Level 3 Advanced Diploma in ICT Systems Support (7266-27)



Qualification handbook 500/1870/X

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1 About this document

This document contains the information that centres need to offer the following diploma

Level 2 Diploma for Software Developers 7266-27

QCA accreditation number

500/1870/X

This document includes details and guidance on:

- centre resource requirements
- candidate entry requirements
- information about links with, and progression to, other qualifications
- qualification standards and specifications
- assessment requirements

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2 About the qualification

2.1 Aim of the qualification

This qualification was developed to keep pace with the fast changing information technology sector and is for candidates who

- do not have access to an N/SVQ
- want to install and support ICT systems
- want career progression within the Information and Communication Technology (ICT) industry
- wish to develop the skills learnt from NVQs and other qualifications
- require evidence towards the underpinning knowledge of the N/SVQ
- want to use the underpinning knowledge gained from this Vocationally Related Qualification to contribute to their Apprenticeship.

Accreditation details

This qualification is accredited by the Qualifications and Curriculum Authority at Level 3 of the NQF

For further details about accreditation, national qualification frameworks and level descriptors please refer to Appendix 1.

The aims of this qualification are to:

- meet the needs of candidates who work or want to work as systems support professionals in the ICT sector
- allow candidates to learn, develop and practise the skills required for employment and/or career progression in the sector
- contribute to the knowledge and understanding of the related level 3 N/SVQs for ICT Professionals, whilst containing additional skills and knowledge which go beyond the scope of the NOS. See the N/SVQ Relationship mapping in 6.1 for further details.
- replace the City & Guilds Level 3 Diploma for IT Practitioners (ICT Systems Support) which expired on 31/08/2007.
- serve as a technical certificate, part of the Advanced Apprenticeship framework
- provide valuable accreditation of skills and/or knowledge for candidates not following N/SVQ and Apprenticeship programmes, without requiring or proving occupational competence.

2 About the qualification

2.2 The structure of the qualification

This section provides information about the structure of the qualification and unit combinations required for the qualification.

Full qualifications

The qualification will be awarded to candidates who successfully complete the assessments for one core unit, 502 plus four optional units, three of the options must come from the choices shown below. One unit can come from another level of ICT Systems Support.

QCA unit reference	City & Guilds unit number	Unit title	Excluded combination of units (if any)
M/101/2977	501	Plan for the delivery of ICT support services and assist in the acquisition of ICT systems	
T/101/2978	502	Customer support provision 3	Core unit for 7266-27 and 7266-29
			May not be taken with 402
A/101/2979	503	Install, configure and integrate networked hardware and software	
R/500/7568	504	Install, configure and upgrade ICT software	
Y/500/7149	505	Testing ICT systems 3	
R/500/7151	506	ICT Systems and network management	
Y/500/7152	507	ICT Repair centre procedure 3	
Y/500/7572	508	Develop ICT technical documentation and procedures	
L/101/2985	509	Principles of planning telecommunications services	
D/500/7153	510	Maintain ICT equipment and systems	
Y/500/7569	511	Implementing an ICT systems security policy	
M/500/7156	522	Design and maintain ICT networks software components	
F/501/3057	523	Implementing and Managing Microsoft Exchange Server (70-284)	
L/501/3174	524	CISCO Fundamentals of wireless networking	
M/501/3183	525	CISCO CCENT	

Certificates of unit credit

Certificates of unit credit (CUC) will be issued to candidates for each successfully completed unit, even if the full qualification is not attempted.

Candidates who do complete a full qualification will receive, in addition to their full certificate/diploma, a CUC for each unit achieved.

About the qualification

2.3 Sources of information and assistance

Related publications

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

Publication	Available from
Sample test papers	www.cityandguilds.com/e-quals07
Assignment instructions for assessors	www.cityandguilds.com/e-quals07
Assignment instructions for candidates	www.cityandguilds.com/e-quals07
Information for centres	www.cityandguilds.com/e-quals07
Information for employers	www.cityandguilds.com/e-quals07
Information for learners	www.cityandguilds.com/e-quals07
Qualification handbook (SP-27-7266)	www.cityandguilds.com/e-quals07

Other essential City & Guilds documents

There are other City & Guilds documents which contain general information on City & Guilds qualifications:

Providing City & Guilds qualifications – a guide to centre and qualification approval 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.

• Ensuring quality

contains updates on City & Guilds assessment and policy issues.

Centre toolkit

contains additional information on Providing City & Guilds qualifications, in a CD-ROM, which links to the internet for access to the latest documents, reference materials and templates. The Centre Toolkit is sent to centres when they receive approved centre status. It is also available from to order at an additional cost.

• Online catalogue

contains details of general regulations, registration and certification procedures and fees. This information is also available online.

