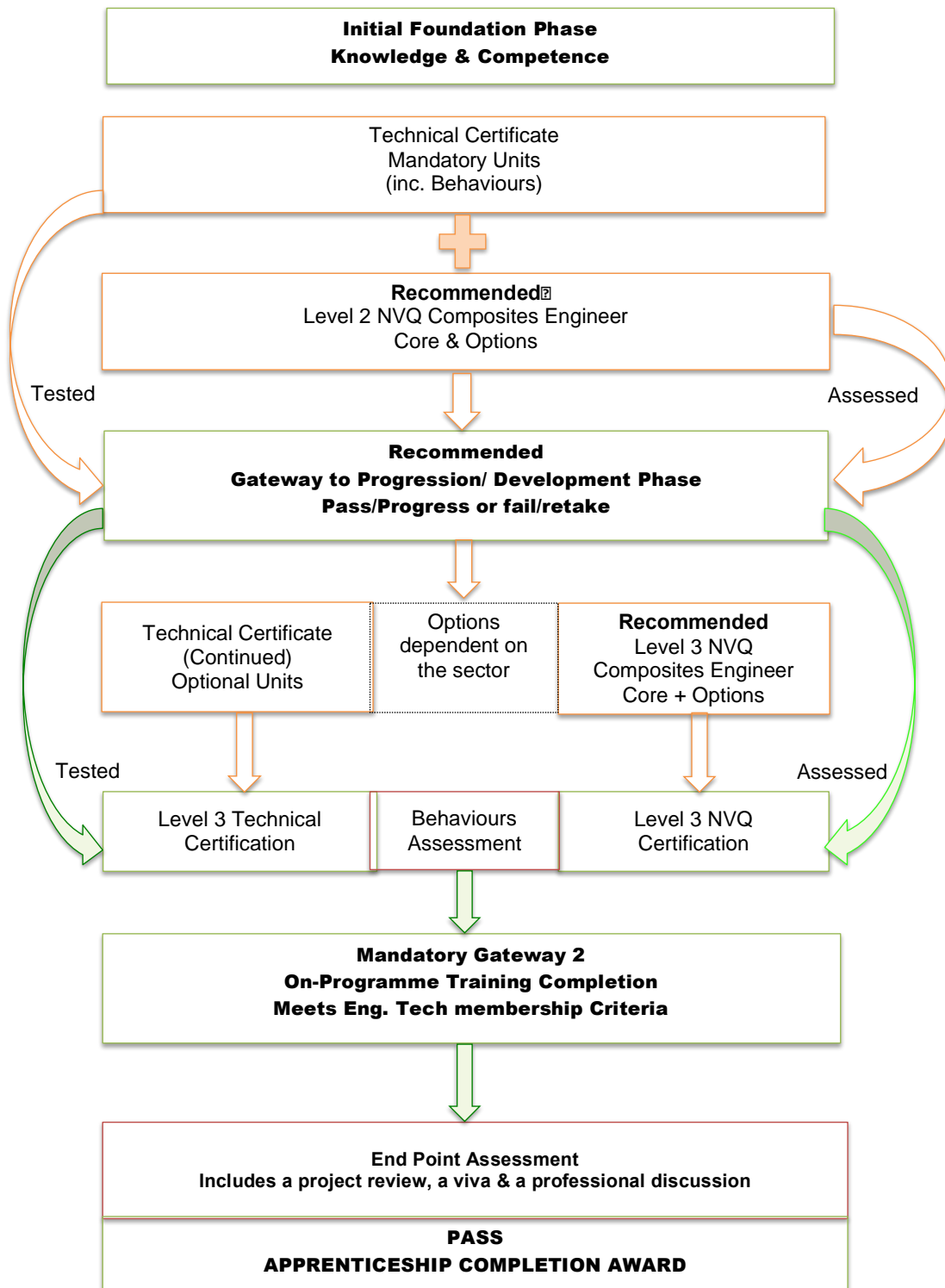


Composites Technician Assessment Plan

The Composites Technician Apprenticeship enables the apprentice to develop their knowledge, skills and behaviours to work unsupervised in either a large organisation, which may use process driven manufacturing techniques, or a SME which may require a multi-disciplined craftsman. The apprenticeship has been developed by an Industrial Steering Group (ISG) consisting of small, medium and large sized employers incorporating Composites UK, the Trade Body which represents the industry.

