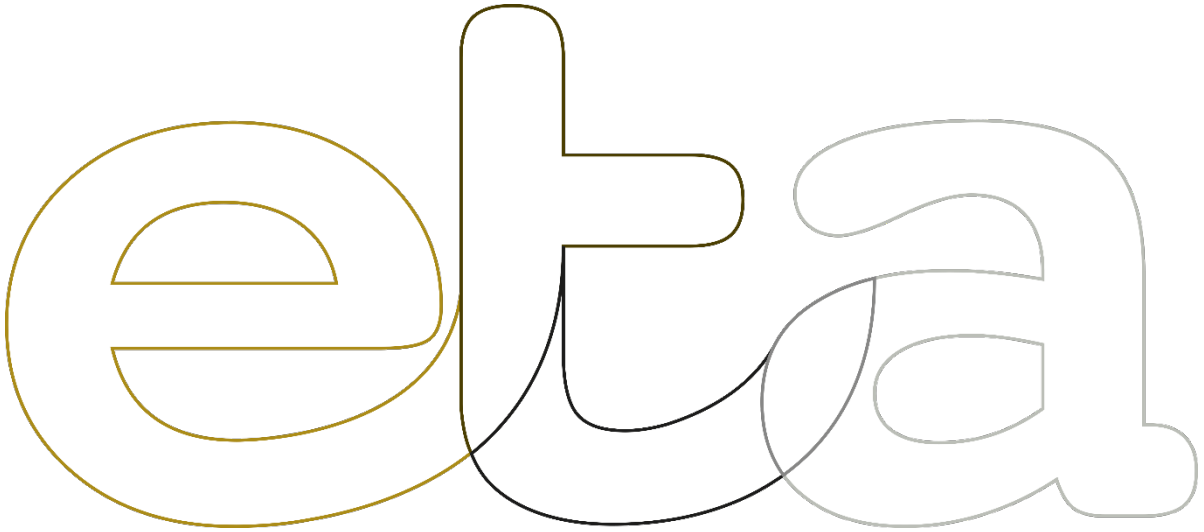

ETCAL Level 2 Diploma in Rail Engineering (Competence)
603/6051/3

Qualification aim

This qualification informs and guides learners who want to work as an operative in the rail engineering industry who needs to demonstrate their competence to enable progression within their workplace and careers. They could be learners who may have limited prior experience in rail engineering but have the ability to achieve a level 2 qualification, and for those learners starting a career in rail engineering. This qualification provides the competence aspect of the Level 2 Rail Engineering Operative Standard and can be attempted once the employer deems it appropriate to do so to up skill existing operatives, or career changers who may have existing technical engineering competence and need this to be recognised in a qualification.

Qualification introduction

This qualification is made up of six pathways that will help learners to develop skills and capabilities relevant to the sector and specific routes within it. It provides evidence of competence for specific job roles within the rail industry and through the individual pathways. It will help the learner to acquire the self-confidence and motivation to take advantage of the many opportunities for their progression and development within the industry.

Assessment

In order to achieve this qualification a learner must complete all units as mandatory. The assessment criteria determine the standard required to achieve each unit and allow for a variety of assessment methods to be used as appropriate to the environment the qualification is delivered in. There is no examined assessment element in this qualification.

All assessment criteria in this qualification should be undertaken and met in line with the current rail standards rule book.

Progression

On completion of this qualification learners will be prepared to progress to level 2/3 qualifications in a range of occupations within the sector, this could include but not limited to apprenticeships.

Pathway Title	GLH	TQT	Credit Value
Track Engineering	370	370	37
Overhead Line Equipment	370	370	37
Signalling	380	380	38
Telecoms	380	380	38
Electrification	380	380	38
Traction and Rolling Stock	370	370	37

Achievement

The qualification consists of six pathways all with individual achievement requirements and as detailed in the overview table below.

Track Engineering - Learners must achieve a total of 37 credits, by completing all units in the qualification.

