Composite Technician ST0094/V1.1



Level: 3 Duration: 36 months EPA: 3 months	Assessment Methods	Gateway Requirements
	Observation with questions	 Achieved English & Mathematics at Level 2*
	Interview underpinned by a portfolio of evidence	 Portfolio of Evidence
	Multiple-choice test	 Gateway Declaration Form

Occupation Summary

Composite technicians work in the process manufacturing sector.

Composite components are used in the aerospace, automotive, construction, furniture, marine, medical, motorsport, oil and gas, rail, renewables industries and many more. Composite products include doors, prosthetic limbs, shower trays, and tennis rackets.

Composites combine polymeric resins (plastics) and a reinforcing material such as carbon fibre, glass fibre, or Kevlar to produce a material with improved properties.

Composite technicians produce polymer matrix composite (thermoset and thermoplastics) components or final products to a specification. They may combine the composite elements or use a pre-prepared material to produce the product using a variety of moulding processes. The processes require manual dexterity and skills. Production tends to be in batches and conducted in small-scale production facilities. Quality and process control is part of the role. They conduct quality assurance processes, check equipment and tooling for future usability, complete documentation, and participate in improvement activities.

They work with other members of the manufacturing team. They also have contact with other functions for example, process engineers, maintenance engineers, laboratory staff, supply chain staff, and warehouse staff. They may also have contact with external people such as customers, service providers, suppliers, and regulators.

They must ensure that the process and products meet quality specifications and are produced to schedule. They must comply with health and safety, regulations and procedures including wearing personal protection equipment (PPE). They also need to meet environmental and sustainability regulations and procedures – minimising waste and recycling materials. They may work alone or as part of a team with minimal supervision. They are responsible for the quality and accuracy of their own work.

To view Composite Technician assessment plan visit: <u>https://www.instituteforapprenticeships.org/apprenticeship-</u> standards/composites-technician-v1-1?view=epa

End Point Assessment

Observation with questions

In the observation with questions, an independent assessor observes the apprentice in their workplace and asks questions. The apprentice completes their day-to-day duties under normal working conditions. It gives the apprentice the opportunity to demonstrate the KSBs mapped to this assessment method. The observation will last for at least 4 hours.

Interview underpinned by a portfolio of evidence

In the interview, an independent assessor asks the apprentice questions. It gives the apprentice the opportunity to demonstrate the KSBs mapped to this assessment method. The apprentice has access to their portfolio of evidence during the interview allowing the apprentice to be able to refer to it and illustrate their answers with evidence from their portfolio of evidence. The interview will last at least 90 minutes. **Multiple-choice test**

In the multiple-choice test, the apprentice answers questions in a controlled and invigilated environment. It gives the apprentice the opportunity to demonstrate the knowledge mapped to this assessment method. The test will consist of 40 multiple-choice questions. The apprentice must have 60 minutes to complete the test. The test is closed book which means that the apprentice cannot refer to reference books or materials whilst taking the test.

Order of Assessment Methods

The assessment methods can be delivered in any order and results of one assessment method does not need to be known before starting the next.

Grading

The standard is graded overall: Fail, Pass or Distinction

* Apprentices who are aged 16 to 18 at the start of their training, are required to achieve English and maths qualifications to support their career progression. Adult apprentices, aged 19 and over at the start of their apprenticeship training, are no longer required to hold or achieve English and maths qualifications to pass their apprenticeship. Instead, these apprentices will need to demonstrate their proficiency through the development and assessment of occupationally relevant English and maths skills as part of their apprenticeship. Funding will continue to be available for English and maths qualifications for all apprentices, including those aged 19 and over, when either the employer or apprentice feels this is required.