BCS Level 2 Certificate for IT Systems Administrators

Qualification Guide

This qualification is regulated by one or more of the following: Ofqual, Qualifications Wales, CCEA Regulation or SQA.

QAN: 610/1520/9

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The Chartered Institute for IT

Introduction

Technology is constantly transforming the way we live, work, and carry out our daily tasks. As digital and IT technologies continue to evolve and enable the digital transformation of businesses, there is an ever-increasing need for individuals to be equipped with the skills to support the development and implementation of IT solutions that deliver efficiencies, that enhance the productivity of individuals and teams, and which ensure successful operations can be carried out.

In conjunction with the ICDL Foundation, BCS, The Chartered Institute for IT, has designed this qualification to support individuals to develop the industry-specific knowledge and skills needed to be successful in increasingly digitised roles. As an IT Support Administrator, these skills include using IAAS, SAAS, assisting teams online and understanding IT security.

BCS, The Chartered Institute for IT

As the Chartered Institute for IT, we are the digital specialists and the only awarding body focused on computing and IT. Our commitment under our royal charter is to ensure everyone within society has access to the basic skills required to live and work in a digital age.

Qualification Suitability and Overview

The Level 2 Certificate for IT Systems Administrators qualification is suitable for individuals with a basic to intermediate level of competence in using IT software to complete tasks at work, as part of their studies, or within their daily lives.

This qualification is suitable for anyone;

- seeking to develop their IT skills to an advanced level in order to become a department expert in their workplace
- wishing to undertake professional development as part of seeking a new job opportunity
- currently studying, who wishes to develop their practical IT skills in preparation for the working environment or who are looking to progress onto higher level qualifications

Successfully completing this qualification will equip individuals with the skills and knowledge required to be able to identify ways to improve productivity through the identification and use of suitable IT tools and processes which support the completion of specific tasks, which help to minimise the need for manual processes or duplication of tasks, and which enable others to work more efficiently - ensuring a greater level of accuracy and productivity is achieved overall

LEVEL 2 CERTIFICATE FOR IT SYSTEMS ADMINISTRATORS	
QAN	610/1520/9
Entry Requirements	N/A
Guided Learning Hours (GLH)	114 hours
Total Qualification Time (TQT)	142 hours
Assessment Method	Online test
Outcome	Pass/fail

Although there are no formal entry requirements for this qualification, it would be beneficial for learners to have a basic understanding of IT.

In order to complete this Level 2 qualification, learners will have to complete a minimum of 14 credits and a maximum of 20 credits, which must include the two mandatory modules. An overview of these can be found below, while further details are included under Module Criteria.

MANDATORY UNITS	LEVEL	CREDIT VALUE
Cloud Computing Learners will be introduced to the use of internet-connected remote servers.	2	4
Cyber Security Learners will explore the concepts relating to the secure use of ICT in daily life.	2	6
OPTIONAL UNITS	**LEVEL**	**CREDIT VALUE**
Coding Principles Learners will explore the concepts and skills relating to the use of computational thinking and coding to create simple computer programs.	2	7
Data Protection Learners will explore data protection concepts and principles.	2	4
Database Software Learners will explore the concepts and skills needed for using a database application.	2	4
IT Security for Users Learners will explore the concepts and skills to help minimise security risk to IT systems and data.	1	1
IT User Fundamentals Learners will explore using devices, file creation and management, networks and data security.	1	3
Online Collaboration Learners will explore the concepts and skills to setup and use of online collaborative tools.	2	5
Presentation Software Learners will explore the concepts and skills to demonstrate competence in using presentation software.	2	4
Spreadsheet Software Leaners will explore concepts and skills relating to understanding the concept and use of spreadsheets.	2	4
Word Processing Software Learners will explore the concepts and skills needed for using a word processing application.	2	4

In order to undertake this qualification, candidates will need to have access to the following Microsoft Office applications. NOTE: supported versions include 2016, 2019 or 365

Microsoft Word, Microsoft Access, Microsoft PowerPoint, Microsoft Excel.

Offering Level 2 Certificate for IT Systems Administrators

To be able to offer this qualification, an organisation must be a BCS Approved Centre.

Details of what is required to be a centre can be found on our website.

Learner Progression

Learners undertaking this qualification may aim to further develop their skills in order to move into a specific area of IT. This may include progression onto a Level 3 apprenticeship for example the Level 3 IT Solutions Technician or Level 3 Higher Education Qualification.

Module Criteria

CLOUD COMPUTING	
Assessment Time:	**30 minutes**
Pass mark	**75%**
1. What is Cloud Computing?	
1.1	Define the term cloud computing.
1.2	Identify the origins of cloud computing.
1.3	Identify cloud computing's key services: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).
2. Infrastructure as a Service (IaaS)	
2.1	Identify the components of IaaS.
2.2	Identify common examples of IaaS solutions.
2.3	Identify the benefits of IaaS.
2.4	Identify the limitations of IaaS.
3. Platform as a Service (PaaS)	
3.1	Identify the components of PaaS.
3.2	Identify common examples of PaaS solutions.
3.3	Identify the benefits of PaaS.
3.4	Identify the limitations of PaaS.
4. Software as a Service (SaaS)	
4.1	Identify the components of SaaS.
4.2	Identify common examples of SaaS solutions.
4.3	Identify the benefits of SaaS.
4.4	Identify the limitations of SaaS.
5. Serverless, Function as a Service (FaaS)	
5.1	Identify the features and purpose of a serverless solution.
5.2	Identify common examples of serverless solutions.
6. Deployment Models	
6.1	Identify the features of private cloud models.
6.2	Identify the features of public cloud models.
6.3	Identify the features of community cloud models.
6.4	Identify the features of hybrid cloud models.