For the latest updates on our publications and details of how to obtain them and other City & Guilds resources, please refer to the City & Guilds website.

City & Guilds websites

Website	Address	Purpose and content
City & Guilds main website	www.cityandguilds.com	This is the main website for finding out about the City & Guilds group, accessing qualification information and publications.
SmartScreen	www.smartscreen.co.uk	SmartScreen is the City & Guilds online learning support website. It gives registered subscribers access to qualification-specific support materials.
Walled Garden	www.walled-garden.com	The Walled Garden is a qualification administration portal for approved centres, enabling them to register candidates and claim certification online.

Contacting City & Guilds by e-mail

The following e-mail addresses give direct access to our Customer Relations team.

e-mail	 Query types all learner enquiries, including requesting a replacement certificate information about our qualification finding a centre. 	
learnersupport@cityandguilds.com		
centresupport@cityandguilds.com	all centre enquiries	
walledgarden@cityandguilds.com	all enquiries relating to the Walled Garden, including	
	setting up an accountresetting passwords.	

Candidate entry and progression 3

Candidate entry requirements

Candidates should 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.

Please see section 5 of this document, Course design and delivery, which offers guidance on initial assessment.

Age restrictions

This qualification is not approved for use by candidates under the age of 16, and City & Guilds cannot accept any registrations for candidates in this age group. Centres and candidates should be fully aware of minimum age requirements in their home nation and any implications for completing assessments.

Progression

The qualification provides knowledge and practical skills related to the NVQ Level 3 for ICT Professionals.

On completion of this qualification, candidates may progress into employment or to the following City & Guilds qualifications:

- Level 3 Advanced Diploma for IT Professionals (7266-25)
- City & Guilds level 3 NVO for ICT Professionals (4324-03)
- Level 4 Higher Professional Diploma for IT Practitioners (4457)

Apprenticeship frameworks

The Level 3 Advanced Diploma in ICT Systems Support has been approved by e-skills UK, the Sector Skills Council for IT, Telecoms and Contact Centres, as a technical certificate for the Advanced Apprenticeship in IT Services and Development...

This qualification supports the Employment rights and responsibilities (ERR) of the apprenticeship framework.

Full details of the requirements of the apprenticeship framework for the IT Services and Development are available from:

Name of SSC e-skills UK

Address 1 Castle Lane London SW1E 6DR

Telephone 020 7963 8920 020 7492 9138 Fax e-mail info@e-skills.com URL www.e-skills.com

4.1 Centre, qualification and fast track approval

Centres not yet approved by City & Guilds

To offer this qualification, new centres will need to gain both **centre and qualification approval**. Please refer to Appendix 2 for further information.

Existing City & Guilds centres

To offer this qualification, centres already approved to deliver City & Guilds qualifications will need to gain **qualification approval**. Please refer to Appendix 2 for further information.

Centres already offering City & Guilds qualifications in this subject area

Centres approved to offer the Level 3 Advanced Diploma for IT Professionals (ICT Systems Support), 7262-25, and who have been active within the 2006-2007 academic year, will receive automatic approval to offer this qualification, this process will be coordinated internally by City & Guilds.

Centres that are approved to offer the NVQ for IT Professionals (4324-03) at level 3 may apply to offer the new qualification using the fast track form

- providing there have been no changes to the way the qualifications are delivered, and
- if they meet all of the approval criteria specified in the fast track form guidance notes.

Fast track approval is available for 12 months from the launch of the qualification. After this time, the qualification is subject to the **standard** Qualification Approval Process. It is the centre's responsibility to check that fast track approval is still current at the time of application.

4.2 Resource requirements

Physical resources

Centres must provide access to sufficient equipment in the centre or workplace to ensure candidates have the opportunity to cover all of the practical activities.

Human resources

To meet the quality assurance criteria for this qualification, the centre must ensure that the following internal roles are undertaken:

- quality assurance co-ordinator
- trainer / tutor
- assessor
- internal verifier/moderator
- examinations secretary
- invigilator.

Staff delivering the qualifications

Staff delivering this qualification must be able to demonstrate that they are technically competent in the area for which they are delivering training and/ or have experience of providing training. This knowledge must be at least to the same level as the training being delivered.

Centre staff may undertake more than one role eg tutor and assessor or internal verifier, but must never internally verify their own assessments.

Trainer / tutors must

- be occupationally knowledgeable in the area for which they are delivering training. This knowledge must be at least to the same level as the training being delivered.
- have credible experience of providing training.

Assessors internal verifiers

While the Assessor/Verifier (A/V) units are valued as qualifications for centre staff, they are not currently a requirement for the qualification.

