Level 3 Award in Requirements for Electrical Installations BS7671: June 2008 (2011) (2382-12)

October 2011

Version 1.1 (October 2011)
Version 1.2 (March 2012)

City&
Guilds

Qualification at a glance

Subject area	Electrical Installations
City & Guilds number	2382
Age group approved	16+
Assessment	Multiple Choice
Fast track	Automatic approval applies in certain cases.
Support materials	Centre handbook Smartscreen Exam Success Book
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	City & Guilds number	Accreditation number
Level 3 Award in Requirements for Electrical Installations BS7671: June 2008 (2011)	2382-12	600/3046/X

Version and date	Change detail	Section
1.1 Oct 2011	Test specifications percentages	Test specifications
1.2 Mar 2012	Expanded guidance for the bookmarks allowed in IET wiring regulations books taken into examinations.	Assessment

Contents

1   Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	This qualification is primarily aimed at practising electricians with relevant experience and other allied professionals e.g. surveyors, consultants and other trades needing to update and enhance their understanding of IEE Wiring Regulations. It is also suitable for anyone wishing to demonstrate an understanding of the IEE 17th Edition Wiring Regulations (BS 7671).
What does the qualification cover?	The IEE Wiring Regulations (BS 7671) are the definitive standards for the electrical industry in respect of safe use and operation of electrical equipment and systems. They set requirements and operating criteria for the UK and correspond to EC standards and are recognised by the British Standards Institute as a British Standard (BS 7671). It is intended to ensure that individuals are conversant with the format, content and application of the Requirements for Electrical Installations BS 7671: June 2008 (2011).
Who did we develop the qualification with?	This qualification was developed by City & Guilds in conjunction with members of the electrical industry including NICEIC, ECA and is endorsed by the SSC SummitSkills.
What opportunities for progression are there?	It allows candidates to progress into employment or to the following City & Guilds qualifications: • City & Guilds Level 2 Certificate in Fundamental Inspection, Testing and Initial Verification (2392-10) • City & Guilds Level 3 Certificate in Inspection, testing and certification of electrical installations (2391-10) • City & Guilds Level 3 Certificate in Design, erection and verification of electrical installations (2391-20) • City & Guilds Level 3 Certificate in Building Regulations for Electrical Installation Contractors In Dwellings (2393-10) • City & Guilds Level 4 Higher Professional Diploma in Building Services Engineering (4467-04)

Structure

To achieve the **Level 3 Award in Requirements for Electrical Installations BS7671: June 2008 (2011)**, learners must achieve **4** credits from the mandatory units.

Unit accreditation number	City & Guilds unit number	Unit title	Credit value
Mandatory			
J/503/4802	101	Requirements of BS7671:2008 (2011) and its application to electrical installations	4

2   Centre requirements

Approval

If your Centre is approved to offer the qualification City & Guilds Level 3 Certificate in the Requirements of Electrical Installations to BS7671: 2008 (2382-10) you will be automatically approved to offer the Level 3 Award in Requirements for Electrical Installations BS7671:June 2008 (2011).

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Resource requirements

Centre staffing

Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications. Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance, and City & Guilds is responsible for external quality assurance.

External quality assurance for the qualification will be provided by City & Guilds external verification process. External verifiers are appointed by City & Guilds to approve centres, and to monitor the assessment and internal quality assurance carried out by centres. External verification is carried out to ensure that assessment is valid and reliable, and that there is good assessment practice in centres.

To carry out their quality assurance role, external verifiers must have appropriate occupational and verifying knowledge and expertise. City & Guilds external verifiers attend training and development designed to keep them up-to-date, facilitate standardisation between verifiers and share good practice.

External verifiers
The role of the external verifier is to:
* provide advice and support to centre staff
* ensure the quality and consistency of assessments within and between centres by the use of systematic sampling
* provide feedback to centres and to City & Guilds.

Candidate entry requirements

Candidates must not be entered for a qualification of the same type, content and level as that of a qualification they already hold.

There are no formal entry requirements for candidates undertaking this qualification. However, centres must ensure that candidates have the potential and opportunity to successfully gain the qualification.

It is expected that candidates will have basic knowledge of electrical science.

Age restrictions

There is no age restriction for this qualification unless this is a legal requirement of the process or the environment.

3   Delivering the qualification

Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs
- support and guidance they may need when working towards their qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualification, their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

The primary publication associated with this qualification is the *IEE Wiring Regulations: Requirements for Electrical Installations BS 7671 2008 (2011)*. This publication can be obtained from the IET at **www.theiet.org**

Candidates will require access to a copy of BS 7671 during the assessment and the examination will be based upon this document only.

City & Guilds also provides the following documents specifically for this qualification.

Description	How to access
Exam Success Book	City & Guilds Walled Garden The IET: www.theiet.org
NICEIC Wiring Regulations Teaching and Learning Materials Toolbox	**www.niceic.com**

Centre staff must familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Centres may design course programmes of study in any way that:
- best meets the needs and capabilities of their candidates
- satisfies the requirements of the qualification.

This qualification specifically addresses the IET Wiring Regulations BS 7671: 2008 (2011) and delivery methods must concentrate on this publication.

Useful material for candidates includes the City & Guilds Exam Success books and the NICEIC wiring regulations teaching and learning materials toolbox.

4   Assessment

Candidates must:

- successfully complete one multiple choice online test.

