities that are tailored to Apprentice's and the employer's needs.



## On programme

During this stage of the apprenticeship, Apprentices will work to improve knowledge skills and behaviours required for the apprenticeship standard and complete the required off-the-job training. This will involve regular 1:1 meetings with their tutor, in addition to live sessions during which they will plan to stretch and challenge their learning. They will also be learning and developing new skills/competencies and knowledge in the workplace.

Throughout the duration of the apprenticeship, live, weekly, sessions are delivered virtually.



On our online learning platform, Apprentices will be able to access learning and recap all of their own learning at their own convenience. They will be given submission deadlines for assessments and will be expected to submit work that has been set by their tutor, providing evidence of competence and knowledge.

Formal Progress reviews are scheduled every 10 to 12 weeks with the learner, their educational supervisor and their tutor. Progress reviews are an opportunity to review and reflect on progress to date, visualising how they have developed against the required knowledge, skills and behaviours. Progress reviews are also an opportunity to discuss career aspirations, welfare, current affairs and other hot topics.



#### Gateway

Upon completion of their qualification, Apprentices will go through gateway. This is a 3 way meeting with the learner, employer and tutor to confirm mandatory aspects of the apprenticeship are complete and that the learner is ready to undertake the end-point assessment. Once this is agreed upon, Apprentices will complete the end-point assessment with the independent End Point Assessment Organisation. They will receive support all the way up to the day of their End Point Assessment.



#### **End Point Assessment**

The End-point Assessment process usually lasts for around 3 months, learners will participate in activities set by the End Point Assessment Organisation, the mandatory requirements are:

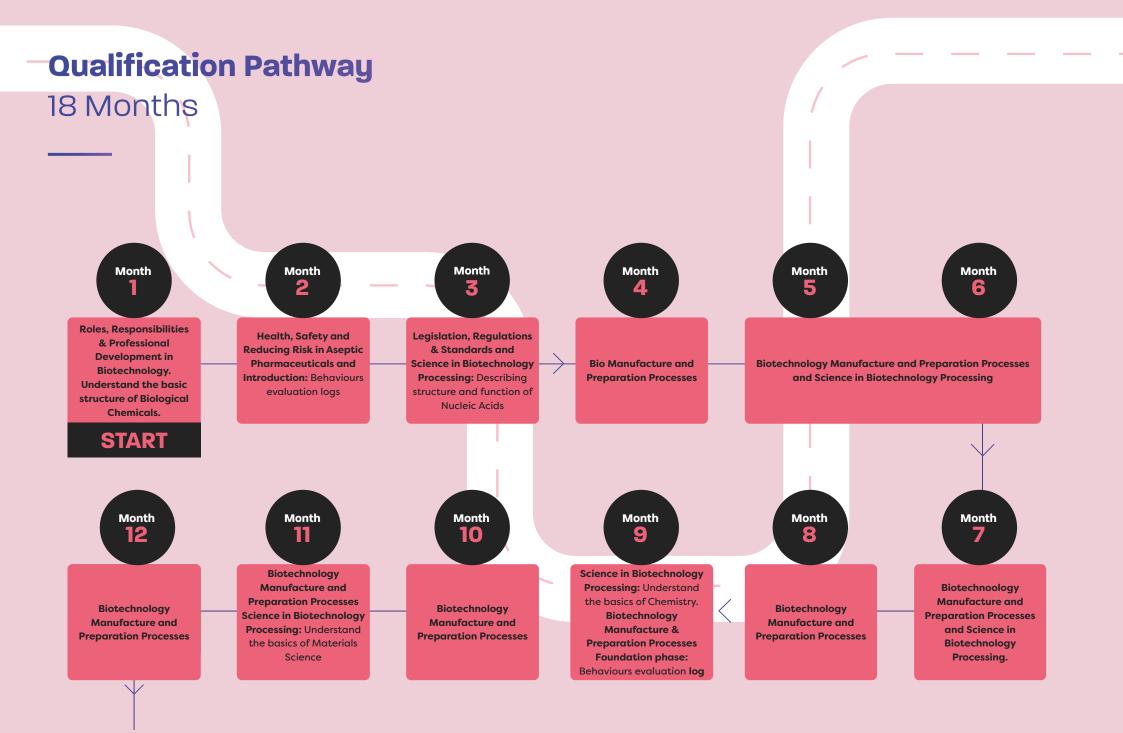
- To compile a portfolio of evidence
- Observation with questions
- · Interview underpinned by portfolio evidence
- Multiple choice test