Please note: Centre staff may undertake more than one role eg tutor and assessor but must never internally verify their own assessments.

Continuing professional development (CPD)

Centres are expected to support their staff in ensuring that their knowledge of the occupational area and of best practice in delivery, mentoring, training, assessment and verification remains current, and takes account of any national or legislative developments.

4.3 Registration and certification

Administration

Full details of City & Guilds' administrative procedures for this qualification is provided in the *Online Catalogue*. This information includes details on:

- registration procedures
- enrolment numbers
- fees
- entry for examinations
- claiming certification.

Centres should be aware of time constraints regarding the registration and certification periods for the qualification, as specified in the City & Guilds *Online Catalogue*.

Centres should follow all administrative guidance carefully, particularly noting that fees, registration and certification end dates for the qualification are subject to change. The latest News are available on the website (**www.cityandguilds.com**).

Regulations for the conduct of examinations

Regulations for the conduct of examinations for online and written examinations are given in *Providing City & Guilds qualifications - a guide to centre and qualification approval* and in the *Online Catalogue*. Centres should ensure they are familiar with all requirements prior to offering assessments.

Retaining assessment records

Centres must retain copies of candidate assessment records for at least three years after certification.

Notification of results

After completion of assessment, candidates will receive, via their centre, a 'notification of candidate results', giving details of how they performed. It is not a certificate of achievement.

Certificate of unit credit (CUC)

A certificate of unit credit records the successful completion of a unit. Centres can apply for CUCs on behalf of a candidate at any time after they have achieved the unit. They do not need to wait until the full programme of study has been completed.

Full certificates

Full certificates are only issued to candidates who have met the full requirements of the qualification, as described in section 2.2, 'The structure of the qualification'.

4.4 Quality assurance

This information is a summary of quality assurance requirements.

Providing City & Guilds qualifications and in the Centre toolkit provide full details and guidance on:

- internal quality assurance
- external quality assurance
- roles and responsibilities of quality assurance staff.

Internal quality assurance

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

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.

City & Guilds External Verifiers use electronically scannable report forms designed to provide an objective risk analysis of individual centre assessment and verification 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
- regularly visit centres to ensure they continue to meet the centre and qualification approval
- provide feedback to centres and to City & Guilds.

5.1 Initial assessment and induction

Centres will need to make an initial assessment of each candidate prior to the start of their programme to ensure they are entered for an appropriate type and level of qualification.

The initial assessment should identify any specific training needs the candidate has, and the support and guidance they may require when working towards their qualification. This is sometimes referred to as diagnostic testing.

City & Guilds recommends that centres provide an induction programme to ensure the candidate fully understands the requirements of the qualification they will work towards, their responsibilities as a candidate, and the responsibilities of the centre. It may be helpful to record the information on a learning contract.

Further guidance about initial assessment and induction, as well as a learning contract that centres may use, are available in the *Centre toolkit*.

5.2 Recommended delivery strategies

Centre staff should 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
- which satisfies the requirements of the qualification.

In particular, staff should consider the skills and knowledge related to the national occupational standards.

City & Guilds recommends that centres address the wider curriculum, where appropriate, when designing and delivering the course. Centres should also consider links to the National Occupational Standards, Key/Core Skills and other related qualifications. Relationship tables are provided in section 6 Relationships to other qualifications, to assist centres with the design and delivery of the qualification.

Centres may wish to include topics as part of the course programme which will not be assessed through the qualification.

For further information to assist with the planning and development of the programme, please refer to the City & Guilds Smartscreen portal at www.smartscreen.co.uk.

5.3 Data protection, confidentiality and legal requirements

Data protection and confidentiality

Data protection and confidentiality must not be overlooked when planning the delivery of this qualification.

Centres offering this qualification may need to provide City & Guilds with personal data for staff and candidates. Guidance on data protection and the obligations of City & Guilds and centres are explained in *Providing City & Guilds qualifications*.

Protecting identity

It is extremely important to protect the identity of the individuals encountered by candidates in the work setting, eg customers and clients.

Confidential information must not be included in candidate portfolios or assessment records. Confidential information should remain in its usual location, and a reference should be made to it in the portfolio or assessment records.

Images of minors being used as evidence

If videos or photographs of minors (those under 18) are used as the medium to present evidence as part of the qualification, **both centre and candidate** have responsibilities for meeting child protection legislation.

It is the responsibility of the centre to inform the candidate of the

- need to obtain permission from the minor's parent/guardian prior to collecting the evidence
- reasons and restrictions for using photographs or video recordings as evidence
- period of time for which the photographs or video recordings may be kept
- obligation to keep photographs or video recordings secure from unauthorised access
- secure electronic storage requirements of photographs or video recordings
- associated child protection legislation.