From discussions with employers and ratified by the ISG, there are a significant number of companies who require employees to gain knowledge and skills at a foundation level prior to progressing. This apprenticeship has a foundation phase which will enable apprentices to demonstrate their competence at Level 2 prior to progressing.

Those who complete the foundation phase will progress to Level 3 and on completion of the apprenticeship will be eligible to apply for Eng.Tech registration with an appropriate Professional Engineering Institute (PEI).



Summary of Assessment

On completion of this apprenticeship the apprentice will be a competent and job-ready Composites Technician. The apprenticeship standard provides a high level description of the skills, knowledge, values and behaviours required of the Composites Technician. The assessment plan describes how the apprentice is assessed at the end of their apprenticeship and by whom.

The assessment plan has been informed by on-going consultation with employers, professional bodies, awarding organisations and training providers. When delivered by high-quality training providers in partnership with employers, assessed by a Skills Funding Agency registered independent assessment organisation and overseen by the quality assurance process, it ensures that apprentices become competent Composites Technicians.

The purpose of the end point assessment is to test in a synoptic way the skills, knowledge and behaviours of the apprentice as set out in the apprenticeship standard. End point assessment:

- Provides apprentices with a showcase opportunity to provide oral and documentary evidence of their knowledge, skills and behaviours developed throughout the apprenticeship
- Enables the independent assessment panel to test the knowledge, skills and behaviours acquired by the apprentice throughout the apprenticeship.

The end point assessment includes the following components:

- Work-based project completed in the last six months
- A Professional Discussion (including a viva on the work-based project)

Assessment Overview			
Assessment Method	Area Assessed	Assessed by	Grading
<i>Work-based project</i>	<i>Knowledge, Skills and Behaviours</i>	<i>Independent Assessment Organisation</i>	<i>Not graded</i>
<i>Professional Discussion (including a viva on the work-based project)</i>	<i>Knowledge, Skills and Behaviours</i>	<i>Independent Assessment Organisation</i>	<i>Not graded</i>
On-programme Assessment			
<p>It is highly recommended that the apprentice completes their Foundation and Development stages as defined in the flow diagram above including a Level 2 and/or level 3 NVQ which will enable them to obtain the knowledge and skills required for this standard. The apprentice will also need to achieve a Level 3 Technical Certificate which will include a knowledge based test that is invigilated in a classroom environment to ensure robustness, standardization and security.</p> <p>It is recommended that the apprentice is continually assessed throughout the programme to confirm he/she fully understands the topics being taught, to reinforce the knowledge gained and provide an opportunity for additional support where they are falling behind the required standard.</p> <p>Employers will need to decide how and what on-programme training and assessment is delivered in partnership with their training provider.</p>			
Assessment Gateway			

The decision as to when the apprentice is ready to undertake the end point assessment will be taken by the employer with the support of their training provider. It is recommended that this is formalized in a letter signed by the employer and the training provider. The employer will then submit the request letter to an Assessment Organisation registered on the SFA Register of Apprentice Assessment Organisations, usually within 6 months of the apprenticeship. Apprentices should not be put forward for the end point assessment before they are ready.

Before going forward for end point assessment the apprentice must have completed:

- Level 3 Composites Technician Technical Certificate
- Level 2 Maths & English

Administering the End Point Assessment

The end point assessment is triggered by the employer when the above gateway requirements have been met, and when they have determined the readiness of the apprentice. Delivery of all training, development and review activities up to the end point are considered as being on-programme. The independent assessment panel must **not** have been involved in any on-programme training, development or assessment of the apprentice.

The end point assessment takes the following format:

- A work-based project (minimum of 1500 words) undertaken in the final six months of the apprenticeship and submitted to the EPA organisation for review.
- A professional discussion (including a viva based on the work-based project).