Qualification Number		603/6051/3
Qualification Framework		RQF
Title		Track Engineering
Qualification Level		Level 2
Guided Learning Hours		370 GLH
Total Qualification Time		370 TQT
Qualification Credit Value		37 Credits
Qualification Grading Structure		Pass / Fail

Unit Title	Mandatory/Optional	GLH	TQT	Credit Value	Grading
Working Efficiently and Effectively as a Rail Track Engineering Operative	M	50	50	5	Pass/Fail
Complying with Organisational Safety Requirements and Statutory Regulations	M	100	100	10	Pass/Fail
Using and Interpreting Engineering and Documentation Data	M	50	50	5	Pass/Fail
Restore Rail Switches and Crossing to Operational Condition	M	50	50	5	Pass/Fail
Restore Plain Line Track Geometry to Operational Condition	M	50	50	5	Pass/Fail
Restore Track Geometry Faults to Operational Condition by the Manual Repair of Permanent Way Assets and Components	M	30	30	3	Pass/Fail
Undertake Replacement of Permanent Way Assets and Components	M	40	40	4	Pass/Fail
Total		370	370	37	

Overhead Line Equipment - Learners must achieve a total of 37 credits, by completing all mandatory units and at least 3 optional units.

Qualification Number		603/6051/3
Qualification Framework		RQF
Title		Overhead Line Equipment
Qualification Level		Level 2
Guided Learning Hours		370 GLH
Total Qualification Time		370 TQT
Qualification Credit Value		37 Credits
Qualification Grading Structure		Pass / Fail

Unit Title	Mandatory/Optional	GLH	TQT	Credit Value	Grading
Using and Interpreting Engineering and Documentation Data	M	50	50	5	Pass/Fail
Complying with Organisational Safety Requirements and Statutory Regulations	M	100	100	10	Pass/Fail
Working Efficiently and Effectively as a Rail Engineering Operative	M	50	50	5	Pass/Fail
Access Overhead Line Equipment Construction Sites	M	40	40	4	Pass/Fail
Undertake Overhead Line Equipment Main Steelwork Installation Under Direction	O	40	40	4	Pass/Fail
Undertake Overhead Line Equipment Wiring Installation under Direction	O	40	40	4	Pass/Fail
Undertake Installation of Overhead Line Equipment Sectioning, Insulation, Registration and in Span Components under Direction	O	40	40	4	Pass/Fail
Undertake Installation, Enhancement and Renewal of Overhead Line Equipment Earthing and Bonding under Direction	O	50	50	5	Pass/Fail
Undertake Overhead Line Equipment Small Part Steelwork Installation under Direction	O	40	40	4	Pass/Fail
Total		450	450	45	

Signalling - Learners must achieve a total of 38 credits, by completing all mandatory units and at least two optional units, one from group A and one from Group B.

Qualification Number		603/6051/3
Qualification Framework		RQF
Title		Signalling
Qualification Level		Level 2
Guided Learning Hours		380 GLH
Total Qualification Time		380 TQT
Qualification Credit Value		38 Credits
Qualification Grading Structure		Pass / Fail

Unit Title	Mandatory/Optional	GLH	TQT	Credit Value	Grading
Using and Interpreting Engineering and Documentation Data	M	50	50	5	Pass/Fail
Complying with Organisational Safety Requirements and Statutory Regulations	M	100	100	10	Pass/Fail
Working Efficiently and Effectively as a Rail Track Engineering Operative	M	50	50	5	Pass/Fail
Determine Requirements for the Safe Access to Work Locations for Signal Engineering	M	30	30	3	Pass/Fail
Reinstate the Work Area after Signal Engineering Activities	M	30	30	3	Pass/Fail
Assist in the Removal of Signalling equipment	M	30	30	3	Pass/Fail
Assist in the Replacement of Signalling Equipment	M	30	30	3	Pass/Fail
At least one from Group A below					
Establish Information for Signal Engineering Installation	O	30	30	3	Pass/Fail
Establish Information for Signal Engineering Maintenance and/or Fault Finding	O	30	30	3	Pass/Fail
and at least one from Group B below					
Assist in the Planned Maintenance of Signalling Equipment	O	30	30	3	Pass/Fail
Assist in the Installation of Signalling Equipment	O	30	30	3	Pass/Fail
Assist with Establishing Compliance with Specifications for Signalling Equipment	O	30	30	3	Pass/Fail
Total		470	470	47	

Telecoms - Learners must achieve a total of 38 credits, by completing all mandatory units and at least one unit from Option Group C and at least one from Option Group D.

