



ETCAL Level 2 Extended Certificate in Engineering Principles
601/8073/0
Assessment Guide

Introduction

ETA qualifications are developed in conjunction with the industries and employers they service. They are designed to add value and deliver multidimensional outputs that provide impact for both learners and employers.

It is therefore important that the assessment requirements of ETA qualifications are robust whilst not containing unnecessary and over-burdensome challenges that detract from the intended outcomes and impact.

Who is the qualification for?

This qualification has been designed to cover those learners who wish to:

- Develop knowledge and understanding
- Develop a range of specialist skills
- Achieve a stand-alone qualification
- Develop personal growth through learning

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.

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.

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 is 1 optional pathway offering a choice of units applicable to individual workplaces and working environments.

Unit Endorsement

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

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.

Resource Requirements

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.

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.

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.

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.

Qualification Structure

Qualification Number		601/8073/0
Title		Extended Certificate in Engineering Principles
Unit Level		Level 2
Guided Learning Hours		260
Total Qualification Time		270
Unit Credit Value		30
Unit Grading Structure		Pass

Learners must achieve a minimum of 30 credits to gain the qualification. The requirements of the qualification to be met are 260 GLH and 270 TQT.

Ofqual code	Unit Title	Level	CV	GLH
Y/507/8867	Working Safely and Effectively in Engineering	2	5	30
D/507/8868	Interpreting and Using Engineering Information	2	5	30
J/507/8850	Applying Continuous Improvement and Problem Solving Techniques	2	10	60
T/507/8861	Workplace Organisation and Standard Operating Procedures	2	10	60
M/507/8860	Application of Quality Control and Measurement in Engineering	2	10	60
L/507/8851	Preparing and Controlling Engineering Manufacturing Operations	2	5	30
L/507/8848	Engineering Maintenance Procedures	2	5	30

Unit requirements

Y/507/8867	Working Safely and Effectively in Engineering	Level 2	CV 5	GLH 30
1	Be able to apply statutory regulations and organisational safety requirements			
2	Be able to work efficiently and effectively in engineering			

D/507/8868	Interpreting and Using Engineering Information	Level 2	CV 5	GLH 30
1	Know how to interpret drawings and related documentation			
2	Be able to use information from drawings and related documentation			

J/507/8850	Applying Continuous Improvement and Problem Solving Techniques	Level 2	CV 10	GLH 60
1	Know different types of philosophies used to improve the performance of an organisation			
2	Know the concept and techniques of continuous improvement			
3	Be able to use quality tools to solve manufacturing problems			
4	Be able to use continuous improvement and problem solving techniques			

T/507/8861	Workplace Organisation and Standard Operating Procedures	Level 2	CV 10	GLH 60
1	Understand the principles of the 5S/5C process			
2	Know about methods of visual control			
3	Be able to produce a standard operating procedure (SOP)			
4	Know how visual display techniques are used			

M/507/8860	Application of Quality Control and Measurement in Engineering	Level 2	CV 10	GLH 60
1	Be able to use comparators and gauges to monitor quality of given products			
2	Be able to use measuring equipment to monitor the quality products			
3	Know about dimensional tolerances and grades of fit			
4	Know about quality and quality control as applied to manufacturing products			

L/507/8851	Preparing and Controlling Engineering Manufacturing Operations	Level 2	CV 5	GLH 30
1	Be able to prepare a work area for a manufacturing operation according to defined procedures in a safe manner			
2	Be able to control a manufacturing operation in a safe manner according to defined procedures			

L/507/8848	Engineering Maintenance Procedures	Level 2	CV 5	GLH 30
1	Know about engineering maintenance purposes, procedures and resources			
2	Be able to plan and carry out a maintenance activity on a non-complex engineering system			