5.4 Learning and support resources

City & Guilds will provide the following learning and support resources which will be posted on our website.

Resource	How to access		
SmartScreen	www.smartscreen.co.uk		
Assignment instructions for assessors	www.cityandguilds.com/e-quals07		
Assignment instructions for candidates	www.cityandguilds.com/e-quals07		
Sample assessments	www.cityandguilds.com/e-quals07		

6.1 Links to National Occupational Standards and N/SVQs

City & Guilds has identified the connections to linked NVQs and National Occupational Standards. This mapping is provided as guidance and suggests areas of overlap and commonality between the qualifications. It does not imply that candidates completing units in one qualification are automatically covering all of the content of the qualifications listed in the mapping.

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that candidates meet requirements of all units/qualifications. For example, a qualification may provide knowledge towards an N/SVQ, but centres are responsible for ensuring that the candidate has met all of the knowledge requirements specified in the N/SVQ standards.

This qualification has connections to the

- Level 3 NVQ for ICT Professionals (4324-03)
- Level 3 Advanced Diploma for IT Professionals (7266-25)
- National Curriculum for ICT Key Stage 4

Relationship between the Vocational Qualification and Level 3 NVQ for ICT Professionals

This qualification	Outcome	Level 3 NVQ for IT Professionals (4324)
Unit Number/Title		Related units
501 Plan for the delivery of ICT support services and assist in the acquisition of ICT systems	1,2,3,4,5 1,3,4,5 2	306.1a Relevant client/customer needs 306.1b Relevant client/customer constraints 306.2 Defects which can arise in information
502 Customer support provision 3	2	303.4 Relevant methods of measuring customer satisfaction
	2	306.1 Relevant client/customer needs 306.2 Defects which can arise in information
	1	309.1 The products or services to be supported
	1,2,4	309.2 Organisational requirements of customer care
	1,4,5	316.1 The appropriate uses of advice and guidance
	3	316.4 Technical information to form the basis for advice and guidance
	1,3,4,5	317.1 Appropriate uses of diagnostic methods
	1,3,4,5	317.2 The purpose for which diagnostic information is required
	1,3,4,5	317.3 The diagnostic process to be followed

This qualification	Outcome	Level 3 NVQ for IT Professionals (4324)
Unit Number/Title		Related units
503 Install, configure and integrate networked hardware and software	1,2	301.1 Carry out formal Health and Safety risk assessments
	2, 5	314.1 Prepare for the installation of hardware products
	2, 3	314.2 Make hardware products ready for installation
	2, 3 3	314.3 Assemble hardware products 314.4 Load and use software associated
	3, 4	with hardware products 314.5 Complete the installation of hardware products
	2, 4	315.1 Prepare for the installation of software
	4	315.2 Load and configure software 315.3 Complete the installation of software
	3, 4, 5 3, 4, 5	316 1 Plan for system testing 316.2 Carry out system testing
	3, 4, 5	316.3 Examine and respond to the results of system tests
504 Install, configure and upgrade ICT software	1,2,3,4 1,2	313.1 The installation/upgrade process 313.2 The capabilities of available software loading facilities
	3,4 3,4	319.1 The testing process to be followed 319.3 What test preparations and conclusion activities are necessary for specific tests
	2,4	320.1 How to create and edit standard profiles
	2,4	320.2 How to make changes to user profiles
	2,4	320.3 How user profiles affect access to system facilities
505 Testing ICT systems 3	1, 2,3 2,4	319.1 The testing process to be followed 319.2 The purpose of testing
	1,3	319.3 What test preparation and conclusion activities are necessary for specific tests
506 ICT Systems and network management	1,2,3	314.1 How available options for system configuration affect functionality and capacity
	1,3	314.2 Make changes to system configuration
	2	315.1 What operating procedures are applicable to the system
	1, 3, 4 1, 4	315.2 How to operate the system 315.3 System functionality during normal operation
	1, 4	3 ¹ 5.4 Effects of operational activities on system functionality
	2,3,4	315.5 How to recognise and resolve system faults
	1,2,3	317.1 Appropriate uses of diagnostic methods

This qualification	Outcome	Level 3 NVQ for IT Professionals (4324)
Unit Number/Title		Related units
	2,3	317.2 The purpose for which diagnostic information required
	1,2,3	317.3 The diagnostic process to be followed
	3	319.1 The testing process to be followed
	4	319.2 The purpose of testing
	3	319.3 What test preparation and conclusion activities are necessary for specific tests
	1	321.1 The working process
	3	321.2 What regulatory requirements affect work activities
507 ICT Repair centre procedure 3	2	33.2 Obtain technical resources for a repair centre
	2, 3	33.3 Develop technical resources for a repair centre
	4	33.4 Co-ordinate the implementation of technical resources
	1	104.1 Check that health and safety procedures are followed
	1, 2	104.2 Ensure that risks are controlled safely and effectively Assess the technical resource
		requirements of repair centre operations
508 Develop ICT technical documentation and procedures	1, 2	309.1 Products or services to be supported
documentation and procedures	3	316.1 Appropriate uses of advice and guidance
	1,2,3	316.4 Technical information to form the basis for advice and guidance

