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

Certificate - Assessment Principles

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. These assessment principles are prepared with that in mind and are applicable to this qualification:

Level 2 Extended Certificate in Engineering Principles

Principles

There are four key principles to underpin assessment delivery:

1. Assessment should contribute to developing a learner's knowledge and/or skills and provide relevant and current development as the related industry requires.

2. Systems for capturing evidence of competence should be integrated and efficient. Assessment practices for both competence-based and knowledge-based aspects of qualifications should, where possible, be integrated with industry driven standards and requirements.

3. Assessment methods must be appropriate for the level and nature of the qualification units to be assessed. Methods of assessing achievement against learning outcomes and assessment principles must be accommodating and flexible, whilst remaining appropriate for both the level being assessed and industry expectations of learners at that level.

4. Evidence of knowledge and understanding must be recorded and be clearly attributable to the learner. This can be delivered using task based activity with questions and answer sessions, supported by assessor observation.

The choice and application of assessment methods must be consistent with these principles and will generally include:

- Direct Observation
- Written evidence (portfolio/workbook)
- Centre set assignment
- Centre set coursework
- Oral examination
- Professional/open discussion

Delivery Team Requirements

Tutors / Assessors

- Tutors / Assessors should have a detailed knowledge of, and be competent in, the occupational requirements of the units
- Tutors / Assessors should hold or be working towards the related professional qualifications for delivery and assessment as required
- This competence will have been acquired either in direct employment in the occupational role to which the unit relates, or in employment as a manager, supervisor or in-house trainer of employees carrying out the role
- It is unlikely that occupational competence will have been achieved in less than twelve months of employment but individuals with less experience could be considered as assessors if sufficiently occupationally competent

Internal Quality Assurers (IQAs)

- IQAs must have a thorough understanding of the structure, content and occupational requirements of the units that they are internally quality assuring. This understanding will have been acquired while either working directly within or delivering within the relevant occupational area in either an operational or a support function
- The level of understanding must be sufficient to allow the IQA to judge whether the assessor has fully assessed learners against all the principles within the unit
- It is unlikely that a person could have gained this level of understanding in less than twelve months of being employed but individuals with less experience could be considered as IQAs if they have the required level of experience, knowledge and understanding.

Technical / Expert Witness

Expert witnesses can be drawn from a wide range of people who can observe, 'measure and examine performance against the industry and qualification principles. These can include; line managers and experienced individuals within a related sector-based organisation. The Technical Expert Witnesses should have proven practical experience and knowledge relating to the content of the principles being assessed.

It is unlikely that someone could become an expert in their entire job role in less than twelve months of being employed in their industry. They could, however, very quickly become an expert in the content of a single unit if this was the focus of their job role. The assessor should make a

judgement as to the level of expertise held by a potential Technical Expert Witness and, where necessary, this should be confirmed with the awarding organisation.

Assessment Materials

ETC Awards Ltd. (ETA) Assessment Materials are protected by copyright and are supplied only to Approved Centres for use solely for the purpose of the assessment of ETA learners.

Instructions for Conducting Assessment

the Approved Centre must either:

- secure approval of in-house assessment material by ETA's External Quality Assurance team prior to use
- use ETA Assessment Materials
- we recognise that reasonable adjustments may be considered at the time of assessment, please refer to the ETA Reasonable adjustments and considerations policy

All approved centres must then handle and store securely all Assessment Materials in accordance with the following:

- Assessment Material must be accessible to learners only during their programme
- The Approved Centre must not make public in any format the contents of any materials either in part or in full.
- Materials must be securely handled and under no circumstances shared with third party organisations or individuals
- The Approved Centre must seek permission from ETA through the External Quality Assurance team if they want to convert Material for alternative storage, retrieval and delivery in electronic formats.

All centre based assessment material must be agreed with ETA prior to use and will be subject to robust monitored during sampling and verification activity.