For final certification, the apprentice must have passed all components in the end point assessment. At the conclusion of the end point assessment, the independent Chair will make the final decision on pass or fail.

The apprentice must attempt all components of the end point assessment on their first attempt.

End Point Assessment:

- Work-based project.
- A professional discussion (including a viva based on the work-based project).

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Work-based project

The apprentice will be required to produce a detailed work based report during the final 6 months of their apprenticeship of not less than 1500 words which will be submitted to the end point assessment organisation prior to the interview taking place.

This report will enable the apprentice to demonstrate specific work related tasks that they have completed in order to demonstrate how they have achieved the skills, knowledge and behaviours and professional competence set out in the Composites Technician Standard and for registration as an Engineering Technician by a relevant Professional Engineering Institution. The report will also give the apprentice the opportunity to demonstrate to the end point assessment panel that they understand the company in terms of their products, processes, procedures, tools, equipment, materials, documentation and information systems by showcasing what they have done, what they have learnt and how they have applied this knowledge and skills to real work tasks including solving composites related problems. The report should be based on the requirements set out in the Eng.Tech. Registration Form. (Available from PEI website) <http://www.engtechnow.com/engtech>.

A professional discussion (including a viva based on the work-based project)

There will be a 60 minute discussion which will include a viva based on the work-based project report produced by the apprentice. The end point assessment panel will use the report as a basis for testing the knowledge, skills and behaviours of the apprentice as set out in the standard.

The discussion will focus on all the components of the Apprenticeship Standard, which will enable the panel to make a judgement of the apprentice's **occupational competence**. It is a structured and formal discussion between the apprentice and the panel, drawing upon information supplied in the report. It covers both what tasks the apprentice has completed in the workplace, the standard of their work, and the behaviours they have demonstrated throughout, such as, being a team player, having a positive attitude, a strong work ethic, being a responsible employee, self-motivation and a proven commitment to the organisation. This enables the end point assessment to cover a broad range of knowledge and understanding, skills and behaviours. The assessment of behaviours will require the apprentice to demonstrate as part of their viva:

- appropriate safety behaviours, individually and towards others
- a commitment to quality and continuous improvement
- a strong work ethic, including being motivated, reliable and proactive
- an ability to work individually and as part of a team

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- a recognition and understanding of diversity and equality in the workplace
- an ability to communicate effectively at all levels in the organization
- effective time management including prioritisation of work
- a desire to continually learn

It will also be an opportunity for the assessment panel to:

- clarify any points and/or probe the apprentice on the information they have presented in their report
- confirm and validate that the report is the apprentice's own work
- confirm and validate the judgements about the quality of the work the apprentice has completed
- explore particular areas of work presented in the report, how it was carried out, any problems that they encountered and how these were resolved
- validate the apprentice's skills and knowledge and understanding of the company in terms of their products, processes, procedures, tools, equipment, materials, documentation and information systems
- elicit the apprentice's depth and breadth of understanding of the **professional competence** requirements for an Engineering Technician (EngTech).

End-point – final judgement

The end-point assessment will be conducted by a panel of three, including a member of an appropriate Professional Body.

The panel will be made up of the following:

- (Chair) Independent assessor with a minimum of 3 years' experience from the assessment organisation on the Register of Apprenticeship Assessment Organisations.
- Professional Body Registered member
- Composites engineer chosen from within the employer who has had no involvement in training the apprentice

Independence

End point assessments are carried out by staff from independent end-point assessment organisations on the Skills Funding Agency's Register of Apprenticeship Assessment Organisations. An apprenticeship certificate is only issued if approved by the independent assessment organisation.

