



QualCert Level 2 Diploma in Quality Control (QC) Electrical

Version 1.0 September 2024

QualCert Qualification number: QC100008

Qualification Specification

Table of Contents

About QualCert	3
Course Overview	4
Qualification Framework.....	6
Assessment Processes	6
Entry Requirements	6
Qualification Structure.....	7
Centre Requirements.....	8
Support for Candidate	9
Assessments Requirements.....	9
Units – Learning Outcomes & Assessment Criteria	11
Unit 01 – Electrical Installation Quality Basics.....	11
Unit 02 – Introduction to Inspection and Testing Procedures.....	13
Unit 03 – Workplace Health & Safety in Electrical Environments	14
Unit 04 – Understanding UK Electrical Regulations Overview	15
Unit 05 – Electrical Fault Identification and Reporting	16
Unit 06 – Basic Quality Assurance Principles in Electrical Work	17

About QualCert

QualCert is a globally recognized awarding body based in the United Kingdom, renowned for its commitment to excellence in Quality Assurance (QA) and Quality Control (QC) education and training. Specializing in delivering high-quality qualifications, QualCert addresses the evolving needs of international learners, professionals, and industries seeking expertise in QA and QC.

Dedicated to fostering innovative and flexible learning pathways, QualCert provides learners with the skills, knowledge, and practical competencies required to excel in dynamic quality-focused professional environments. The organization adheres to international qualification frameworks and standards, ensuring its certifications are globally recognized and highly applicable across diverse sectors.

The vision of QualCert is to establish itself as a global benchmark in quality education and skills development within Quality Assurance and Quality Control. Its mission is to equip individuals and organizations with internationally recognized qualifications that enhance employability, professional productivity, and career progression in QA/QC disciplines.

Course Overview

The **QualCert Level 2 Diploma in Quality Control (QC) – Electrical** is designed for learners who wish to develop the practical knowledge and technical skills required to support quality control activities within the electrical installation and construction industry. Building on fundamental electrical concepts, the qualification introduces learners to electrical inspection, testing procedures, wiring standards, workplace safety, quality documentation, and fault identification in accordance with UK industry practices.

The course combines theoretical knowledge with practical application, enabling learners to carry out routine quality control tasks under limited supervision. It develops the ability to inspect electrical installations, identify quality issues, follow safe working procedures, maintain accurate records, and contribute to compliance with relevant standards. The qualification provides a strong platform for progression into higher-level quality control, electrical installation, and inspection roles.

Aims

The aims of this qualification are to:

- Develop practical knowledge of electrical quality control principles and inspection processes.
- Build competence in carrying out routine electrical quality checks and supporting testing activities.
- Promote safe working practices in accordance with UK health and safety requirements.
- Develop an understanding of electrical wiring standards, quality documentation, and compliance procedures.
- Improve learners' ability to identify common electrical faults and quality issues.
- Prepare learners for employment or further study in electrical quality control and related technical disciplines.

Learning Objectives

Upon successful completion of this qualification, learners will be able to:

- Explain the principles and importance of quality control in electrical installations.
- Carry out routine visual inspections and basic quality checks on electrical work.
- Apply safe working practices during electrical quality control activities.
- Identify common electrical components, wiring methods, and installation requirements.
- Assist with basic electrical testing and interpret simple test results.

- Complete quality control records and inspection documentation accurately.
- Recognise common installation defects and report non-conformities using workplace procedures.
- Use basic electrical tools and measuring instruments safely and correctly.
- Support compliance with relevant UK electrical standards and quality requirements.
- Contribute effectively to maintaining quality and safety within electrical installation projects.

Targeted Audience

This qualification is suitable for:

- Individuals seeking to develop practical skills in electrical quality control.
- Electrical trainees and apprentices working towards technical roles in the electrical industry.
- Entry-level electricians and electrical installation operatives wishing to enhance their quality control knowledge.
- Construction workers involved in electrical installation and inspection activities.
- Individuals progressing from a Level 1 qualification in Electrical Quality Control or a related discipline.
- Employers wishing to develop the quality inspection and compliance skills of their electrical workforce.
- Learners preparing for higher-level qualifications in electrical quality control, inspection, testing, or electrical engineering.

