



QualCert Level 1 Diploma in Quality Control (QC) Electrical

Version 1.0 September 2024

QualCert Qualification number: QC100007

Qualification Specification

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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 1 Diploma in Quality Control (QC) – Electrical** is an introductory qualification designed to provide learners with a basic understanding of quality control practices used in electrical installation and construction environments. The course introduces essential concepts of electrical quality assurance, workplace safety, inspection procedures, electrical systems, tools, documentation, and quality standards commonly applied within the electrical industry.

The qualification focuses on developing practical awareness and fundamental skills required to support quality control activities under supervision. Learners will gain the knowledge needed to recognise quality requirements, follow safe working practices, use basic inspection tools, and complete simple quality records. This programme provides a strong foundation for further study and entry-level employment within the electrical installation and quality control sector.

Aims

The aims of this qualification are to:

- Introduce the fundamental principles of quality control in electrical installation and maintenance.
- Develop awareness of safe working practices and electrical hazards in accordance with UK workplace requirements.
- Build basic knowledge of electrical systems, components, tools, and measuring instruments.
- Develop the ability to assist with simple inspection and quality checking activities.
- Promote accurate recording and reporting of quality-related information using basic documentation.
- Prepare learners for further training and entry-level roles within the electrical and construction industries.

Learning Objectives

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

- Explain the basic principles of quality control in electrical work.
- Identify common electrical components, systems, and installation practices.
- Recognise the importance of workplace health, safety, and the correct use of personal protective equipment (PPE).
- Identify basic electrical tools and measuring instruments used during inspection activities.
- Follow simple quality control procedures under supervision.
- Complete basic quality control records and workplace documentation accurately.
- Recognise common electrical hazards and report unsafe conditions appropriately.

- Demonstrate safe working practices while supporting electrical quality control activities.

Targeted Audience

This qualification is suitable for:

- Individuals who are new to the electrical installation or construction industry.
- School leavers seeking an introduction to electrical quality control.
- Learners preparing for further study in electrical installation, quality assurance, or construction.
- Entry-level electrical operatives and trainees working under supervision.
- Apprentices beginning a career in the electrical sector.
- Individuals wishing to develop basic knowledge of electrical quality control before progressing to higher-level qualifications.
- Anyone interested in gaining a foundation in electrical quality control, inspection, and safe working practices.

Qualification Framework

Qualification Title	QualCert Level 1 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 1 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 1 Diploma in Quality Control (QC) Electrical comprises 30 credits, with a Total Qualification Time (TQT) of 180 hours, including 120 Guided Learning Hours (GLH).

Mandatory Units				
Unit Ref No	Unit Name	Credits	GLH	TQT
QC100007-1	Introduction to Electrical Quality Control Principles	5	20	30
QC100007-2	Basic Electrical Safety Awareness	5	20	30
QC100007-3	Fundamentals of Electrical Systems and Components	5	20	30
QC100007-4	Understanding Tools and Measurement Instruments	5	20	30
QC100007-5	Introduction to Site Safety and PPE Requirements	5	20	30
QC100007-6	Basic Documentation and Reporting in Electrical Work	5	20	30

Centre Requirements

Centres delivering the QualCert Level 1 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 – Introduction to Electrical Quality Control

Principles

Learning outcome

The learner will:

Assessment criterion

The learner can:

01. Describe the purpose of quality control in basic electrical work.	1.1 State what quality control means in electrical work. 1.2 Identify the main purpose of quality control during electrical installation. 1.3 Give simple examples of quality checks carried out on site. 1.4 Explain how quality control helps produce safe electrical work.
02. Identify simple quality requirements used during electrical installations.	2.1 Identify basic quality requirements for electrical installation work. 2.2 Recognise work that meets simple quality requirements. 2.3 Match quality requirements to basic electrical tasks. 2.4 Follow simple quality requirements during supervised activities.
03. Recognise the importance of following quality procedures to produce safe and reliable work.	3.1 State why quality procedures should be followed. 3.2 Identify simple quality procedures used on site. 3.3 Recognise the effects of not following quality procedures. 3.4 Follow simple quality procedures while carrying out a task.
04. Carry out basic quality checks by following simple instructions under supervision.	4.1 Follow instructions before carrying out a quality check. 4.2 Perform a basic visual quality check under supervision. 4.3 Identify simple quality issues during an inspection.

