

601/7649/0 - ETCAL Level 3 NVQ Diploma in Installation and Commissioning (QCF)

1 Introduction to the Qualification

1.1 Who is the qualification for?

- This qualification has been designed to cover those learners who are:
 - employed but require additional engineering competencies as part of an existing job role or to enable career progression.

1.2 Learner entry requirements

There are no formal entry requirements for learners undertaking this qualification. However, centres must ensure that learners have the potential and opportunity to gain the qualification successfully.

1.3 Age restrictions

This qualification is not approved for use by learners under the age of 16, and ETA cannot accept any registrations for learners in this age group.

1.4 What does the qualification cover?

- Mandatory units cover those areas which have a common approach such as organisational safety requirements, team working and using technical information
- There are 5 optional pathways, Equipment Installation, Commissioning, Traction Lift Installation, Hydraulic Lift Installation, Escalator Installation and Commissioning offering a choice of units applicable to individual workplaces and working environments

2 Qualification Structure

Learners must achieve a minimum of 149 credits to gain the qualification. 35 credits must be achieved by completing the 4 mandatory units and the remaining credits achieved by completing the unit requirements from the selected pathway.

Mandatory Units – all units must be completed

Ofqual code	Unit Title	Level	CV	GLH
A/601/5013	Complying with Statutory Regulations and Organisational Safety Requirements	2	5	35
Y/601/5102	Using and Interpreting Engineering Data and Documentation	2	5	25
K/601/5055	Working Efficiently and Effectively in Engineering	3	5	25

D/601/0547	Handing Over and Confirming Completion of Installation or Commissioning Activities	3	20	35
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Equipment Installation Optional Pathway – 1 unit must be selected from the following.

Ofqual code	Unit Title	Level	CV	GLH
K/601/0549	Installing Mechanical Equipment	3	118	224
D/601/0550	Installing Electrical/Electronic Equipment	3	118	224
M/601/0553	Installing Equipment to Produce an Engineered System	3	123	259
A/601/0555	Installing Instrumentation and Control Equipment	3	115	196
J/601/0557	Installing Fluid Power Equipment	3	115	196
L/601/0558	Installing Process Controller Equipment	3	118	224
R/601/0559	Installing Emergency Electrical Power Generation Equipment	3	114	182
J/601/0560	Installing Environmental Pollution Control Equipment	3	114	182
L/601/0561	Installing Workplace Environmental Control Equipment	3	118	224
R/601/0562	Installing Heating and Ventilation Equipment	3	118	224
D/601/0564	Installing Air Conditioning and Ventilation Equipment	3	118	224
H/601/0565	Installing Compressed Air Equipment	3	114	182
K/601/0566	Installing Waste/Foul Water Distribution Equipment	3	114	182
M/601/0567	Installing Fresh Water Distribution Equipment	3	114	182
A/601/0572	Installing Refrigeration Equipment	3	114	182
Commissioning Optional Pathway – 1 unit must be selected from the following.				
F/601/0573	Commissioning Mechanical Equipment and Systems	3	118	224
J/601/0574	Commissioning Electrical/Electronic Equipment and Systems	3	118	224
L/601/0575	Commissioning Engineered Systems	3	123	259
R/601/0576	Commissioning Process Controller Equipment and Systems	3	118	224
R/601/0626	Commissioning Instrumentation and Control Equipment and Systems	3	115	196
Y/601/0627	Commissioning Fluid Power Equipment and Systems	3	115	196
D/601/0628	Commissioning Emergency Electrical Power Generation Equipment and	3	114	182