Qualification Framework

Qualification Title	QualCert Level 2 Diploma in Quality Control (QC) Electrical
Qualification Duration	3 to 6 months
Grading Type	Pass / Fail
Competency Evaluation	Coursework / Assignments / Evidence Based

Assessment Processes

Stage	Details
Internal Assessment and Verification	- Conducted by staff at the Approved Training Centre (ATC) to ensure qualification standards are met. - Internal Quality Assurance (IQA) by designated centre staff to maintain assessment integrity.
External Quality Assurance	- Overseen by QualCert verifiers who periodically review assessment and IQA procedures. - Ensures adherence to standards and consistency across all ATCs.

Entry Requirements

To enroll in the QualCert Level 2 Diploma in Quality Control (QC) Electrical, following are requirement:

1. **Age Requirement:**

Candidates must be 16+ years of age or older at the time of enrollment.

2. **Educational Background:**

basic secondary education

3. **English Language Proficiency:**

The course is delivered in English. Candidates should have basic to intermediate proficiency in reading, writing, and speaking English.

Qualification Structure

The QualCert Level 2 Diploma in Quality Control (QC) Electrical comprises 42 credits, with a Total Qualification Time (TQT) of 210 hours, including 150 Guided Learning Hours (GLH).

Mandatory Units				
Unit Ref No	Unit Name	Credits	GLH	TQT
QC100008-1	Electrical Installation Quality Basics	7	25	35
QC100008-2	Introduction to Inspection and Testing Procedures	7	25	35
QC100008-3	Workplace Health & Safety in Electrical Environments	7	25	35
QC100008-4	Understanding UK Electrical Regulations Overview	7	25	35
QC100008-5	Electrical Fault Identification and Reporting	7	25	35
QC100008-6	Basic Quality Assurance Principles in Electrical Work	7	25	35

Centre Requirements

Centres delivering the QualCert Level 2 Diploma in Quality Control (QC) Electrical must uphold high standards to ensure quality learning, assessment integrity, and successful learner outcomes. Centres are required to provide qualified staff, appropriate facilities, and access to the necessary resources to deliver advanced pharmaceutical training. Meeting these requirements ensures learners receive a professional, engaging, and internationally recognised educational experience.

Qualified and Competent Teaching Staff

- Employ instructors with advanced qualifications and professional experience in pharmaceutical technology, quality assurance, or related fields
- Ensure staff maintain up-to-date knowledge of manufacturing practices, regulatory standards, and quality systems
- Provide ongoing professional development and training to teaching staff to maintain excellence in delivery

Adequate Learning Facilities and Resources

- Provide modern classrooms, laboratories, or online learning platforms to support interactive and practical learning
- Ensure access to up-to-date pharmaceutical reference materials, case studies, and digital tools
- Maintain safe and inclusive environments suitable for laboratory work, research, and practical exercises

Robust Assessment and Quality Assurance Systems

- Implement clear and consistent assessment policies aligned with qualification standards
- Maintain internal quality assurance processes to monitor teaching, assessment, and learner performance
- Regularly review assessment methods to ensure relevance and alignment with industry best practices

Comprehensive Learner Support

- Provide academic guidance, technical assistance, and pastoral care to support learner success
- Ensure accessibility for learners with disabilities or specific learning needs through reasonable adjustments

- Maintain effective communication channels for feedback, queries, and learner support

Compliance with Regulatory, Health, and Safety Standards

- Adhere to legal, ethical, and health and safety regulations in all teaching and practical activities
- Keep accurate learner records, attendance, and assessment documentation
- Follow data protection and confidentiality protocols to safeguard learner information

Support for Candidate

Supporting Materials for Candidates

- Enable tracking of learners' progress toward achieving specified learning outcomes and assessment criteria.
- Provide clear guidance on accessing QualCert policies and procedures.
- Establish robust mechanisms for Internal and External Quality Assurance personnel to verify and authenticate evidence efficiently.

Assessments Requirements

This qualification consists of 6 mandatory assignments designed to assess the learner's understanding and practical application of the required skills and knowledge. The key elements of the assessment framework include:

- **Comprehensive Assignment Structure:**
The assignments are designed to cover a range of topics within the qualification, ensuring that learners demonstrate their competence across all essential areas.
- **Pass Requirement:**
Learners must successfully complete all 6 assignments to meet the requirements for certification. Each assignment must meet the specified criteria and demonstrate sufficient understanding and application of the subject matter.
- **Assessment Process:**
Each assignment is reviewed and marked by a qualified assessor, with feedback provided to support learner development.
- **Final Completion Criteria:**
The successful completion of all assignments is necessary for certification. Only

learners who meet the required standards across all assignments will be awarded the qualification.