7. Adoption	
6.1	Identify key challenges to adoption of cloud computing in an organisation.
7.2	Consider appropriate services and models for a given scenario.

Cyber Security		
Assessment Time:	**45 minutes**	
Pass mark	**75%**	
1. Security Concepts		
1.1 Data Threats	1.1.1	Distinguish between data and information.
	1.1.2	Understand the terms cybercrime, hacking.
	1.1.3	Recognise malicious, accidental threats to data from individuals, service providers, external organisations.
	1.1.4	Recognise threats to data from extraordinary circumstances like: fire, floods, war, earthquake.
	1.1.5	Recognise threats to data from using cloud computing like: data control, potential loss of privacy.
1.2 Value of Information	1.2.1	Understand basic characteristics of information security like: confidentiality, integrity, availability.
	1.2.2	Understand the reasons for protecting personal information like: avoiding identity theft, fraud, maintaining privacy.
	1.2.3	Understand the reasons for protecting workplace information on computers and devices like: preventing theft, fraudulent use, accidental data loss, sabotage.
	1.2.4	Identify common data/privacy protection, retention and control principles like: transparency, legitimate purposes, proportionality.
	1.2.5	Understand the terms data subjects and data controllers and how data/privacy protection, retention and control principles apply to them.
	1.2.6	Understand the importance of adhering to guidelines and policies for ICT use and how to access them.
1.3 Personal Security	1.3.1	Understand the term social engineering and its implications like: unauthorised computer and device access, unauthorised information gathering, fraud.
	1.3.2	Identify methods of social engineering like: phone calls, phishing, shoulder surfing.
	1.3.3	Understand the term identity theft and its implications: personal, financial, business, legal.
	1.3.4	Identify methods of identity theft like: information diving, skimming, pretexting.
1.4 File Security	1.4.1	Understand the effect of enabling/disabling macro security settings.
	1.4.2	Understand the advantages, limitations of encryption. Be aware of the importance of not disclosing or losing the encryption password, key, certificate.
	1.4.3	Encrypt a file, folder, drive.
	1.4.4	Set a password for files like: documents, spreadsheets, compressed files.

2. Malware		
2.1 Types and Methods	2.1.1	Understand the term malware. Recognise different ways that malware can be concealed on computers and devices like: Trojans, rootkits, backdoors.
	2.1.2	Recognise types of infectious malware and understand how they work like: viruses, worms.
	2.1.3	Recognise types of data theft, profit generating/extortion malware and understand how they work like: adware, ransomware, spyware, botnets, keystroke logging, diallers.
2.2 Protection	2.2.1	Understand how anti-virus software works and its limitations.
	2.2.2	Understand that anti-virus software should be installed on computers and devices.
	2.2.3	Understand the importance of regularly updating software like: anti-virus, web browser, plug-in, application, operating system.
	2.2.4	Scan specific drives, folders, files using anti-virus software. Schedule scans using anti-virus software.
	2.2.5	Understand the risks of using obsolete and unsupported software like: increased malware threats, incompatibility.
2.3 Resolving and Removing	2.3.1	Understand the term quarantine and the effect of quarantining infected/suspicious files.
	2.3.2	Quarantine, delete infected/suspicious files.
	2.3.3	Understand that a malware attack can be diagnosed and resolved using online resources like: websites of operating system, anti-virus, web browser software providers, websites of relevant authorities.
3. Network Security		
3.1 Networks and Connections	3.1.1	Understand the term network and recognise the common network types like: local area network (LAN), wireless local area network (WLAN), wide area network (WAN), virtual private network (VPN).
	3.1.2	Understand how connecting to a network has implications for security like: malware, unauthorised data access, maintaining privacy.
	3.1.3	Understand the role of the network administrator in managing authentication, authorisation and accounting, monitoring and installing relevant security patches and updates, monitoring network traffic, and in dealing with malware found within a network.
	3.1.4	Understand the function, limitations of a firewall in personal, work environment.
	3.1.5	Turn a personal firewall on, off. Allow, block an application, service/feature access through a personal firewall.
3.2 Wireless Security	3.2.1	Recognise different options for wireless security and their limitations like: Wired Equivalent Privacy (WEP), Wi-Fi Protected Access (WPA) / Wi-Fi Protected Access 2 (WPA2), Media Access Control (MAC) filtering, Service Set Identifier (SSID) hiding.
	3.2.2	Understand that using an unprotected wireless network can lead to attacks like: eavesdroppers, network hijacking, man in the middle.