	Systems			
D/601/0631	Commissioning Environmental Pollution Control Equipment and Systems	3	114	182
H/601/0632	Commissioning Workplace Environmental Control Equipment and Systems	3	118	224
J/601/0638	Commissioning Heating and Ventilation Equipment and Systems	3	118	224
L/601/0642	Commissioning Air Conditioning and Ventilation Equipment and Systems	3	118	224
Y/601/0644	Commissioning Compressed Air Equipment and Systems	3	114	182
K/601/0650	Commissioning Waste/Foul Water Distribution Equipment and Systems	3	114	182
F/601/0654	Commissioning Fresh Water Distribution Equipment and Systems	3	114	182
Y/601/0658	Commissioning Refrigeration Equipment and Systems	3	114	182
Traction Lift Installation Mandatory Pathway – all 7 units must be selected.				
F/601/0573	Carrying Out Fault Diagnosis on Lift Installations	3	50	60
J/601/0574	Measuring and Setting Out Lift Installations	3	23	63
L/601/0575	Installing Lift Well and Ancillary Equipment	3	25	84
R/601/0576	Installing Traction Lift Equipment	3	25	84
R/601/0626	Installing Lift Ropes and Chains	3	25	84
Y/601/0627	Installing Lift Doors, Frames and Ancillary Components	3	25	84
D/601/0628	Checking and Setting Lift Installations	3	25	77
Hydraulic Lift Installation Mandatory Pathway – all 7 units must be selected.				
F/601/0573	Carrying Out Fault Diagnosis on Lift Installations	3	50	60
J/601/0574	Measuring and Setting Out Lift Installations	3	23	63
L/601/0575	Installing Lift Well and Ancillary Equipment	3	25	84
R/601/0626	Installing Lift Ropes and Chains	3	25	84
Y/601/0627	Installing Lift Doors, Frames and Ancillary Components	3	25	84
D/601/0628	Checking and Setting Lift Installations	3	25	77
R/601/0674	Installing Hydraulic Lift Equipment	3	25	84
Escalator Installation and Commissioning Mandatory Pathway – all 3 units must be selected.				

H/601/0677	Carrying Out Fault Diagnosis on Escalator Installations	3	50	60
H/601/0680	Installing Escalator Equipment	3	33	161
A/601/0684	Commissioning Escalator Installations	3	100	182

2.1 Unit requirements are available as a separate document

2.2 Unit Endorsement

These units are endorsed by the Sector Skills Council for Science, Engineering and Manufacturing Technologies (SEMTEA).

3 Centre & Qualification Approval

Centres wishing to offer the qualification will need to gain ETA's approval to do so. Current ETA centres can do this via Quartz Web. For non ETA Centres to gain approval to run the qualification please provide your details via <http://quartz.etawards/quartz-system.com> and the ETA team will start the process of approval.

4 Resource Requirements

4.1 Assessors

Assessment must be carried out by competent assessors who hold, or are working towards, a current assessor qualification. They will be expected to regularly review their skills, knowledge and understanding and, where applicable, undertake continuing professional development to ensure that they are carrying out workplace assessment to the most up to date national occupational standards.

Assessors must be able to demonstrate that they have relevant and sufficient technical competence to evaluate and judge performance and knowledge evidence of this qualification, the units being taken and the associated assessment criteria. This will be demonstrated either by holding a relevant technical qualification or by proven experience in the learner's industry. The assessor's competence must, at the very least, be at the same level as that required of the learner in the assessment so that they are able to demonstrate the skills needed.

4.2 Internal Quality Assurance Advisors

Internal quality assurance (IQA) must be carried out by competent quality assurers who should hold or be working towards, a current internal quality assurance qualification. They will be expected to regularly review their skills, knowledge and understanding and, where applicable, undertake continuing professional development to ensure that they are carrying out workplace assessment to the most up to date national occupational standards.

Persons carrying out the role of internal quality assurance will also be expected to be fully conversant with the ETA requirements for IQA in centres. These are detailed in the centre manual.

IQAAs must be able to demonstrate that they have relevant and sufficient technical competence to understand performance and knowledge evidence of this qualification, the units being taken and the associated assessment criteria. This will be demonstrated either by holding a relevant technical qualification or by proven experience in the learner's industry. The IQAA's competence must be sufficient to recognise what constitutes acceptable performance, knowledge and understanding as required by this qualification.

4.3 External Quality Assurance Advisors

ETA will appoint an appropriately qualified person to provide advice and guidance to the centre team and act as their external quality assurance advisor (EQAA).

External quality assurance (EQA) must be carried out by competent quality assurers who should hold, or be working towards, a current external quality assurance qualification. They will be expected to regularly review their skills, knowledge and understanding and where applicable undertake continuing professional development to ensure that they are carrying out workplace assessment to the most up to date national occupational standards.

EQAAs must be able to demonstrate that they have relevant and sufficient technical competence to recognise performance and knowledge evidence of this qualification as required by the units being taken and the associated assessment criteria.

4.4 Assessment environment

The evidence of a learner's competence, knowledge and understanding for this qualification can only be regarded as valid, reliable, sufficient and authentic if demonstrated in a real working environment.