Quality Assurance & Verification:

QualCert applies a rigorous, multi-layered quality assurance system to ensure the reliability, consistency, and integrity of all assessments and results.

1. Internal Quality Assurance (IQA)

Conducted by the approved training centre:

- **Assignment Evaluation:**
Centre-approved Assessors and Internal Quality Assurers (IQAs) review the assignments to ensure they meet the assessment criteria and learning outcomes.
- **Standardisation:**
Regular standardisation sessions are held to maintain consistency in assessment and marking practices across all centre staff.
- **Feedback & Support:**
IQAs ensure that learners receive constructive feedback to aid their progress and improve future submissions.

2. External Quality Assurance (EQA)

Conducted by QualCert:

- **Independent Verification:**
QualCert's External Quality Assurers (EQAs) verify the completed assignments and assess the quality and fairness of the marking process.
- **Centre Audits:**
EQAs audit the centre's compliance with QualCert's quality assurance standards, reviewing assessment practices, learner records, and overall delivery.
- **Final Certification:**
After satisfying the EQA's verification process, QualCert will officially issue the certification to the learner.

Units – Learning Outcomes & Assessment Criteria

Unit 01 – Electrical Installation Quality Basics

Learning outcome

The learner will:

Assessment criterion

The learner can:

01. Explain the basic principles of electrical installation quality in line with UK standards.

1.1 Explain basic principles of electrical installation quality used in UK construction work.
1.2 Identify key UK standards that apply to electrical installation quality.
1.3 Describe how quality standards ensure safe electrical installation work.
1.4 Give examples of good quality electrical installation practices.

02. Identify quality requirements for safe and correct electrical installation work.

2.1 Identify basic quality requirements for electrical installation work.
2.2 Recognise correct installation methods that meet standards.
2.3 Match quality requirements with installation tasks.
2.4 Follow quality requirements during supervised work.

03. Follow basic quality procedures during simple electrical installation tasks.

3.1 Follow instructions during electrical installation tasks.
3.2 Apply basic quality procedures during installation work.
3.3 Use correct tools and materials during tasks.
3.4 Report quality issues during installation activities.

04. Carry out basic checks to confirm installation work meets quality requirements.

4.1 Carry out visual checks on electrical installation work.
4.2 Identify simple defects in installation work.

	4.3 Compare work against quality requirements. 4.4 Record inspection results using standard forms.
--	--

Unit 02 – Introduction to Inspection and Testing Procedures

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Describe basic inspection and testing procedures used in electrical work.	1.1 Describe basic inspection and testing procedures in electrical work. 1.2 Explain purpose of inspection and testing in quality control. 1.3 Identify steps involved in inspection activities. 1.4 Recognise types of basic electrical testing.
02 Identify common tools and equipment used for electrical inspection and testing.	2.1 Identify tools used for electrical inspection and testing. 2.2 Recognise basic testing equipment used on site. 2.3 Match tools with inspection and testing tasks. 2.4 Select suitable tools under supervision.
03 Assist in simple inspection and testing activities under supervision.	3.1 Assist in inspection and testing activities under supervision. 3.2 Prepare tools and equipment for tasks. 3.3 Follow instructions during testing activities. 3.4 Work safely during inspection and testing work.
04 Record basic inspection and test results accurately using standard formats.	4.1 Record inspection results using standard forms. 4.2 Enter correct data from testing activities. 4.3 Check records for simple errors. 4.4 Submit completed reports to supervisor.

Unit 03 – Workplace Health & Safety in Electrical Environments

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Explain key health and safety rules in electrical working environments.	1.1 Explain key health and safety rules in electrical work environments. 1.2 Identify safety rules used on construction sites. 1.3 Describe importance of safety in electrical work. 1.4 Give examples of safe working practices.
02 Identify common electrical hazards and associated risks on site.	2.1 Identify common electrical hazards on site. 2.2 Recognise risks linked to electrical hazards. 2.3 Match hazards with possible dangers. 2.4 Report hazards to supervisor.
03 Follow safe working practices during electrical tasks under supervision.	3.1 Follow safe working practices during electrical tasks. 3.2 Work safely under supervisor instructions. 3.3 Avoid unsafe actions on site. 3.4 Stop work if hazards are identified.
04 Use personal protective equipment (PPE) correctly in electrical work areas.	4.1 Identify correct PPE for electrical tasks. 4.2 Wear PPE correctly before starting work. 4.3 Use PPE during electrical tasks. 4.4 Store PPE safely after use.