#### Certification

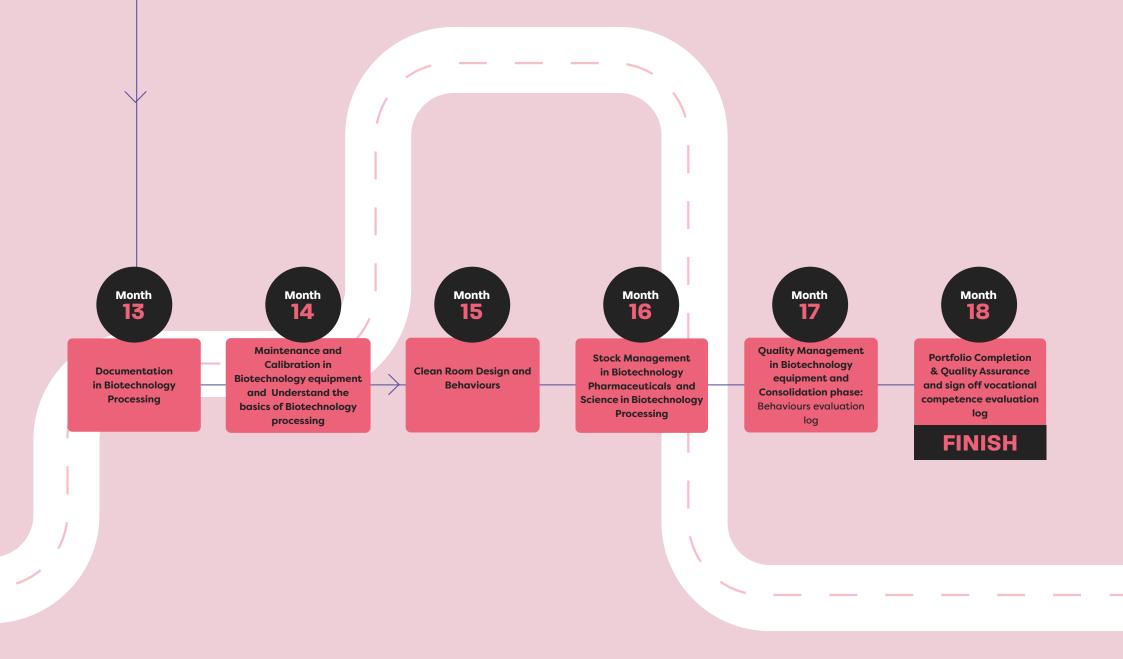
On successful completion of EPA, Apprentices will receive a certificate confirming their achievement.

# Qualification Pathway



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# Off-the-job Training

## Off-the-job Training

### What is off-the-job training?

Off-the-job training is a vital and mandatory part of every apprenticeship programme. It refers to any learning undertaken by the apprentice during their paid working hours that is outside of their usual day-to-day duties, but directly related to the development of the knowledge, skills, and behaviours required by their apprenticeship standard.

It's important to note that off-the-job training must take place during the apprentice's normal working hours, this means the hours they are paid for, excluding any overtime. Recently, the Department for Education (DfE) introduced changes to how off-the-job training is measured and delivered. Rather than applying a single standard approach across all apprenticeships, the requirement is now tailored to each apprenticeship programme.

This means that the minimum number of off-the-job training hours an apprentice must complete will differ depending on the specific apprenticeship they are enrolled on.

These hours are not optional. Apprentices must meet the minimum off-the-job training requirement in order to progress to the gateway stage, the point at which they are assessed for successful completion of their apprenticeship.

If this requirement is not met, they cannot move forward, which may cause delays and affect both the apprentice's progress and their apprenticeship duration.

Employers play a key role in supporting this part of the apprenticeship. This includes allowing your apprentice time within their normal working hours to complete their off-the-job learning, working closely with the training provider to plan and structure training time effectively, and creating a supportive environment.

If you are unsure about the required off-the-job hours for a particular apprenticeship or need support in structuring this into your apprentice's schedule, our team is here to help guide you through the process.

## Why during working hours?

If the required off-the-job training must, by exception, take place outside of the apprentice's normal working hours (e.g. in an evening or at the weekend, for an apprentice that normally works Mon-Fri 9-5), the apprentice must agree to this and be compensated for this time (e.g. through time off in lieu (TOIL) or by being paid for these hours). The majority of the programme must not be delivered in this way.

More information on off-the-job training can be found on the **www.gov.uk website** 

### Theory:

- Classes & workshops
- Online Webinars
- ✓ Masterclasses
- Reading & Research
- Lunch & Learn Sessions
- Roleplay & Simulation Exercises.

## **Practical Training:**

- Job Shadowing Mentoring
- Attending Meetings
- Networking & Events
- Visits to Other Departments or Sites
- Project Work.

## **Learning Support:**

- Writing Assignments
- Writing Self Assessments
- Revision
- Exam Prep
- One-to-one Tutorials
- Peer Discussions.

## **Get Started Today!**

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