This is an open book assessment and learners will be allowed to take in the following permitted reference material

- *IET Wiring Regulations BS 7671:2008 (2011)*

IET wiring regulations books taken into examinations **can** contain the following:

- Bookmarks (eg blank post-it notes, post-it notes numbered to indicate chapters or corners of pages folded)
- Highlighting of text
- *The Corrigendum*, issued by the IEE as a supplement to the wiring regulations in July 2008.

IET wiring regulations books taken into exams cannot contain the following:

- Sample exam questions, answers or diagrams
- Any writing in the regulations or accompanying written notes
- Notes, diagrams or any content that may in anyway advantage the candidate in answering questions within the exam.

It is the responsibility of the centre to ensure the material in the candidate's IEE Requirements to Electrical Installations cannot unfairly advantage candidates in any way. If there is any doubt over the suitability of content the publication should not be used and replaced with 'clean' regulations.

Many centres may find it easier to continue using 'clean' regulations.

Candidates will also require a non-programmable calculator.

Test specifications

The way the knowledge is covered by each test is laid out in the table below:

Test 1:   Unit 101
Duration: 2 hours

Unit	Outcome	Number of questions	%
101	1 Understand the scope, object and fundamental principles of BS7671.	4	7
	2 Understand the definitions used within BS7671.	2	3
	3 Understand how to assess the general characteristics of electrical installations	6	10
	4 Understand requirements of Protection for safety for electrical installations	15	25
	5 Understand the requirements for Selection and erection of equipment for electrical installations	14	23
	6. Understand the requirements of Inspection and testing of electrical installations	4	7
	7. Understand the requirements of special installations or locations as identified in BS 7671.	10	17
	8 Understand the information contained within the appendices of BS7671.	5	8
	Total	**60**	**100**

5   Units

Availability of units

The following units are available on The Register of Regulated Qualifications: **http://register.ofqual.gov.uk/Unit**

Structure of units

These units each have the following:
- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- credit value
- unit aim
- relationship to NOS, other qualifications and frameworks
- endorsement by a sector or other appropriate body
- information on assessment
- learning outcomes which are comprised of a number of assessment criteria

Unit 101　　Requirements of BS7671: 2008 (2011) and its application to electrical installations

UAN:	J/503/4802
Level:	3
Credit value:	4
GLH:	35
Endorsement by a sector or regulatory body:	This unit is endorsed by SummitSkills
Aim:	This unit gives the learner an understanding of the full content of BS6761, and how this applies to electrical installations within its scope.

Learning outcome
The learner will:
1.　Understand the scope, object and fundamental principles of BS7671.
Assessment criteria
The learner can:
1.1　Identify the scope of BS7671
1.2　Identify the object of BS7671
1.3　Identify the fundamental principles of BS7671.

Learning outcome
The learner will:
2.　Understand the definitions used within BS7671.
Assessment criteria
The learner can:
2.1　Interpret the definitions used within BS7671
2.2　Relate the definitions to the regulations and appendices of BS7671.

Learning outcome
The learner will:
3.　Understand how to assess the general characteristics of electrical installations.
Assessment criteria
The learner can:
3.1　Interpret the requirements of assessing the general characteristics of electrical installations within the scope of BS767.

Learning outcome
The learner will:
4. Understand requirements of protection for safety for electrical installations.
Assessment criteria
The learner can:
4.1 Identify the requirements of protection for safety within the scope of BS7671

4.2 Interpret how this applies to electrical installations within the scope of BS7671 to include:
 	
    • Protection against electric shock
    • Protection against thermal effects
    • Protection against overcurrent
    • Protection against voltage disturbances and electromagnetic disturbances.

Learning outcome
The learner will:
5. Understand the requirements for selection and erection of equipment for electrical installations.
Assessment criteria
The learner can:
5.1 Identify the requirements for selecting and erecting equipment, within the scope of BS7671

5.2 Interpret how this applies to electrical installations within the scope of BS7671 to include:
 	
    • Common rules
    • Selection and erection of wiring systems
    • Protection, isolation, switching, control and
    • Monitoring
    • Earthing arrangements and protective conductors
    • Other equipment
    • Safety services.

Learning outcome
The learner will:
6. Understand the requirements of Inspection and testing of electrical installations.
Assessment criteria
The learner can:
6.1 Identify the requirements for inspection and testing
6.2 Interpret how this applies to electrical installations.

Learning outcome
The learner will:
7. Understand the requirements of Special installations or locations as identified in BS.
Assessment criteria
The learner can:
7.1 identify the requirements for special installations and locations
7.2 Interpret how these effect the general requirements of the regulations.

Learning outcome
The learner will:
8. Understand the requirements for selection and erection of equipment for electrical installations.
Assessment criteria
The learner can:
8.1 identify the information in the appendices of BS7671
8.2 specify how the information contained in the appendices is used to support electrical installation activities.

Appendix 1   Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Qualifications and Credit Framework (QCF)**: general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events**: dates and information on the latest Centre events
- **Online assessment**: how to register for e-assessments.

Useful contacts

UK learners General qualification information	**T: +44 (0)844 543 0033** **E:** learnersupport@cityandguilds.com
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: **intcg@cityandguilds.com**
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **centresupport@cityandguilds.com**
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: **singlesubjects@cityandguilds.com**
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **intops@cityandguilds.com**
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **walledgarden@cityandguilds.com**
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: **business@cityandguilds.com**
Publications Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

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As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group
The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Land Based Services (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

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