	3.2.3	Understand the term personal hotspot.
	3.2.4	Enable, disable a secure personal hotspot, and securely connect, disconnect devices.
4. Access Control		
4.1 Methods	4.1.1	Identify measures for preventing unauthorised access to data like: user name, password, PIN, encryption, multifactor authentication.
	4.1.2	Understand the term one-time password and its typical use.
	4.1.3	Understand the purpose of a network account.
	4.1.4	Understand that a network account should be accessed through a user name and password and locked, logged off when not in use.
	4.1.5	Identify common biometric security techniques used in access control like: fingerprint, eye scanning, face recognition, hand geometry.
4.2 Password Management	4.2.1	Recognise good password policies, like: adequate password length, adequate letter, number and special characters mix, not sharing passwords, changing them regularly, different passwords for different services.
	4.2.2	Understand the function, limitations of password manager software.
5. Secure Web Use		
5.1 Browser Settings	5.1.1	Select appropriate settings for enabling, disabling autocomplete, autosave when completing a form.
	5.1.2	Delete private data from a browser like: browsing history, download history, cached Internet files, passwords, cookies, autocomplete data.
5.2 Secure Browsing	5.2.1	Be aware that certain online activity (purchasing, banking) should only be undertaken on secure web pages using a secure network connection.
	5.2.2	Identify ways to confirm the authenticity of a website like: content quality, currency, valid URL, company or owner information, contact information, security certificate, validating domain owner.
	5.2.3	Understand the term pharming.
	5.2.4	Understand the function and types of content-control software like: Internet filtering software, parental control software.
6. Communications		
6.1 Email	6.1.1	Understand the purpose of encrypting, decrypting an email.
	6.1.2	Understand the term digital signature.
	6.1.3	Identify possible fraudulent email, unsolicited email.
	6.1.4	Identify common characteristics of phishing like: using names of legitimate organisations, people, false web links, logos and branding, encouraging disclosure of personal information.
	6.1.5	Be aware that you can report phishing attempts to the legitimate organisation, relevant authorities.
	6.1.6	Be aware of the danger of infecting a computer or device with malware by opening an e-mail attachment that contains a macro or an executable file.

6.2 Social Networking	6.2.1	Understand the importance of not disclosing confidential or personal identifiable information on social networking sites.
	6.2.2	Be aware of the need to apply and regularly review appropriate social networking account settings like: account privacy, location.
	6.2.3	Apply social networking account settings: account privacy, location.
	6.2.4	Understand potential dangers when using social networking sites like: cyber bullying, grooming, malicious disclosure of personal content, false identities, fraudulent or malicious links, content, messages.
	6.2.5	Be aware that you can report inappropriate social network use or behaviour to the service provider, relevant authorities.
6.3 VoIP and Instant Messaging	6.3.1	Understand the security vulnerabilities of instant messaging (IM) and Voice over IP (VoIP) like: malware, backdoor access, access to files, eavesdropping.
	6.3.2	Recognise methods of ensuring confidentiality while using IM and VoIP like: encryption, non-disclosure of important information, restricting file sharing.
6.4 Mobile	6.4.1	Understand the possible implications of using applications from unofficial application stores like: mobile malware, unnecessary resource utilisation, access to personal data, poor quality, hidden costs.
	6.4.2	Understand the term application permissions.
	6.4.3	Be aware that mobile applications can extract private information from the mobile device like: contact details, location history, images.
	6.4.4	Be aware of emergency and precautionary measures if a device is lost like: remote disable, remote wipe, locate device.
7. Secure Data Management		
7.1 Secure and Back up Data	7.1.1	Recognise ways of ensuring physical security of computers and devices like: do not leave unattended, log equipment location and details, use cable locks, access control.
	7.1.2	Recognise the importance of having a backup procedure in case of loss of data from computers and devices.
	7.1.3	Identify the features of a backup procedure like: regularity/frequency, schedule, storage location, data compression.
	7.1.4	Back up data to a location like: local drive, external drive/media, cloud service.
	7.1.5	Restore data from a backup location like: local drive, external drive/media, cloud service.
7.2 Secure Deletion and Destruction	7.2.1	Distinguish between deleting and permanently deleting data.
	7.2.2	Understand the reasons for permanently deleting data from drives or devices.
	7.2.3	Be aware that content deletion may not be permanent on services like: social network site, blog, Internet forum, cloud service.

	7.2.4	Identify common methods of permanently deleting data like: shredding, drive/media destruction, degaussing, using data destruction utilities.

Coding Principles		
Assessment Time:	**45 minutes**	
Pass mark	**75%**	
1. Computing Terms		
1.1 Key Concepts	1.1.1	Define the term computing.
	1.1.2	Define the term computational thinking.
	1.1.3	Define the term program.
	1.1.4	Define the term code. Distinguish between source code, machine code.
	1.1.5	Understand the terms program description and specification.
	1.1.6	Recognise typical activities in the creation of a program: analysis, design, programming, testing, enhancement.
	1.1.7	Understand the difference between a formal language and a natural language.
2. Computational Thinking Methods		
2.1 Problem Analysis	2.1.1	Outline the typical methods used in computational thinking: decomposition, pattern recognition, abstraction, algorithms.
	2.1.2	Use problem decomposition to break down data, processes, or a complex problem into smaller parts.
	2.1.3	Identify patterns among small, decomposed problems.
	2.1.4	Use abstraction to filter out unnecessary details when analysing a problem.
	2.1.5	Understand how algorithms are used in computational thinking.
2.2 Algorithms	2.2.1	Define the programming construct term sequence. Outline the purpose of sequencing when designing algorithms.
	2.2.2	Recognise possible methods for problem representation like: flowcharts, pseudocode.
	2.2.3	Recognise flowchart symbols like: start/stop, process, decision, input/output, connector, arrow.
	2.2.4	Outline the sequence of operations represented by a flowchart, pseudocode.
	2.2.5	Write an accurate algorithm based on a description using a technique like: flowchart, pseudocode.
	2.2.6	Fix errors in an algorithm like: missing program element, incorrect sequence, incorrect decision outcome.
3. Starting to Code		
3.1 Getting Started	3.1.1	Describe the characteristics of well-structured and documented code like:

		indentation, appropriate comments, descriptive naming.
	3.1.2	Use simple arithmetic operators to perform calculations in a program: +, - , /, *.
	3.1.3	Understand the precedence of operators and the order of evaluation in complex expressions. Understand how to use parenthesis to structure complex expressions.
	3.1.4	Understand the term parameter. Outline the purpose of parameters in a program.
	3.1.5	Define the programming construct term comment. Outline the purpose of a comment in a program.
	3.1.6	Use comments in a program.
3.2 Variables and Data Types	3.2.1	Define the programming construct term variable. Outline the purpose of a variable in a program.
	3.2.2	Define and initialise a variable.
	3.2.3	Assign a value to a variable.
	3.2.4	Use appropriately named variables in a program for calculations, storing values.
	3.2.5	Use data types in a program: string, character, integer, float, Boolean.
	3.2.6	Use an aggregate data type in a program like: array, list, tuple.
	3.2.7	Use data input from a user in a program.
	3.2.8	Use data output to a screen in a program.
4. Building using Code		
4.1 Logic	4.1.1	Define the programming construct term logic test. Outline the purpose of a logic test in a program.
	4.1.2	Recognise types of Boolean logic expressions to generate a true or false value like: =, >, <, >=, <=, <>, !=, ==, AND, OR, NOT.
	4.1.3	Use Boolean logic expressions in a program.
4.2 Iteration	4.2.1	Define the programming construct term loop. Outline the purpose and benefit of looping in a program.
	4.2.2	Recognise types of loops used for iteration: for, while, repeat.
	4.2.3	Use iteration (looping) in a program like: for, while, repeat.
	4.2.4	Understand the term infinite loop.
	4.2.5	Understand the term recursion.
4.3 Conditionality	4.3.1	Define the programming construct term conditional statement. Outline the purpose of conditional statements in a program.
	4.3.2	Use IF...THEN...ELSE conditional statements in a program.
4.4 Procedures and Functions	4.4.1	Understand the term procedure. Outline the purpose of a procedure in a program.
	4.4.2	Write and name a procedure in a program.
	4.4.3	Understand the term function. Outline the purpose of a function in a program.

	4.4.4	Write and name a function in a program.
4.5 Events and Commands	4.5.1	Understand the term event. Outline the purpose of an event in a program.
	4.5.2	Use event handlers like: mouse click, keyboard input, button click, timer.
	4.5.3	Use available generic libraries like: math, random, time.
5. Test, Debug and Release		
5.1 Run, Test and Debug	5.1.1	Understand the benefits of testing and debugging a program to resolve errors.
	5.1.2	Understand types of errors in a program like: syntax, logic.
	5.1.3	Run a program.
	5.1.4	Identify and fix a syntax error in a program like: incorrect spelling, missing punctuation.
	5.1.5	Identify and fix a logic error incorrect B r in a program like: Boolean expression, incorrect data type.
5.2 Release	5.2.1	Check your program against the requirements of the initial description.
	5.2.2	Describe the completed program, communicating purpose and value.
	5.2.3	Identify enhancements, improvements to the program that may meet additional, related needs.

DATA PROTECTION		
Assessment Time:	**45 minutes**	
Pass mark	**75%**	
1. Concepts		
1.1 Personal Data	1.1.1	Understand the term privacy and its associated rights. Be aware that privacy is not an absolute right and other rights may take precedence.
	1.1.2	Define the term personal data.
	1.1.3	Understand the term data processing.
	1.1.4	Distinguish between automated and manual data processing.
1.2 Protecting Personal Data	1.2.1	Understand the term data protection.
	1.2.2	Recognise some risks to personal data from data processing like: accidental or unlawful destruction, loss, alteration, unauthorised disclosure, unauthorised access.
	1.2.3	Recognise some risks for data subjects from personal data processing like: discrimination, identity theft or fraud, financial loss, damage to reputation, loss of confidentiality, loss of privacy, loss of rights, loss of data control, profiling.
	1.2.4	Understand data protection roles and responsibilities like: data subject, data processor, data controller, data protection officer (DPO), supervisory authority.
2. GDPR Overview		
2.1 Rationale and Objectives	2.1.1	Understand that the General Data Protection Regulation (GDPR) is a data protection regulation that is enforceable as law in all European Economic Area (EEA) member states.
	2.1.2	Recognise the rationale for the introduction of the GDPR: increased legal certainty, increased consumer confidence and trust, increased protection of growing volumes of electronic personal data and their international transfer.
	2.1.3	Outline the primary objectives of the General Data Protection Regulation: equivalent level of protection of natural persons with regard to the processing of personal data, free flow of personal data throughout the European Union (EU).
2.2 Scope	2.2.1	Outline the scope of data processing activities covered by the GDPR: automated and manual processing of personal data, personal data processing activities exempted from the application of the regulation.
	2.2.2	Outline the territorial scope of the GDPR regarding the location of personal data processing and data subjects.
3. Principles		
3.1 Processing Personal Data	3.1.1	Define the principle of lawfulness, fairness and transparency.
	3.1.2	Define the principle of purpose limitation.
	3.1.3	Define the principle of data minimisation.
	3.1.4	Define the principle of accuracy.