Level 2 Unit – Working Safely and Effectively in Engineering

Unit Reference Number		Y/507/8867
Qualification Framework		RQF
Title		Working Safely and Effectively in Engineering
Unit Level		Level 2
Guided Learning Hours		30
Unit Credit Value		5
Unit Grading Structure		Pass / Fail

Learning Outcome		**Assessment Criteria - The learner can**		**Criteria expansion**
1.	Working Safely and Effectively in Engineering	1.1	Be able to apply statutory regulations and organisational safety requirements	
		1.2	Be able to work efficiently and effectively in engineering	

Level 2 Unit – Interpreting and Using Engineering Information

Unit Reference Number		D/507/8868
Qualification Framework		RQF
Title		Interpreting and Using Engineering Information
Unit Level		Level 2
Guided Learning Hours		30
Unit Credit Value		5
Unit Grading Structure		Pass / Fail

Learning Outcome		**Assessment Criteria - The learner can**		**Criteria expansion**
1.	Interpreting and Using Engineering Information	1.1	Know how to interpret drawings and related documentation	
		1.2	Be able to use information from drawings and related documentation	

Level 2 Unit – Applying Continuous Improvement and Problem Solving Techniques

Unit Reference Number		J/507/8850
Qualification Framework		RQF
Title		Applying Continuous Improvement and Problem Solving Techniques
Unit Level		Level 2
Guided Learning Hours		60
Unit Credit Value		10
Unit Grading Structure		Pass / Fail

Learning Outcome		**Assessment Criteria - The learner can**		**Criteria expansion**
1.	Applying Continuous Improvement and Problem Solving Techniques	1.1	Know different types of philosophies used to improve the performance of an organization	
		1.2	Know the concept and techniques of continuous improvement	
		1.3	Be able to use quality tools to solve manufacturing problems	
		1.4	Be able to use continuous improvement and problem solving techniques	

Level 2 Unit – Workplace Organisation and Standard Operating Procedures

Unit Reference Number		T/507/8861
Qualification Framework		RQF
Title		Workplace Organisation and Standard Operating Procedures
Unit Level		Level 2
Guided Learning Hours		60
Unit Credit Value		10
Unit Grading Structure		Pass / Fail

Learning Outcome		**Assessment Criteria - The learner can**		**Criteria expansion**
1.	Workplace Organisation and Standard Operating Procedures	1.1	Understand the principles of the 5S/5C process	
		1.2	Know about methods of visual control	
		1.3	Be able to produce a standard operating procedure (SOP)	
		1.4	Know how visual display techniques are used	

Level 2 Unit – Application of Quality Control and Measurement In Engineering

Unit Reference Number		M/507/8860
Qualification Framework		RQF
Title		Application of Quality Control and Measurement in Engineering
Unit Level		Level 2
Guided Learning Hours		60
Unit Credit Value		10
Unit Grading Structure		Pass / Fail

Learning Outcome		**Assessment Criteria - The learner can**		**Criteria expansion**
1.	Application of Quality Control and Measurement in Engineering	1.1	Be able to use comparators and gauges to monitor quality of given products	
		1.2	Be able to use measuring equipment to monitor the quality products	
		1.3	Know about dimensional tolerances and grades of fit	
		1.4	Know about quality and quality control as applied to manufacturing products	

Level 2 Unit – Preparing and Controlling Engineering Manufacturing Operations

Unit Reference Number		L/507/8851
Qualification Framework		RQF
Title		Preparing and Controlling Engineering Manufacturing Operations
Unit Level		Level 2
Guided Learning Hours		30
Unit Credit Value		5
Unit Grading Structure		Pass / Fail

Learning Outcome		**Assessment Criteria - The learner can**		**Criteria expansion**
1.	Preparing and Controlling Engineering Manufacturing Operations	1.1	Be able to prepare a work area for a manufacturing operation according to defined procedures in a safe manner	
		1.2	Be able to control a manufacturing operation in a safe manner according to defined procedures	

Level 2 Unit – Engineering Maintenance Procedures

Unit Reference Number		L/507/8848
Qualification Framework		RQF
Title		Engineering Maintenance Procedures
Unit Level		Level 2
Guided Learning Hours		30
Unit Credit Value		5
Unit Grading Structure		Pass / Fail

Learning Outcome		**Assessment Criteria - The learner can**		**Criteria expansion**
1.	Engineering Maintenance Procedures	1.1	Know about engineering maintenance purposes, procedures and resources	
		1.2	Be able to plan and carry out a maintenance activity on a non-complex engineering system	