This qualification	Outcome	Level 3 NVQ for IT Professionals (4324)	
Unit Number/Title		Related units	
509 Principles of planning telecommunications services	1, 2, 4, 5	302 Develop personal and organisational effectiveness 3	
terecommunications services	1, 2, 3,	306 Investigating and defining requirements 3	
	2	305 Interpersonal and written communication 3	
	3	308 Quality management of ICT products and services 3	
	1, 3, 5	321 Working with ICT hardware and equipment 3	
	2 3	325 Spreadsheet software 3	
	1, 2, 3, 5	328 Artwork and imaging software 333 Support the efficient use of resources 3	
	4	453 Manage the use of physical resources	
		454 Manage the use of financial resources 4	
		460 Develop a detailed schedule for the project 4	
		461 Identify perceived risks and evaluate options for their control 4	
510 Maintain ICT equipment and systems 3	1 2, 3	319 1 The testing process to be followed 319.2 The purpose of testing	
Systems 3	3	319.3 What test preparation and	
		conclusion activities are necessary for specific tests	
511 Implementing an ICT systems security policy	4 1, 2, 3, 4	320 User profile administration 310 Security for ICT Systems	
522 Design and maintain ICT networks software components	3,4,5	311 Software development – component creation 3	
		307 Managing software development 3	

6.2 Relationship to previous versions of the qualification

City & Guilds has identified the connections to qualifications previously offered by City & Guilds in this subject area.

This mapping is provided as guidance and suggests areas of overlap and commonality between the qualifications. It does not imply that candidates completing units in one qualification are automatically covering all of the content of the qualifications listed in the mapping.

This qualification has connections to the Level 3 Diploma for IT Practitioners (ICT Systems Support) 7262-25

Relationship between the Vocational Qualification and Level 3 Advanced Diploma for IT Practitioners (ICT Systems Support)

This qualification	Level 3 Advanced Diploma for IT Practitioners (ICT Systems Support) 7262-25		
Unit Number/Title	Related units		
501 Plan for the delivery of ICT support services and assist in the acquisition of ICT systems	501 Plan for the delivery of support services and assist in the acquisition of systems		
502 Customer support provision 3	502 Customer support provision		
503 Install, configure and integrate networked hardware and software	503 Install, configure and integrate networked hardware and software		
504 Install, configure and upgrade ICT software	504 Install and configure software		
505 Testing ICT Systems 3	505 Systems testing		
506 ICT Systems and network management	506 System and network management		
507 ICT Repair centre procedures 3	507 Repair centre procedure		
508 Develop ICT technical documentation and procedures	508 Develop customer documentation and procedures		
510 Maintain ICT equipment and systems 3	510 Maintain equipment and systems		
511 Implementing an ICT systems security policy	511 ICT security		
522 Design and maintain ICT Networks software components	7262-23-310 Networking		

6.3 Key skills (England, Wales and Northern Ireland)

This qualification includes opportunities to develop and practise many of the underlying skills and techniques described in Part A of the standard for each key skills qualification. Where candidates are working towards any key skills alongside this qualification they will need to be registered with City & Guilds for the key skills qualifications.

It should not be assumed that candidates will necessarily be competent in, or able to produce evidence for, the key skills at the same level as this qualification.

The 'signposts' below identify the **potential** for key skills portfolio evidence gathering that can be naturally incorporated into the completion of each unit. Any key skills evidence needs to be separately assessed and must meet the relevant standard defined in the QCA document 'Key skills qualifications standards and guidance'.

If this qualification is being delivered alongside an Essential Skills Communication and/or Application of Number programme in **Northern Ireland**, it is good practice to emphasise the relevance of these skills to candidates when completing their Action-Based Activities.