	4.4 Report the results of the quality check to the supervisor.
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Unit 02 – Basic Electrical Safety Awareness

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Identify common electrical hazards found in the workplace.	1.1 Identify common electrical hazards on a work site. 1.2 Recognise unsafe electrical equipment or conditions. 1.3 Match hazards with the possible risks they create. 1.4 Report identified hazards using workplace procedures.
02 Describe basic electrical safety rules used during electrical activities.	2.1 State basic electrical safety rules. 2.2 Explain why electrical safety rules are important. 2.3 Recognise situations where safety rules must be followed. 2.4 Follow basic safety rules during supervised work.
03 Recognise safe working practices that help prevent electrical accidents.	3.1 Identify safe working practices for electrical tasks. 3.2 Recognise actions that may cause electrical accidents. 3.3 Explain the importance of working safely around electricity. 3.4 Demonstrate safe behaviour while carrying out simple tasks.
04 Follow basic electrical safety instructions while carrying out simple tasks.	4.1 Listen to and follow safety instructions correctly. 4.2 Use equipment only as instructed by the supervisor. 4.3 Stop work and report unsafe situations immediately. 4.4 Complete simple tasks while following safety requirements.

Unit 03 – Fundamentals of Electrical Systems and Components

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Identify the main parts of simple electrical systems.	1.1 Identify the main parts of a basic electrical system. 1.2 Name common items used in simple electrical installations. 1.3 Match electrical parts with their correct location in a system. 1.4 Recognise the purpose of each main part.
02 Describe the purpose of common electrical components used in installations.	2.1 Identify common electrical components used on site. 2.2 Describe the purpose of switches, sockets, cables, and circuit breakers. 2.3 Match components with their basic functions. 2.4 Select the correct component for a simple task under supervision.
03 Recognise basic electrical circuits and their functions.	3.1 Identify simple electrical circuits. 3.2 State the basic purpose of an electrical circuit. 3.3 Recognise the direction of electrical flow in a simple circuit. 3.4 Identify circuit components from a basic diagram.
04 Handle simple electrical components safely under supervision.	4.1 Handle electrical components carefully during practical tasks. 4.2 Follow instructions when moving or storing components. 4.3 Use suitable PPE while handling electrical items. 4.4 Return components safely after completing the task.

Unit 04 – Understanding Tools and Measurement Instruments

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Identify common electrical tools and measuring instruments used on site.	1.1 Identify common electrical hand tools. 1.2 Identify basic measuring instruments used in electrical work. 1.3 Match each tool with its correct use. 1.4 Recognise damaged or unsuitable tools.
02 Describe the basic purpose of electrical tools and test equipment.	2.1 Describe the purpose of common electrical tools. 2.2 State the use of simple testing equipment. 2.3 Identify the correct tool for basic electrical work. 2.4 Explain why the correct tool should be used.
03 Select suitable tools for simple electrical quality tasks under supervision.	3.1 Select suitable hand tools for simple quality tasks. 3.2 Choose appropriate measuring equipment as instructed. 3.3 Check that tools are safe before use. 3.4 Prepare tools correctly before starting work.
04 Use basic tools and measuring instruments safely by following instructions.	4.1 Use basic tools following the supervisor's instructions. 4.2 Operate simple measuring instruments safely. 4.3 Store tools safely after use. 4.4 Report damaged tools or equipment promptly.

Unit 05 – Introduction to Site Safety and PPE Requirements

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Identify basic site safety rules followed during electrical work.	1.1 State basic site safety rules. 1.2 Identify safety signs used on construction sites. 1.3 Recognise restricted and safe work areas. 1.4 Follow site safety rules during supervised activities.
02 Recognise different types of personal protective equipment (PPE) used on site.	2.1 Identify common PPE used for electrical work. 2.2 Match PPE with the hazard it helps protect against. 2.3 Check PPE before use. 2.4 Select suitable PPE for a simple work activity.
03 Explain why PPE is important for electrical safety.	3.1 State why PPE is needed during electrical work. 3.2 Identify the risks of not wearing PPE. 3.3 Explain how PPE helps reduce workplace injuries. 3.4 Recognise situations where PPE must be worn.
04 Wear and use appropriate PPE correctly during basic workplace activities.	4.1 Wear the correct PPE before starting work. 4.2 Use PPE correctly throughout the task. 4.3 Keep PPE clean and in good condition after use. 4.4 Report damaged PPE to the supervisor.

Unit 06 – Basic Documentation and Reporting in Electrical Work

Learning outcome

The learner will:

Assessment criterion

The learner can:

01 Identify simple documents used in electrical quality control activities.	1.1 Identify common quality control documents used on site. 1.2 Recognise inspection checklists and simple work records. 1.3 Match documents with their purpose. 1.4 Select the correct document for a basic task.
02 Describe the importance of keeping basic work and inspection records.	2.1 State why work records are kept. 2.2 Explain the importance of accurate information. 2.3 Identify the benefits of keeping inspection records. 2.4 Recognise the need to complete records on time.
03 Complete simple quality control forms using correct information.	3.1 Enter basic information correctly on a quality form. 3.2 Record simple inspection details clearly. 3.3 Check completed forms for missing information. 3.4 Submit completed forms to the supervisor.
04 Report basic inspection findings to the supervisor using workplace procedures.	4.1 Identify findings that need to be reported. 4.2 Report inspection results clearly to the supervisor. 4.3 Follow workplace reporting procedures. 4.4 Record reported information accurately where required.



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.

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