

# ST0422 | Science Manufacturing Process Operative

SIAS

## General Overview

- ✓ Typical on-programme learning: 18 months
- ✓ EPA duration: 3 months
- ✓ Maximum funding: £7,000
- ✓ Level 2



The Science Manufacturing Process Operative standard includes industries such as biotechnology, chemical, composites, petrochemical, polymer, and pharmaceutical.

Science process industries combine raw materials and apply a science-based process or processes - biological, chemical, or physical - to create products. Products are made continuously or in batches.

The broad purpose of the occupation is to complete science-based manufacturing processes to produce materials and products following standard operating procedures. Products are varied and may include battery cells, composite wind turbine parts, drugs, plastic bottles, proteins, and solvents. This involves checking and preparing materials and using specialist science-based manufacturing process plant or equipment. They monitor the process and take action to resolve deviations. Maintaining the work area is part of the role. They contribute to quality control, continuous improvement, and problem-solving activities. They also complete work records, which are important in regulated workplaces.

The apprentice will be responsible for meeting work schedules. They must work to quality, health and safety, and environment regulations and procedures. This may include wearing personal protective equipment and complying with Control of Substances Hazardous to Health (COSHH)

They may work alone or as part of a team, under supervision.

They work in varied conditions. Some workplaces may be physically demanding. Some may require use of specialist safety equipment. They complete shift work. Sites often run 24 x 7, 365-days a year.

## Entry Requirements

There are no requirements for previous knowledge or qualifications before a learner commences this apprenticeship.

## 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 Science Manufacturing Process Operative 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.

# End Point Assessment (EPA)

The assessment plan defines the following methods of assessment for the Science Manufacturing Process Operative standard.

## 1

### Observation with Questions

- The purpose of the observation with questions is to validate the apprentices' competence by observing them carrying out their job role in a normal working environment under normal conditions. Questioning allows for assessment of the breadth and depth of underpinning knowledge against the grading descriptors.
- Duration: 2 hours.

## 2

### Interview Underpinned by a Portfolio of Evidence

- The purpose of this assessment allows for testing of responses where there are a range of potential answers that cannot be tested through the multiple-choice test. It allows for assessment of KSBs that do not occur on a predictable or regular basis.
- Duration: 1 hour.

## 3

### Multiple-Choice Test

- 40 multiple-choice questions.
- Duration: 1 hour.



## 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, Merit 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.