End-point – Summary of roles and responsibilities

Assessor	Role
<i>Apprentice</i>	<ul style="list-style-type: none"> • Participates fully in their training and development. Completes the recommended Foundation and Development stages and achieves their Level 2 Maths & English. Actively contributes to their performance review • Contributes to the decision on the timing of their end point assessment • Produces a work-based project • Participates in a professional discussion (including a viva based on the report)
<i>Employer</i>	<ul style="list-style-type: none"> • Supports the apprentice throughout on programme projects and assesses competence in the workplace • Allocates a skilled colleague to act as a mentor • Agrees when the apprentice is ready to attempt the end point assessment
<i>Training Provider</i>	<ul style="list-style-type: none"> • Provides on-going training for the apprentice • Provides tools and processes to support the apprentice • Carries out regular reviews with the apprentice and employer • Assesses competence in the workplace • Supports employer to assess when the apprentice is ready to attempt the end point assessment
<i>Awarding Organisations</i>	<ul style="list-style-type: none"> • Award a level 3 Technical Certificate and relevant NVQ qualifications
<i>Assessment Organisation</i>	<ul style="list-style-type: none"> • Arranges and delivers the end point assessment • Takes no part in the training of those apprentices for whom they complete end point assessments • Devises and administers the end point assessment • Recruits and trains independent assessors

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	<ul style="list-style-type: none"> • Ensures assessors are occupationally competent, are able to assess the performance of the apprentice in all components of the end point assessment and are able to determine the grade achieved • Maintains robust quality assurance processes • Actively participates in the quality assurance procedures described in this assessment plan • Standardises end point assessments • Appoints an Independent Assessor to the EPA panel who makes the final judgement on whether the apprentice has passed
<i>Professional Body</i>	<ul style="list-style-type: none"> • Provides a Chairperson for the EPA panel (but to do so, must be on the Register of Apprenticeship Assessment Organisations. (Chairing is the role of the assessment organisation, but this can be the Professional Body if registered.)
<i>Panel</i>	<ul style="list-style-type: none"> • Conducts the end point assessment • Reviews work-based report • Conducts a professional discussion and a viva
Quality Assurance – internal	
<p>Assessment organisations that deliver end point assessment for the Composites Technician apprenticeship must be accepted by the Skills Funding Agency onto the Register of Apprenticeship Assessment Organisations.</p> <p>Skills Funding Agency registered end point assessment organisations develop the assessments and supporting materials. Assessments are designed to produce assessment outcomes that are consistent and reliable, allowing fair and proper comparison between apprentices employed in different types and sizes of organisations.</p> <p>Only assessors appointed by the apprenticeship end point assessment organisation will be able to carry out the end point assessment. Assessors must:</p> <ul style="list-style-type: none"> • Be occupationally competent (occupationally competent means that each assessor must be capable of carrying out the full requirements within the competence they are assessing). • Hold, or be working towards, a formal assessor qualification. • Be an experienced composites engineer (with at least 3 years' experience) • Carry out initial and on-going training with the assessment organisation.. <p>The end point assessment organisation must:</p>	

- hold an internal annual standardisation event which focusses on current assessment practices and issues which have arisen
- have an appeals process.

Quality Assurance – external

External quality assurance will be carried out by the Institute for Apprenticeships (IFA).

End-point - Grading

A grading exemption has been granted due to the link to professional registration. A pass or fail grade will be awarded. A pass will mean the apprentice has met the requirements for EngTech. Link to Eng. Tech. Criteria.
<http://www.engtechnow.com/engtech>.

Implementation the Apprenticeship Assessment

Professional Body recognition

This apprenticeship will meet the professional standards required for Eng.Tech. Registration with an Engineering Professional Institute (EPI).

Affordability

This approach to independent assessment is evidenced based and sector specific and has been tested with employers who have confirmed that it is the preferred approach.

Cost analysis verified that this approach was the most cost effective method of all. The cost of the independent assessment forms no more than 5% of the over-arching cost of the apprenticeship standard.

Manageability and Feasibility

The end point assessment has been designed to meet the needs of all employers within the composites sector from large businesses delivering their own work based provision to small SME businesses reliant on high quality training provision to deliver their work based training.

We believe that the approach is manageable and feasible as the necessary expertise already exists within the sector. We would expect apprenticeship assessment organisations to tap into PEIs that are accountable for these experts when recruiting for independent assessors. Utilising existing expertise would ensure a sufficiency of qualified assessors with a good geographical spread. Under these conditions, the anticipated uptake of the Apprenticeship in the first year is 100 starts.