	3.1.5	Define the principle of storage limitation.
	3.1.6	Define the principle of integrity and confidentiality.
	3.1.7	Define the principle of accountability.
3.2 Lawfulness of Processing	3.2.1	Outline the conditions under which personal data processing is lawful: consent by data subject, performance of a contract, compliance with a legal obligation, protection of vital interests, performance of a task carried out in the public interest, pursuance of legitimate interests by the controller or by a third party.
	3.2.2	Be aware that consent can only be considered given by the data subject if certain conditions are met. Outline the conditions for consent: recorded, clearly requested, withdrawable, given freely.
	3.2.3	Understand the conditions applicable to a child's consent in relation to online services.
	3.2.4	Recognise that where processing is carried out on behalf of a data controller, a legal agreement must be in place between the data controller and data processor that ensures compliance with data protection regulations and protects the rights of data subjects.
	3.2.5	Identify special categories of personal data that are typically prohibited from processing: racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic information, biometric information, health, sex life, sexual orientation. Recognise that special categories of data can be processed lawfully under certain conditions like explicit consent.
	3.2.6	Recognise that in general personal data can only be transferred outside the EU for processing when the external data protection regulations are compliant with the GDPR.
4. Data Subject Rights		
4.1 Facilitate Rights	4.1.1	Recognise the importance of clearly communicating to the data subject information relating to processing like: privacy notice, fair processing notice.
	4.1.2	Outline key information that must be provided to a data subject when personal data is obtained like: the data controller's identity and contact details, the purpose and legal basis of processing, the data retention period, the data subject's rights.
	4.1.3	Outline additional information that may need to be provided to a data subject when personal data is obtained by the data controller like: data transfer to a third country, contact details for any DPO, any other recipients, any other information to make the processing fair.
	4.1.4	Be aware that additional information should be provided to the data subject when data is not obtained directly by the data controller.
4.2 Exercise Rights	4.2.1	Define the term subject access request and understand a data subject's right of access.
	4.2.2	Understand the right to rectification.
	4.2.3	Understand the right to be forgotten.
	4.2.4	Understand the right to restriction of processing.

	4.2.5	Understand the right to data portability.
	4.2.6	Understand the right to object and not to be subject to a decision based solely on automated processing, including profiling.
	4.2.7	Understand that the rights of the data subject may not be met if there are legal restrictions.
5. Implementation		
5.1 Policies and Methods	5.1.1	Understand that organisational data protection guidelines and policies must be compliant with data protection regulations. Be aware of the importance of adhering to organisational data protection guidelines and policies.
	5.1.2	Understand that data processing should incorporate data protection by design and by default.
	5.1.3	Understand the term data protection impact assessment and when it is required.
5.2 Measures	5.2.1	Recognise some appropriate technical and organisational measures to manage risks when processing personal data like: the pseudonymisation and encryption of personal data; the ability to ensure the ongoing confidentiality, integrity, availability and resilience of systems and services; the ability to restore personal data in a timely manner; a process for determining the effectiveness of technical and organisational measures.
	5.2.2	Be aware of specific technical measures to manage risks when processing personal data like: encryption, secure digital storage, back up data, secure digital communications, secure physical environment, secure disposal of data.
	5.2.3	Be aware of specific organisational measures to manage risks when processing personal data like: training, processes and procedures, legal contracts, managerial oversight.
	5.2.4	Distinguish between the pseudonymisation and anonymisation of personal data.
6. Compliance		
6.1 Data Breaches	6.1.1	Understand the term personal data breach.
	6.1.2	Be aware when the data controller must report personal data breaches to the supervisory authority. Be aware of the associated time frame for reporting.
	6.1.3	Be aware that the data controller should report personal data breaches to the data subject when there is a high risk to their rights and freedoms.
6.2 Enforcement	6.2.1	Identify the supervisory authority in your jurisdiction and recognise the requirement to cooperate with it when requested.
	6.2.2	Be aware of the data subject's right to lodge a complaint to their supervisory authority, regardless of where their data is processed.
	6.2.3	Understand possible consequences for organisations that fail to implement relevant data protection regulations like: fines, litigation, reputational damage.

DATABASE SOFTWARE		
Assessment Time:		**45 minutes**
Pass mark		**75%**
1. Understanding Databases		
1.1 Key Concepts	1.1.1	Understand what a database is.
	1.1.2	Understand that information is the processed output of data.
	1.1.3	Understand how a database is organised in terms of tables, records and fields.
	1.1.4	Understand that all database data is stored in tables. Understand that changes are automatically saved.
	1.1.5	Know some of the common uses of databases like: social networks, booking systems, government records, bank account records, hospital patient details.
1.2 Database Organisation	1.2.1	Understand that each table in a database should contain data related to a single subject type.
	1.2.2	Understand that each record in a database should contain data related to a single subject.
	1.2.3	Understand that each field in a table should contain only one element of data.
	1.2.4	Understand that field content is associated with an appropriate data type like: text, number, date/time, yes/no.
	1.2.5	Understand that fields have associated field properties like: field size, format, default value.
	1.2.6	Understand what a primary key is.
	1.2.7	Understand that the main purpose of an index is to speed up search queries.
1.3 Relationships	1.3.1	Understand that the main purpose of relating tables in a database is to minimise duplication of data.
	1.3.2	Understand that a relationship is built by matching a unique field in one table with a field in another table.
	1.3.3	Understand the importance of maintaining the integrity of relationships between tables.
2. Using the Application		
2.1 Working with Databases	2.1.1	Open, close a database application.
	2.1.2	Open, close a database.
	2.1.3	Create a new database and save to a location on a drive.
	2.1.4	Display, hide built-in toolbars. Restore, minimise the ribbon.
	2.1.5	Use available help resources.
2.2 Common Tasks	2.2.1	Open, save, close a table, query, form, report.