Unit number/ and title	Communication	Application of Number	Information Technology
501 Plan for the delivery of ICT support services and assist in the acquisition of ICT systems	C3		IT2
502 Customer support provision 3	C2.1, C3.2, C3.3		IT2
503 Install, configure and integrate networked hardware and software	C3		IT2
504 Install, configure and upgrade ICT software	C2.2, C2.3		IT2
505 Testing ICT Systems 3	C3.2, C3.3		IT2
506 ICT Systems and network management	C2.2, C2.3		IT2.1
507 ICT Repair centre procedures 3	C3.2, C3.3		IT2
508 Develop ICT technical documentation and procedures	C3.1a, C3.2, C3.3		IT3
509 Principles of planning telecommunications services	C3	N2	IT3
510 Maintain ICT equipment and systems 3	C2.1a, C2.2, C2.3		IT2
511 Implementing an ICT systems security policy	C3.2		IT2.1

Unit number/ and title	Communication	n Application of Number	Information Technology
512 Installing, configuring and administering Microsoft Windows XP Professional (70-270)	C3.2		IT3.1
513 Managing and maintaining a Microsoft Windows Server 2003 environment (70-290)	C3.2		IT3.1
514 Planning and maintaining a Microsoft Windows Server 2003 network infrastructure (70-293)	C3.2		IT3.1
515 Implementing, managing and maintaining a Microsoft Windows Server 2003 network infrastructure (70-291)	C3.2		IT3.1
516 CompTIA ICT systems security+	C3.2		IT3.1
517 CompTIA ICT systems network+	C2.2		IT3.1
518 CISCO CCNA1	C3.2		IT3.1
519 CISCO CCNA2	C3.2		IT3.1
520 CISCO CCNA3	C3.2		IT3.1
521 CISCO CCNA4	C3.2		IT3.1
522 Design and maintain ICT Networks software components	C1.2, C3.2	N1.1	IT3.1
Unit number/and title	Problem Solving	Improving own learning and performance	Working With Others
501 Plan for the delivery of ICT support services and assist in the acquisition of ICT systems	PS3.1, PS3.2	LP2	WWO3
502 Customer support provision 3	PS3	LP2	WWO3
503 Install, configure and integrate networked hardware and software	PS3	LP2	WWO1
504 Install, configure and upgrade ICT software	PS2	LP2	
505 Testing ICT Systems 3	PS3.1	LP2	
506 ICT Systems and network management	PS3.1	LP2	
507 ICT Repair centre procedures 3	PS3.1	LP2	
508 Develop ICT technical documentation and procedures	PS2	LP2	
509 Principles of planning telecommunications services	PS3	LP2	WWO3

Unit number/and title	Problem Solving	Improving own learning and performance	Working With Others
510 Maintain ICT equipment and systems 3	PS3	LP2	WWO2
511 Implementing an ICT systems security policy	PS3.1	LP2.1	
512 Installing, configuring and administering Microsoft Windows XP Professional (70-270)	PS3.1	L3.2	WWO2
513 Managing and maintaining a Microsoft Windows Server 2003 environment (70-290)	PS3.1	L3.2	WWO2
514 Planning and maintaining a Microsoft Windows Server 2003 network infrastructure (70-293)	PS3.1	L3.2	WWO2
515 Implementing, managing and maintaining a Microsoft Windows Server 2003 network infrastructure (70-291)	PS3.1	L3.2	
516 CompTIA ICT systems security+	PS3.1	L2.1	
517 CompTIA ICT systems network+	PS2.1, PS2.2, PS2.3	LP3.1, LP3.2, LP3.3	
518 CISCO CCNA1	PS2.1, PS2.2, PS2.3	LP3.1, LP3.2, LP3.3	
519 CISCO CCNA2	PS2.1, PS2.2, PS2.3	LP3.1, LP3.2, LP3.3	
520 CISCO CCNA3	PS2.1, PS2.2, PS2.3	LP3.1, LP3.2, LP3.3	
521 CISCO CCNA4	PS2.1, PS2.2, PS2.3	LP3.1, LP3.2, LP3.3	
522 Design and maintain ICT Networks software components	PS3.1, PS3.2, PS3.3	LP3.1, LP3.2, LP3.3	

6.4 The wider curriculum

Candidates taking this qualification may also have the opportunity to cover the following aspects of the wider curriculum.

Unit No and Title	Spiritual, moral, ethical, social and cultural issues	European dimension	Environmental education	Health and safety
501 Plan for the delivery of ICT support services and assist in the acquisition of ICT systems	√	√	√	√
502 Customer support provision 3	$\overline{\hspace{1cm}}$			
503 Install, configure and integrate networked hardware and software	√	√	√	√
504 Install, configure and upgrade ICT software		√	√	√
505 Testing ICT Systems 3	√			✓
506 ICT Systems and network management	\checkmark			√
507 ICT Repair centre procedures 3	$\overline{\hspace{1cm}}$	√	<u>√</u>	√
508 Develop ICT technical documentation and procedures	√			√
509 Principles of planning telecommunications systems	√	√	√	√
510 Maintain ICT equipment and systems 3	√		√	√
511 Implementing an ICT systems security policy	\checkmark	√	<u>√</u>	√

Unit No and Title	Spiritual, moral, ethical, social and cultural issues	European dimension	Environmental education	Health and safety	
522 Design and maintain ICT Networks software components	\checkmark	\checkmark	✓	\checkmark	

7 Assessment

7.1 Summary of assessment requirements

For this qualification, candidates must complete **one** assignment for each unit. Units 501 and 503 also have an on-line multiple-choice test.