Qualification Number		603/6051/3
Qualification Framework		RQF
Title		Telecoms
Qualification Level		Level 2
Guided Learning Hours		380 GLH
Total Qualification Time		380 TQT
Qualification Credit Value		38 Credits
Qualification Grading Structure		Pass / Fail

Unit Title	Mandatory/Optional	GLH	TQT	Credit Value	Grading
Determine Requirements for the Safe Access to Work Locations for Telecoms Engineering	M	30	30	3	Pass/Fail
Reinstate the Work Area after Telecoms Engineering Activities	M	30	30	3	Pass/Fail
Assist in the Removal of Telecoms Equipment	M	30	30	3	Pass/Fail
Assist in the Replacement of Telecoms Equipment	M	30	30	3	Pass/Fail
Using and Interpreting Engineering and Documentation Data	M	50	50	5	Pass/Fail
Complying with Organisational Safety Requirements and Statutory Regulations	M	100	100	10	Pass/Fail
Working Efficiently and Effectively as a Rail Track Engineering Operative	M	50	50	5	Pass/Fail
At least one unit from Group C Below					
Establish Information for Telecoms Engineering Installation	O	30	30	3	Pass/Fail
Establish information for Telecoms Engineering Maintenance and/or Fault Finding	O	30	30	3	Pass/Fail
and at least one from Group D below					
Assist in the Tests and Checks of Telecoms Equipment	O	30	30	3	Pass/Fail
Assist in the Installation of Telecoms Equipment	O	30	30	3	Pass/Fail
Assist in the Planned Maintenance of Telecoms Equipment	O	30	30	3	Pass/Fail
Total		470	470	47	

Electrification - Learners must achieve a total of 38 credits, by completing all units as mandatory.

Qualification Number		603/6051/3
Qualification Framework		RQF
Title		Electrification
Qualification Level		Level 2
Guided Learning Hours		380 GLH
Total Qualification Time		380 TQT
Qualification Credit Value		38 Credits
Qualification Grading Structure		Pass / Fail

Unit Title	Mandatory/Optional	GLH	TQT	Credit Value	Grading
Complying with Organisational Safety Requirements and Statutory Regulations	M	100	100	10	Pass/Fail
Using and Interpreting Engineering and Documentation Data	M	50	50	5	Pass/Fail
Working Efficiently and Effectively as a Rail Engineering Operative	M	50	50	5	Pass/Fail
Plan Railway Electrification Activities	M	30	30	3	Pass/Fail
Assist in Preventative and Corrective of Traction and Cabling Systems	M	40	40	4	Pass/Fail
Establish the Operational Condition of Electrification Plant Assets	M	40	40	4	Pass/Fail
Assist in Preparing Resources for Railway Electrification Engineering Activities	M	30	30	3	Pass/Fail
Assist with Maintenance on Railway Electrification Equipment and Components	M	40	40	4	Pass/Fail
Total		380	380	38	

Traction and Rolling Stock - Learners must achieve a total of 37 credits, by completing all mandatory units and at least two optional units.

Qualification Number		603/6051/3
Qualification Framework		RQF
Title		Traction and Rolling Stock
Qualification Level		Level 2
Guided Learning Hours		370 GLH
Total Qualification Time		370 TQT
Qualification Credit Value		37 Credits
Qualification Grading Structure		Pass / Fail

Unit Title	Mandatory/Optional	GLH	TQT	Credit Value	Grading
Using and Interpreting Engineering and Documentation Data	M	50	50	5	Pass/Fail
Complying with Organisational Safety Requirements and Statutory Regulations	M	100	100	10	Pass/Fail
Working Efficiently and Effectively as a Rail Track Engineering Operative	M	50	50	5	Pass/Fail
Assist in the Installation of Traction and Rolling Stock Equipment	M	50	50	5	Pass/Fail
Carry out Scheduled Maintenance on Traction and Rolling Stock Mechanical Equipment	O	60	60	6	Pass/Fail
Carry out Scheduled Maintenance on Traction and Rolling Stock Electrical Equipment	O	60	60	6	Pass/Fail
Carry out Scheduled Maintenance on Traction and Rolling Stock Communication Electronic Equipment	O	60	60	6	Pass/Fail
Carry out Scheduled Maintenance on Traction and Rolling Stock Fluid Power Equipment	O	60	60	6	Pass/Fail
Total		490	490	49	