	2.2.2	Switch between view modes in a table, query, form, report.
	2.2.3	Delete a table, query, form, report.
	2.2.4	Navigate between records in a table, query, form. Navigate between pages in a report.
	2.2.5	Sort records in a table, form, query output in ascending, descending numeric, alphabetic order.
3. Tables		
3.1 Record	3.1.1	Add, delete records in a table.
	3.1.2	Add, modify, delete data in a record.
3.2 Design	3.2.1	Create and name a table and specify fields with their data types like: text, number, date/time, yes/no.
	3.2.2	Apply field property settings: field size, number format, date/time format, default value.
	3.2.3	Understand consequences of changing data types, field properties in a table.
	3.2.4	Create a simple validation rule for numbers.
	3.2.5	Set a field as a primary key.
	3.2.6	Index a field with, without duplicates allowed.
	3.2.7	Add a field to an existing table.
	3.2.8	Adjust the width of column(s) in a table.
3.3 Relationships	3.3.1	Create a one-to-many relationship between tables.
	3.3.2	Delete a one-to-many relationship between tables.
	3.3.3	Apply referential integrity between tables.
4. Retrieving Information		
4.1 Main Operations	4.1.1	Use the search command for a specific word, number, date in a field.
	4.1.2	Apply a filter to a table, form.
	4.1.3	Remove filter from a table, form.
4.2 Queries	4.2.1	Understand that a query is used to extract and analyse data.
	4.2.2	Create a named single-table query using specific search criteria.
	4.2.3	Create a named two-table query using specific search criteria.
	4.2.4	Add criteria to a query using one or more operators: = (Equal), <> (Not equal to), < (Less than), <= (Less than or equal to), > (Greater than), >= (Greater than or equal to).
	4.2.5	Add criteria to a query to sort records in ascending, descending numeric, alphabetic order.
	4.2.6	Add criteria to a query using one or more logical operators: AND, OR, NOT.
	4.2.7	Use a wildcard in a query like: * or %, ? or _.
	4.2.8	Edit a query: modify, remove criteria.

	4.2.9	Edit a query: add, remove, move, hide, unhide fields.
	4.2.10	Run a query.
5. Forms		
5.1 Using Forms	5.1.1	Understand that a form is used to display, add and edit records.
	5.1.2	Create and name a simple form.
	5.1.3	Use a form to insert new records.
	5.1.4	Use a form to delete records.
	5.1.5	Use a form to add, modify, delete data in a record.
	5.1.6	Add, modify text in headers, footers in a form.
6. Outputs		
6.1 Reports, Data Export	6.1.1	Understand that a report is used to present selected information from a table, query.
	6.1.2	Create and name a simple report based on a table, query.
	6.1.3	Create and name a grouped report. Sort records and calculate summary information like: sum, minimum, maximum, average.
	6.1.4	Edit a report: change arrangement of data fields, headings.
	6.1.5	Edit a report: add, modify text in headers, footers.
	6.1.6	Export a table, query output in spreadsheet, text file, csv, XML format to a location on a drive.
	6.1.7	Export a report output in pdf format to a location on a drive.
6.2 Printing	6.2.1	Change table, form, query output, report orientation: portrait, landscape. Change paper size.
	6.2.2	Print a page, selected record(s), complete table.
	6.2.3	Print all records, specific page(s) using form layout.
	6.2.4	Print the result of a query.
	6.2.5	Print specific page(s) in a report, print complete report.

IT SECURITY FOR USERS		
Assessment Time:	**45 minutes**	
Pass mark	**75%**	
1.1 System Performance Security		
1.1.1 Unwanted Message	1.1.1.1	Know what 'spam' is.
	1.1.1.2	Understand that unwanted email and other messages, or 'spam', can be received on the computer.
	1.1.1.3	Use anti-spam software to protect the computer from the risk of unwanted messages.
1.1.2 Malicious Programs	1.1.2.1	Understand what malicious programs are: viruses, worms, trojans, spyware, adware, rogue dialers.
	1.1.2.2	Be aware of how malicious programs can enter the computer.
	1.1.2.3	Use anti-virus and anti-spyware software to protect the computer from the risk of malicious programs.
	1.1.2.4	Know that anti-virus software needs to be updated regularly.
	1.1.2.5	Know how to protect yourself from malicious programs: do not open email attachments from unknown users, treat messages, files, software and attachments from unknown sources with caution.
1.1.3 Infiltration	1.1.3.1	Know what a hacker is.
	1.1.3.2	Know how hackers can attempt to infiltrate the computer.
	1.1.3.3	Understand that a firewall helps to protect the computer against the risk of infiltration.
1.1.4 Hoaxes	1.1.4.1	Know that you can receive hoaxes: virus hoaxes, chain letters, scams, false alarms, misunderstandings, scares.
	1.1.4.2	Know how to check whether a message you have received is a hoax.
1.2 Information Security		
1.2.1 Identity/ Authentication	1.2.1.1	Understand that information can be at risk from unauthorised access.
	1.2.1.2	Know that an individual user name limits access to relevant levels of information when logging onto a computer.
	1.2.1.3	Understand that passwords and PIN numbers help to protect information from the risk of unauthorised access.
	1.2.1.4	Understand that you should change your password/PIN number regularly.
	1.2.1.5	Know how to change your password/PIN number.
1.2.2 Confidentiality	1.2.2.1	Understand that you should not share your password/PIN number with others.
	1.2.2.2	Understand that you should not write down your password/PIN number.
	1.2.2.3	Know that you should respect the confidentiality of information you have access to.

