

General Overview

- ✓ Typical on-programme learning: 48 months
- ✓ EPA duration: 9 months
- ✓ Maximum funding: £24,000
- ✓ Level 6



The Materials Science Technologist occupation is at the forefront materials innovation in the Petrochemical, Pharmaceutical, Engineering, Construction, and Manufacturing industries across numerous sectors including automotive, aerospace, healthcare, defence, and energy, mechanical, civil and chemical engineering, material failure, rheology, adhesives, polymers, traditional and advanced ceramics.

The broad purpose of the occupation is to ensure materials used in those industries are fit for purpose in terms of product innovation, performance, failure diagnosis, operational management, process and manufacturing, and the positive advancement of materials science, thus enhancing economic and social value today and in the future.

In their daily work, materials technologists will engage in high level activities such as materials testing, novel product development, solving manufacturing issues, laboratory management, team leadership, technological sales, and client management, depending on which of the variety of related businesses their employer is in.

Entry Requirements

Employers will set their own entry requirements. Typically, they require applicants to have GCSE science grade C or 4. An employer may require applicants to have a health screening to ensure suitability for working in some work environments.

On-Programme Competence Evaluation

The apprentice will complete on and off-the-job training, developing their knowledge, skills & behaviours as stipulated within the apprenticeship standard.

Gateway Requirements

The employer, supported by the training provider must confirm that the apprentice is ready for EPA, before the EPA process can begin.

The employer, supported by the training provider must sign a declaration to agree the apprentice has met the required criteria as set out in the Materials Science Technologist standard.

As part of the SIAS EPA service, we will check that all gateway evidence has been met before we begin the process of EPA.



Assessment Marking & Grading

Results for each individual assessment method will be available within 15 working days from the assessment date.

The SIAS end-point assessor, will combine the results of each individual assessment method and provide an overall assessment grade of Fail, Pass or Distinction.



Apprenticeship Certification

Your apprentice will receive a Certificate of Apprenticeship on successful completion of all individual assessment methods.



Guidance & Support

SIAS provide a range of resources which offer EPA guidance and support for the apprentice, the employer, and the college/training provider.

We aim to help employers and colleges/training providers to support the on-going competence evaluation of the apprentices' knowledge, skills, and behaviour to ensure that your apprentice is confident for their EPA. All of our resources are comprehensively mapped to this apprenticeship standard.

End Point Assessment (EPA)

The assessment plan defines the following methods of assessment for the Materials Science Technologist standard.

1

Work Based Project

Comprising of Project Report, Presentation and Questioning

A project involves the apprentice completing a significant and defined piece of work that has a real business application and benefit. The project must start after the apprentice has gone through the gateway.

This assessment method includes two components:

- Project Report - apprentices must complete and submit a project plan and report. They must prepare the project plan and submit this to SIAS in week 4 of the EPA period. The plan must not exceed 1,000 words. The report must be completed and submitted to SIAS by week 24. It must have a maximum word count of 2,500 words and refer to the project plan and whether the plan was achieved.
- Presentation with questioning - must last 90 minutes. This will typically include a presentation for 50 minutes and questioning lasting 40 minutes. The End-Point Assessor must ask at least 8 questions.

2

Professional Discussion

In the discussion, the End-Point Assessor and apprentice have a formal two-way conversation.

The End-Point Assessor must ask a minimum of 9 questions that should cover three main areas: - Prior learning and/or work based questions - The posing of realistic hypothetical scenarios requiring a judgement, challenge, or assessment - Problem solving questions. There must be three questions in each of these areas.

Duration: 60 minutes.

3

Knowledge Test

16 multiple-choice questions taken under exam conditions.

Duration: 60 minutes.