



EAL Level 4 Diploma in Rail Engineering Advanced Technician Competence

Qualification specification

Overview

This competence qualification has been developed by the Rail Engineering Employers Trailblazer group and as such is intended to provide the means to record the competency aspect of the Level 4 Rail Engineering Advanced Technician Apprenticeship.

In order to articulate the specific level of skills, knowledge and behaviours required to demonstrate full occupational competence in the Apprenticeship, the employers in the Rail Engineering Apprenticeship Trailblazer group have developed a set of standards that this qualification represents.

Qualification code:	603/2090/4
Level:	4
GLH	429 hours
TQT:	1050 hours
Minimum learning age:	16

Purpose of the qualification

What is this qualification?

This competence qualification has been developed by the Rail Engineering Employers Trailblazer group and as such is intended to provide the means to record the competency aspect of the Level 4 Rail Engineering Advanced Technician Apprenticeship.

In order to articulate the level of skills, knowledge and behaviours that are required to demonstrate full occupational competence in the Apprenticeship, the employers in the Rail Engineering Apprenticeship the Trailblazer group have developed an Apprenticeship Standard and an accompanying Assessment Plan, both documents can be downloaded from the Government website for 'Apprenticeship Standards'

What does this qualification cover?

The content of this qualification covers the competency requirements of the Level 4 Rail Engineering Advanced Technician required by an Apprentice working or wishing to progress in Rail Engineering. This qualification is assessed by the apprentice gathering evidence in the workplace to support the recording of their competence.

Who is this qualification for?

This qualification is aimed at apprentices in the rail engineering industry who need to demonstrate their competence to enable progression within their workplace and careers, they could be learners who may have previously achieved a level 3 qualification in rail engineering and have the ability to achieve a level 4 qualification, for example:

- Apprentices that have completed a L3 technician apprenticeship, and are progressing in the rail engineering sector; this qualification provides the knowledge aspect of the Level 4 Rail Engineering Advanced Technician Apprenticeship Standard and can be attempted once the employer deems it appropriate to do so.
- Up skilling of career changers who have may existing technical engineering competence and need this to be recognised in a qualification.

Centres are advised to consider, during delivery and assessment of the qualifications, the support, guidance and opportunities they will need to give learners to enable them to meet the demands of the units.

Who supports the qualification?

This qualification:

- Is accredited by OfQual at level 4,
- Is approved by the Rail Engineering Employer Group as meeting the competence requirement of the Level 4 Rail Engineering Advanced Technician Apprentice Standard.

What could this qualification lead to?

- Rail Engineering Advanced Technicians may work on site or in a depot or in a technical office. They will lead and supervise individuals and teams in the delivery of Rail Engineering tasks. Their work will require an understanding of how the railway works as an integrated, complex system in order to take proactive actions and decisions to avoid Railway asset, equipment, process and systems failures and will include involvement in aspects of rail systems

Entry requirements

There are no entry requirements to undertake the units of competence unless this is a legal requirement of the process or the environment. Assessment is open to any learner who has the potential to achieve the assessment criteria set out in the units. Aids or appliances, which are designed to alleviate disability, may be used during assessment, providing they do not compromise the standard required.

How is the qualification achieved?

This qualification is gained when all mandated units have been achieved. The centre will then be able to apply for the learner's final Certificate. The learner will also receive a Certificate of Unit Credit, listing all the units they have achieved.

However if they don't manage to complete the full qualification learners can still claim a Certificate of Unit Credit for the units achieved therefore, they still have proof of their ability and could complete the qualification at a later date.

Units can also be taken individually (stand alone). The qualification manual must be used in conjunction with the delivery and assessment of any individual units to ensure that assessment requirements and methodologies are consistently applied.

What will be assessed?

This qualification is assessed by the apprentice gathering workplace based evidence of their competence against the unit content and building a portfolio of evidence the progresses through the qualification.

Grading criteria

This qualification is not graded and is marked either pass or refer.

How will it be assessed?

The qualification is assessed by an assessor who validates the portfolio evidence and supports with assessor workplace observation and questioning. The assessor and the apprentice also agree an assessment plan of what will be done and when.

Structure

The apprentice is required to complete the required mandatory units of competence, followed by the required number of optional units of competence.

Group A: Mandatory units: All four units must be completed.

EAL Code	Unit title	GL(hrs)	Ofqual Code
REATC4/001	Complying with statutory regulations and organisational safety requirements	35	K/616/0130
REATC4/002	Solve rail engineering or manufacturing problems	56	M/616/0131
REATC4/003	Schedule rail engineering activities	56	T/616/0132
REATC4/004	Implement rail engineering processes	56	F/616/0134

In addition to the 4 mandatory units learners must select at least 1 unit from group B and a further 7 units from either groups B or C to make 12 units in total

Group B: Optional units: At least one unit must be completed from this group.

EAL Code	Unit title	GL(hrs)	Ofqual Code
REATC4/005	Undertake project management activities	56	J/616/0135
REATC4/006	Lead maintenance activities	56	L/616/0136
REATC4/007	Lead mechanical manufacturing or inspection activities	56	R/616/0137
REATC4/008	Lead installation or commissioning activities	56	Y/616/0138
REATC4/009	Lead electrical/electronic product manufacture or testing activities	56	D/616/0139

Group C: Optional units:

EAL Code	Unit title	GL(hrs)	Ofqual Code
REATC4/010	Obtain resources for the implementation of rail engineering activities	56	R/616/0140
REATC4/011	Determine the requirements for rail engineering activities	56	Y/616/0141
REATC4/012	Produce rail engineering specifications	56	D/616/0142
REATC4/013	Specify methods and procedures to achieve rail engineering requirements	56	H/616/0143
REATC4/014	Monitor and evaluate rail engineering processes	56	K/616/0144
REATC4/015	Provide technical advice and guidance on rail engineering or manufacturing requirements	56	L/616/0153
REATC4/016	Implement quality assurance methods and procedures	56	M/616/0162
REATC4/017	Improve the quality of rail engineering products or processes	56	T/616/0163

Continued

Structure

EAL Code	Unit title	GL(hrs)	Ofqual Code
REATC4/018	Specify risk reduction methods and procedures	56	A/616/0164
REATC4/019	Configure rail engineering products, processes or facilities	56	F/616/0165
REATC4/020	Transfer control of rail engineering products, processes or facilities	56	J/616/0166
REATC4/021	Commission rail engineering products, processes or facilities	56	L/616/0167
REATC4/022	Leading workplace organisation activities	25	R/616/0168
REATC4/023	Evaluate rail engineering risk assessments	56	Y/616/0169
REATC4/024	Carry out maintenance activities on mechanical equipment	56	L/616/0170
REATC4/025	Carry out maintenance activities on electrical equipment	56	R/616/0171
REATC4/026	Carry out maintenance activities on instrumentation and control equipment	56	Y/616/0172
REATC4/027	Investigate incidents relating to rail engineering activities	56	D/616/0173
REATC4/028	Manage physical resources	25	H/616/0174
REATC4/029	Leading failure modes and effects analysis (FMEA) activities	25	K/616/0175
REATC4/030	Leading measurement systems analysis (MSA) activities	25	M/616/0176
REATC4/031	Prepare for and support quality audits	20	T/616/0177
REATC4/032	Provide leadership and direction for own area of responsibility	30	A/616/0178
REATC4/033	Implement change in own area of responsibility	25	F/616/0179
REATC4/034	Plan, allocate and monitor work in own area of responsibility	25	T/616/0180

