

EAL LEVEL 4 AWARD IN THE DESIGN AND VERIFICATION OF ELECTRICAL SYSTEMS

What is this qualification?

This qualification is for learners who wish to obtain an understanding of the concepts, processes and practices involved with the design, construction management and the initial verification of electrical installations.

The emphasis is on the safe and ergonomic design on an installation which complies with relevant statutes, regulations; industry standards, and sound engineering practices.

Where the term Centre is used, this should be considered to be Certsure training centres.

Who should attend?

This qualification comprises of a single knowledge unit which **has 30 guided learning hours (GLH)** which covers: relevant statutory and non-statutory requirements, electrical installation design, BS 7671, design and verification procedures, associated protective systems; and aspects of environmental technologies.

It covers design calculations and the application of BS 7671 and related guidance in the safe and effective design of an installation. The qualification has a total qualification time (TQT) of **100 hours**.

This qualification is:

- Accredited at Level 4
- Industry recognised
- Supported by Certsure
- Supported by the JIB.

Learners

Learners must be at least 16 years old.

There are no formal entry requirements for these qualifications; however centres should ensure that the learners have the potential to achieve these qualifications. Learners must have the minimum levels of literacy and numeracy to complete the learning outcomes and assessments.

It is recommended that learners have completed a recognised electrical apprenticeship, or as a minimum hold qualifications covering inspection and testing, and a current qualification to the wiring regulations.

Achievement of the Qualification

This qualification is gained when the unit and related assessments have been achieved. The centre will then be able to apply for the learner's Certificate.

There will be a 12 month limit for Learners to qualify, starting at the first date of the 30 GLH delivery.

Assessment

The assessment of this qualification involves the following two aspects:

1) An EAL set centre marked assignment.

OR

Learner's real world projects which evidence the assessment criteria to the equivalent complexity.

2) A centre marked controlled and graded knowledge assessment (written paper).

Both assessments must be achieved for the qualification to be awarded.

The overall qualification will be pass or fail only however the grades where achieved will be useful for the learner to recognise their own ability and provide evidence to any current or future employer.

Centre marked (written) controlled knowledge assessment

This is an **open book** centre marked and graded short answer written paper with a duration of 180 minutes.

The permitted materials are listed below:

Essential

- Non-programmable calculator,
- Ruler, pens, pencils, rubber,
- BS 7671,
- IET Electrical Installation Design Guide: Calculations for Electricians and Designers
- IET Guidance Note: Guidance Note 1

Additionally can also be used

- NICEIC Site Guide.
- IET On-Site Guide
- Electrician's Guide (Union Book)
- IET Guidance Notes.

Assignment

This assessment is set by EAL and marked by members of the delivery team at the training centre. All assessment decisions are then subject to internal standardisation and external quality assurance. It has marking criteria to ensure that the markers are consistent in their approach to assessment across learners.

Evidence for the project must be prepared by the learner unaided and without the use of software for carrying out calculations i.e. for determining cable sizes - as this will not demonstrate the learner's ability.

The learner may use any relevant source of information to assist them with the completion of the project, such as the list of publications for the written paper (previous page); manufacturer's information, and the internet.

RPL

Learners will be able to utilise their own real world work based projects to act as evidence for recognition of prior learning (RPL) against the centre marked assignment. Please refer to A1 (below) for guidance on RPL for the requirements for assessors and internal quality assurers when RPL is used.