City & Guilds provides the following assessments:

- Online, on-demand testing using multiple choice questions
- Assignments versions A, B, C (stock code SP-7267- IA)
- A sample synoptic assignment can be downloaded from the SmartScreen section of the City & Guilds website.

Time constraints

All assignments must be completed and assessed within the learner's period of registration. Centres should advise learners of any internal timescales for the completion and marking of individual assignments.

Grading and marking

All multiple-choice on-line tests are graded pass/fail. Assignments will be graded pass, credit or distinction.

Detailed marking and grading criteria are provided in the Assessors' Guide for each assignment, these are available to download from the City & Guilds website at

www.cityandguilds.com/e-quals07. These Assessors' Guides are password protected. Existing centres will be able to get the password, from their nearest City & Guilds Regional Office or the City & Guilds Contact Centre, when they send an email from a recognised centre email address. New centres will be given the password when they receive approval from City & Guilds to run the award.

All assignments are internally marked and graded.

Sample assessments

Sample assignments are available from our Smartscreen portal at www.smartscreen.co.uk.

Test specifications 8

8.1 Test specifications

The test specification for these units follow:

Test 551: Unit 501 Plan for the delivery of ICT support services and assist in the acquisition of

ICT systems

Duration: 1 hour

Outcome number	Outcome		No of questions
1	Determine customer requirements for ICT systems and support services		18
2	Evaluate available ICT systems and services against customer requirements		5
3	Prepare and present suitable options for the acquisition of ICT systems and support services		5
4	Develop plans to ensure that the ICT infrastructure delivers the required functionality, capacity and level of support		12
	T	otal	40

Test 553: Unit 503 Install, configure and integrate networked hardware and software

Duration: 1 hour

Outcome number	Outcome	No of questions
1	Carry out risk assessment and ensure Health and Safety procedures are followed	7
2	Survey the user environment for installation of hardware equipment and systems	2
3	Install hardware equipment and systems	14
4	Install and configure systems software	10
5	Expand (by integration) ICT systems to allow additional facilities	7
	Total	40

9 Units

9.1 About the units

Availability of units

The units for this qualification are available to download from the City & Guilds website at www.cityandguilds.com/e-quals07.

Structure of units

The units in this qualification are written in a standard format and comprise the following:

- title
- unit reference
- rationale
- list of learning outcomes
- statement of guided learning hours
- connections with other qualifications, eg NVQs, key skills
- assessment details
- learning outcomes in detail expressed as practical skills and/ or underpinning knowledge

Appendix 1 Accreditation, national frameworks and qualification level descriptors

Please visit the following websites to find information on accreditation, national frameworks and qualification level descriptors in each country.

Nation	Who to contact	Website
England	The Qualifications and Curriculum Authority	www.qca.org.uk
Scotland	The Scottish Qualifications Authority	www.sqa.org.uk
Wales	The Department for Education, Lifelong Learning and Skills Wales (DELLS)	www.wales.gov.uk
Northern Ireland	The Council for Curriculum, Examinations and Assessment	www.ccea.org.uk

Appendix 2 Obtaining centre and qualification approval

Only approved organisations can offer City & Guilds qualifications. Organisations approved by City & Guilds are referred to as **centres**.

Centres must meet a set of quality criteria including:

- provision of adequate physical and human resources
- clear management information systems
- effective assessment and quality assurance procedures including candidate support and reliable recording systems.

An organisation that has not previously offered City & Guilds qualifications must apply for approval to become a centre. This is known as the **centre approval process** (**CAP**). Centres also need approval to offer a specific qualification. This is known as the **qualification approval process** (**QAP**), (previously known as scheme approval). In order to offer this qualification, organisations which are not already City & Guilds centres must apply for centre and qualification approval at the same time. Existing City & Guilds centres will only need to apply for qualification approval for the particular qualification.

Full details of the procedures and forms for applying for centre and qualification approval are given in *Providing City & Guilds qualifications - a guide to centre and qualification approval*, which is also available on the City & Guilds centre toolkit, or downloadable from the City & Guilds website.

Regional / national offices will support new centres and appoint a Quality Systems Consultant to guide the centre through the approval process. They will also provide details of the fees applicable for approvals.

Assessments must not be undertaken until qualification approval has been obtained.