Unit 04 – Understanding UK Electrical Regulations Overview

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Identify key UK electrical regulations and their purpose in installation work.	1.1 Identify UK electrical regulations used in installation work. 1.2 State purpose of regulations in electrical safety. 1.3 Recognise regulations applied on site. 1.4 Match regulations with installation tasks.
02 Explain why compliance with electrical standards is important for safety.	2.1 Explain importance of following electrical regulations. 2.2 Describe how standards improve safety. 2.3 Identify risks of not following regulations. 2.4 Give examples of compliant work.
03 Recognise basic regulatory requirements during electrical installation activities.	3.1 Recognise regulatory requirements during installation work. 3.2 Identify correct installation practices under regulations. 3.3 Spot non-compliant work under supervision. 3.4 Follow regulatory guidance during tasks.
04 Follow simple regulatory guidance when carrying out supervised tasks.	4.1 Follow regulatory guidance during supervised tasks. 4.2 Apply simple rules during installation work. 4.3 Work according to site requirements. 4.4 Report regulatory issues to supervisor.

Unit 05 – Electrical Fault Identification and Reporting

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Identify common electrical faults in basic installation work.	1.1 Identify common electrical faults in installations. 1.2 Recognise faulty wiring and connections. 1.3 Spot visible installation defects. 1.4 Report faults to supervisor.
02 Describe simple causes of electrical faults in installations.	2.1 Describe simple causes of electrical faults. 2.2 Identify poor installation practices causing faults. 2.3 Recognise faulty components. 2.4 Give examples of fault causes.
03 Assist in detecting faults during supervised inspection activities.	3.1 Assist in detecting faults during inspections. 3.2 Follow instructions during fault finding activities. 3.3 Record simple fault observations. 3.4 Support inspection activities safely.
04 Report identified electrical faults clearly using workplace procedures.	4.1 Identify faults that must be reported. 4.2 Report faults using correct procedures. 4.3 Follow workplace reporting methods. 4.4 Record fault details accurately.

Unit 06 – Basic Quality Assurance Principles in Electrical Work

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Explain the basic principles of quality assurance in electrical work.	1.1 Explain basic quality assurance principles in electrical work. 1.2 Identify purpose of quality assurance in installation work. 1.3 Describe simple QA processes used on site. 1.4 Give examples of QA in electrical work.
02 Identify the purpose of quality checks in electrical installation activities.	2.1 Identify purpose of quality checks in installation work. 2.2 State when quality checks are carried out. 2.3 Recognise what is checked during QA activities. 2.4 Follow instructions during quality checks.
03 Follow simple quality assurance procedures under supervision.	3.1 Follow QA procedures under supervision. 3.2 Apply basic quality steps during tasks. 3.3 Work under supervisor guidance. 3.4 Report quality issues found.
04 Support basic quality control activities to ensure safe installation standards.	4.1 Assist in basic quality control activities. 4.2 Check work for simple quality issues. 4.3 Follow safe working practices during QA tasks. 4.4 Support maintaining quality standards on site.



QualCert, the leading UK-based awarding body dedicated to providing a diverse range of technical and professional qualifications in the fields of occupational health and safety, quality control/quality assurance, civil/electrical/mechanical technology, ISO standards (Lead Auditors), and management courses.

At QualCert, we are committed to empowering individuals and organizations with the knowledge and skills necessary to excel in their respective industries. Whether you're looking to enhance your expertise in health and safety practices, quality management systems, or engineering technologies, our comprehensive suite of certifications caters to a wide spectrum of career paths and professional development goals.

QualCert

Unit 11b 12 Deer Park Road,
London, England,
SW19 3TL
+44 7766 729279
info@qualcerts.co.uk
www.qualcerts.co.uk

 facebook.com/QUALCert.UK.Ltd
 instagram.com/qualcertsuk
 linkedin.com/company/qualcert-uk-ltd
 youtube.com/@QualCert
 pinterest.co.uk/qualcertsuk
 medium.com/@qualcert