	1.2.2.4	Know that you should not leave your computer unattended without logging off or locking it, to prevent the risk of access to your data.
1.2.3 Identity Theft	1.2.3.1	Know what phishing is.
	1.2.3.2	Understand identify theft and how to avoid it.
	1.2.3.3	Avoid inappropriate disclosure of information.
1.3 Technology Security		
1.3.1 Networks	1.3.1.1	Understand what a public network is.
	1.3.1.2	Know that unsecured networks can make information accessible to others.
	1.3.1.3	Be aware that you should not send unencrypted confidential information across an unsecured network.
	1.3.1.4	Understand that wireless networks may be visible or accessible to other users.
	1.3.1.5	Be aware of the security risks when using default passwords and settings on networks, computers and programs.
	1.3.1.6	Know that your internet security settings should be adjusted to prevent the risk of access to your network by other users.
1.3.2 Connectivity	1.3.2.1	Know what Bluetooth connectivity is.
	1.3.2.2	Understand that Bluetooth settings should be adjusted to prevent the risk of unauthorised access to a Bluetooth device by others.
1.3.3 Portable Devices	1.3.3.1	Know that portable devices are vulnerable to loss or theft: laptop, notebook, PDA, mobile phone, multimedia player.
	1.3.3.2	Know that USB and other removable storage devices can contain valuable and confidential information, and are vulnerable to loss or theft.
	1.3.3.3	Ensure all portable and removable devices are stored safely and securely.
1.4 Guidelines and Procedures		
1.4.1 Guidelines and Procedures	1.4.1.1	Know where to find the relevant guidelines and procedures for the secure use of IT within your organisation.
	1.4.1.2	Ensure you follow the guidelines and procedures for the secure use of IT.
	1.4.1.3	Know who to approach if you are unsure of the procedure to follow.
	1.4.1.4	Understand the IT security checks you should carry out.
	1.4.1.5	Know how to report IT security threats or breaches.
1.4.2 Privacy	1.4.2.1	Know the privacy policy within your organisation.
	1.4.2.2	Ensure you follow the privacy policy within your organisation.
1.5 Data Security		
1.5.1 Security	1.5.1.1	Know the privacy policy within your organization.
1.5.2 Backups	1.5.2.1	Be aware of the possibility of accidental file deletion.
	1.5.2.2	Be aware of the possibility of data corruption.
	1.5.2.3	Be aware of the possibility of computer malfunction and subsequent file loss.

	1.5.2.4	Understand that you should back up your personal data to appropriate media.
	1.5.2.5	Understand the importance of having a secure off-site backup copy of files.
1.5.3 Storage	1.5.3.1	Know how to store your personal data safely.
	1.5.3.2	Know how to store software securely.

IT USER FUNDAMENTALS		
Assessment Time:		**45 Minutes**
Pass mark:		**75%**
1. Computers and Devices		
1.1 ICT	1.1.1	Define the term Information and Communication Technology (ICT).
	1.1.2	Identify different types of ICT services/uses like: Internet services, mobile technology, office productivity applications.
1.2 Hardware	1.2.1	Define the term hardware. Identify the main types of computers like: desktops, laptops, tablets. Identify the main types of devices like: smartphones, media players, digital cameras.
	1.2.2	Define the terms processor, Random Access Memory (RAM), storage. Understand their impact on performance when using computers and devices.
	1.2.3	Identify the main types of integrated and external equipment like: printers, screens, scanners, keyboards, mouse/trackpad, webcam, speakers, microphone, docking station.
	1.2.4	Identify common input/output ports like: USB, HDMI.
1.3 Software and Licensing	1.3.1	Define the term software and distinguish between the main types of software like: operating systems, applications. Know that software can be installed locally or available online.
	1.3.2	Define the term operating system and identify some common operating systems for computers and devices.
	1.3.3	Identify common examples of applications like: office productivity, communications, social networking, media, design, mobile applications.
	1.3.4	Define the term End-User License Agreement (EULA). Recognise that software must be licensed before use.
	1.3.5	Outline the types of software licenses: proprietary, open source, trial version, shareware, freeware.
1.4 Start Up, Shut Down	1.4.1	Start a computer and log on securely using a user name and password.
	1.4.2	Log off, shut down, restart a computer using an appropriate routine.
1.5 Maintenance	1.5.1	Know the importance of regular routine maintenance of IT systems and how to carry out routine maintenance of IT systems safely.*
	1.5.2	Identify sources of help and take appropriate action to handle routine IT problems.*

* Items added to facilitate mapping to UK ITQ unit "IT User Fundamentals" at Level 1.

