



Award in the Design, Installation and Commissioning of Electrical Energy Storage Systems

LCL Awards at Level 3: 2 Credits

Qualification Specification

The purpose of this regulated qualification is for practicing electricians to be able to design, install and commission electrical energy storage systems (EESS).

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Introduction to Apex Training

Apex Training is the training arm of The Verdancy Group, delivering accredited green skills programmes across Scotland and the wider UK. We specialise in practical, industry-focused learning that supports individuals and organisations to develop the knowledge required for the transition to a low-carbon built environment.

Delivery through our Apex Training Centres and partner venues, with options for employer-based delivery where suitable. All programmes are led by practising industry specialists to ensure alignment and compliance with current standards, regulations and sector expectations.

About The Verdancy Group and LCL Awards

The Verdancy Group is a specialist provider of green skills training, consultancy, sustainability education, and workforce development. Our programmes are designed to meet emerging industry needs and support national and regional net zero goals.

LCL Awards is one of the Building Services Engineering (BSE) sectors foremost awarding organisation and certification bodies, offering qualifications and training courses via a network of approximately 160 approved centres located nationwide.

Award in the Design, Installation and Commissioning of Electrical Energy Storage Systems

Overview

This regulated qualification is for learners wishing to achieve a regulated qualification in the Design, Installation and Commissioning of EESS. This qualification is in accordance with BS 7671 Requirements for Electrical Installations and the IET Code of Practice for EESS.

Duration

The award has a total notional learning time of 20 hours, comprising:

→ Guided learning: approximately 16 hours

Delivery offered at our Apex Training Centre, Basingstoke.

Materials And Certification

Learners will be provided with access to learning materials but will need to bring their Code of Practice for Electrical Energy Storage Systems & Latest edition of BS 7671.

Learners who successfully meet the assessment requirements will receive an industry recognised certificate of achievement issued by LCL awards.

Assessment

This qualification will be assessed by an externally set, and assessed, multiple choice examination and a centre marked practical assessment.

Progression After This Qualification

This qualification is an excellent gateway into the wider renewable energy and low-carbon technologies sector. After completion, you may wish to progress to further specialist training, e.g., Solar Photovoltaics, or the installation of electric vehicle charging points to broaden your renewable skills.

Who Is This Qualification For?

This qualification is intended for qualified and practicing electricians who are age 18+.

On application for the qualification, we will carry out an initial assessment of the learner's capability to complete the qualification.

Prior to registering for the qualification, learners must provide evidence that they meet the qualification pre-requisites by holding a:

- Level 3 Award in the Requirements for Electrical Installations BS 7671 (current edition).

And one of the following:

- Level 3 NVQ Diploma in Installing Electrotechnical Systems and Equipment (Buildings, Structures and the Environment)
- Level 3 NVQ Diploma in Electrotechnical Services (Electrical Installation or Maintenance)
- Level 3 Electrotechnical Apprenticeship Qualification
- Level 3 NVQ in Electrotechnical Services Experienced Worker
- Level 3 Electrotechnical Experienced Worker Qualification
- Level 3 Electrotechnical in Dwellings Experienced Worker Qualification
- Building Services Engineering (Level 3) Electrotechnical Installation Qualification
- SVQ in Electrical Installation at SCQF level 7
- Equivalent Qualifications. See Tables A4.7 and A4.8 of the EAS Qualifications Guide
- Current ECS Gold Card issued by the JIB or SJIB – Installation Electrician, Approved Electrician, Maintenance Electrician or Domestic Electrician.

Qualification Structure and Module Content

The course consists of one module with seven learning outcomes.

Module 1

Electrical Energy Storage Systems

Learning Outcome 1

The learner will know the key requirements for the installation of EESS.

Learning Outcome Content

- Statutory and non-statutory requirements relating to EESS.

Learning Outcome 2

The learner will know and identify the equipment, arrangements, and operating modes of EESS.

Learning Outcome Content

- Architectures and coupling modes
- Key components of an EESS
- Operating modes of an EESS

Learning Outcome 3

The learner will know the requirements for design and installation of EESS.

Learning Outcome Content

- The limitations for power delivery in island mode operation
- Switching to island mode operation
- Protective earthing, bonding and protection against electric shock in island mode operation
- Suitable locations and protection of EESS
- Circumstances where fire detection and alarm is recommended for EESS
- Generating sets operating in parallel with other sources including public distribution systems

Learning Outcome 4

The learner will be able to prepare for the installation of EESS.

Learning Outcome Content

- Determine the grid electricity independence/self-sufficiency of an EESS using MCS guidance document MGD 003.
- Select an appropriate earthing arrangement for island mode operation, given supply requirements and installation conditions
- Select an appropriate means of protection against electric shock for island mode operation
- Evaluate protection against overcurrent in island mode
- Identify methods of conducting DC arc flash risk assessments



Learning Outcome 5

The learner will be able to install EESS.

Learning Outcome Content

- Apply health and safety procedures for installations with multiple sources of supply
- Select appropriate equipment for DC systems
- Install EESS in accordance with BS 7671 and the IET Code of Practice for EESS

Learning Outcome 6

The learner will know the requirements for initial verification and handover of EESS.

Learning Outcome Content

- Information required to complete an Electrical Installation Certificate for an EESS installation
- Requirements for visual inspection of the installation
- Test methods for circuits into which EESS are connected
- Information the client must be provided with to ensure the EESS can be safely operated
- Notification requirements to the Distribution Network Operator (DNO) in accordance with appropriate ENA Engineering Recommendations G98, G99 and G100
- The circumstances which may require prior notification and/or permission from the DNO before installation can commence

Learning Outcome 7

The learner will be able to conduct initial verification and handover of EESS.

Learning Outcome Content

- Perform inspections that are conducted during initial verification
- Perform appropriate tests for circuits which supply and are connected to EESS
- Complete an Electrical Installation Certificate for the installed EESS
- Advise the client of the correct and safe operation of the EESS

Version History

Version	Date	Summary of Changes	Actioned By	Reviewed / Approved By
Version 1.0	May 2026	First publication of the Award in the Design, Installation and Commissioning of Electrical Energy Storage Systems	Apex Training (Author)	Verdancy QA Lead

Document Control Statement

This document is maintained by Apex Training, part of The Verdancy Group. All updates are recorded through internal quality assurance procedures. The most recent version of this specification supersedes all previous versions.



Apex Training Centre
Unit 3, Spectrum Court
Intec Business Park
Wade Road
Basingstoke, RG24 8NE