City & Guilds reserves the right to withdraw qualification or centre approval for reasons of debt, malpractice or non-compliance with City & Guilds' policies, regulations, requirements, procedures and guidelines, or for any reason that may be detrimental to the maintenance of authentic, reliable and valid qualifications or that may prejudice the name of City & Guilds. Further details of the reasons for suspension and withdrawal of approval, procedures and timescales, are contained in *Providing City & Guilds qualifications*.

Approval for global online assessment (GOLA)

In addition to obtaining centre and qualification approval, centres are also required to set up a GOLA profile in order to offer online examinations to candidates. Setting up a GOLA profile is a simple process that need only be completed once by the centre.

Details of how to set up the profile and GOLA technical requirements are available on the City & Guilds website (**www.cityandguilds.com/e-assessment**). The GOLA section of the website also has details of the GOLA helpline for technical queries and downloads for centres and candidates about GOLA examinations.

Centres should also refer to *Providing City & Guilds qualifications - a guide to centre and qualification approval* for further information on GOLA.

Summary of City & Guilds assessment policies Appendix 3

Health and safety

The requirement to follow safe working practices is an integral part of all City & Guilds qualifications and assessments, and it is the responsibility of centres to ensure that all relevant health and safety requirements are in place before candidates start practical assessments.

Should a candidate fail to follow health and safety practice and procedures during an assessment, the assessment must be stopped. The candidate should be informed that they have not reached the standard required to successfully pass the assessment and told the reason why. Candidates may retake the assessment at a later date, at the discretion of the centre. In case of any doubt, guidance should be sought from the external verifier.

Equal opportunities

It is a requirement of centre approval that centres have an equal opportunities policy (see *Providing* City & Guilds qualifications).

The regulatory authorities require City & Guilds to monitor centres to ensure that equal opportunity policies are being followed.

The City & Guilds equal opportunities policy is set out on the City & Guilds website, in *Providing City* & Guilds qualifications, in the Online Catalogue, and is also available from the City & Guilds Customer Relations department.

Access to qualifications on the National Qualifications Framework is open to all, irrespective of gender, race, creed, age or special needs. The centre co-ordinator should ensure that no candidate is subject to unfair discrimination on any ground in relation to access to assessment and the fairness of the assessment.

Access to assessment

Qualifications on the National Qualifications Framework are open to all, irrespective of gender, race, creed, age or special needs. The centre co-ordinator should ensure that no candidate is subject to unfair discrimination on any ground in relation to access to assessment and the fairness of the assessment.

City & Guilds' Access to assessment and qualifications guidance and regulations document is available on the City & Guilds website. It 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.

Access arrangements are pre-assessment adjustments primarily based on history of need and provision, for instance the provision of a reader for a visually impaired candidate.

Special consideration refers to post-examination adjustments to reflect temporary illness, injury or indisposition at the time of the assessment.

Appeals

Centres must have their own, auditable, appeals procedure that must be explained to candidates during their induction. Appeals must be fully documented by the quality assurance co-ordinator and made available to the external verifier and/or City & Guilds.

Further information on appeals is given in *Providing City & Guilds qualifications*. There is also information on appeals for centres and learners on the City & Guilds website or available from the Customer Relations department.

Appendix 4 Funding

City & Guilds does not provide details on funding as this may vary between regions.

Centres should contact the appropriate funding body to check eligibility for funding and any regional/national arrangements which may apply to the centre or candidates.

For funding regulatory purposes, candidates should not be entered for a qualification of the same type, level and content as that of a qualification they already hold.

Please see the table below for where to find out more about the funding arrangements.

Nation	Who to contact	For higher level qualifications
England	The Learning and Skills Council (LSC) is responsible for funding and planning education and training for over 16-year-olds. Each year the LSC publishes guidance on funding methodology and rates. There is separate guidance for further education and work-based learning. Further information on funding is available on the Learning and Skills Council website at www.lsc.gov.uk and, for funding for a specific qualification, on the Learning Aims Database http://providers.lsc.gov.uk/lad.	Contact the Higher Education Funding Council for England at www.hefce.ac.uk.
Scotland	Colleges should contact the Scottish Further Education Funding Council, at www.sfc.co.uk. Training providers should contact Scottish Enterprise at www.scottish-enterprise.com or one of the Local Enterprise Companies.	Contact the Scottish Higher Education Funding Council at www.shefc.ac.uk.
Wales	Centres should contact the Department for Education, Lifelong Learning and Skills (DELLS): www.wales.gov.uk	Centres should contact the Department for Education, Lifelong Learning and Skills (DELLS): www.new.wales.gov.uk
Northern Ireland	Please contact the Department for Employment and Learning at www.delni.gov.uk .	Please contact the Department for Employment and Learning at www.delni.gov.uk.

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