2. Desktops, Icons, Settings		
2.1 Desktop and Icons	2.1.1	Outline the purpose of the desktop and the task bar.
	2.1.2	Identify common icons like those representing: files, folders, applications, printers, drives, shortcuts/aliases, recycle bin/wastebasket/trash.

	2.1.3	Select and move icons.
	2.1.4	Create, rename, move, delete a shortcut/alias.
2.2 Using Windows	2.2.1	Identify the different parts of a window: title bar, menu bar, toolbar, ribbon, status bar, scroll bar.
	2.2.2	Open, collapse, expand, restore down, maximise, resize, move, close a window.
	2.2.3	Switch between open windows.
2.3 Tools and Settings	2.3.1	Use available help functions.
	2.3.2	View the computer's basic system information: operating system name and version number, installed RAM.
	2.3.3	Change desktop configuration settings: date and time, volume settings, background, resolution.
	2.3.4	Change, add, remove keyboard language. Change default language.
	2.3.5	Shut down a non-responding application.
	2.3.6	Install, uninstall an application.
	2.3.7	Connect a device (USB flash drive, digital camera, media player) to a computer. Disconnect a device using an appropriate routine.
	2.3.8	Capture a full screen, active window.
3. Outputs		
3.1 Working with Text	3.1.1	Open, close a word processing application. Open, close files.
	3.1.2	Enter text into a document.
	3.1.3	Copy, move text within a document, between open documents. Paste a screen capture into a document.
	3.1.4	Save and name a document.
3.2 Printing	3.2.1	Install, uninstall a printer. Print a test page.
	3.2.2	Set the default printer from an installed printer list.
	3.2.3	Print a document from a word processing application.
	3.2.4	View, pause, restart, cancel a print job.
4. File Management		
4.1 Introducing Files and Folders	4.1.1	Understand how an operating system organises drives, folders, files in a hierarchical structure. Navigate between drives, folders, sub-folders, files.
	4.1.2	Display file, folder properties like: name, size, location..
	4.1.3	Change view to display files and folders like: ti les, icons, list, details.
	4.1.4	Identify common file types like: word processing, spreadsheet, presentation, portable document format (pdf), image, audio, video, compressed, executable files.
	4.1.5	Open a file, folder, drive.
	4.1.6	Recognise good practice in folder, file naming: use meaningful names for folders and files to help with searching and organisation.

	4.1.7	Create a folder.
	4.1.8	Rename a file, folder.
	4.1.9	Search for files by properties: all or part of file name using wildcards if necessary, content, date modified.
	4.1.10	View list of recently used files.
4.2 Organising Files and Folders	4.2.1	Select individual, adjacent, nonadjacent files, folders.
	4.2.2	Sort files in ascending, descending order by name, size, type, date modified.
	4.2.3	Copy, move files, folders between folders, drives.
	4.2.4	Delete files, folders to the recycle bin/wastebasket/trash and restore to original location.
	4.2.5	Empty the recycle bin/wastebasket/trash.
4.3 Storage and Compression	4.3.1	Identify the main types of storage media like: internal hard disk, external hard disk, network drive, CD, DVD, Bluray Disc, USB flash drive, memory card, online file storage.
	4.3.2	Identify file size, folder size, storage capacity measurements like: KB, MB, GB, TB.
	4.3.3	View available space on a storage device.
	4.3.4	Understand the purpose of file, folder compression.
	4.3.5	Compress files, folders.
	4.3.6	Extract compressed files, folders to a location on a drive.
5. Networks		
5.1 Network Concepts	5.1.1	Define the term network. Outline the purpose of a network: to share, access data and devices securely.
	5.1.2	Define the term Internet. Identify some of its main uses like: World Wide Web (WWW), VoIP, e-mail, IM.
	5.1.3	Define the terms intranet, virtual private network (VPN) and identify their main uses.
	5.1.4	Understand what transfer rate means. Understand how it is measured: bits per second (bps), kilobits per second (kbps), megabits per second (mbps), gigabits per second (gbps).
	5.1.5	Understand the concepts of downloading from, uploading to a network.
5.2 Network Access	5.2.1	Identify the different options for connecting to the Internet like: phone line, mobile phone, cable, wi-fi, wi-max, satellite.
	5.2.2	Define the term Internet Service Provider (ISP). Identify important considerations when selecting an internet subscription option like: upload speed, download speed and quota, cost.
	5.2.3	Recognise the status of a wireless network: protected/secure, open.
	5.2.4	Connect to a wireless network.

6. Security and Well-Being		
6.1 Protecting Data and Devices	6.1.1	Recognise good password policies like: create with adequate length, adequate character mix, do not share, change regularly.
	6.1.2	Define the term firewall and outline its purpose.
	6.1.3	Understand the purpose of regularly backing up data to a remote location.
	6.1.4	Recognise the importance of regularly updating software like: anti-virus, application, operating system software.
	6.1.5	Know how to stay safe when using ICT-based communication: protect personal information, avoid misuse of images, use appropriate language, respect confidentiality, use copy lists with discrimination.*
6.2 Malware	6.2.1	Understand the term malware. Identify different types of malware like: virus, worm, Trojan, spyware.
	6.2.2	Be aware how malware can infect a computer or device.
	6.2.3	Use anti-virus software to scan a computer.
6.3 Health and Green IT	6.3.1	Know the relevant guidelines and procedures for the safe and secure use of IT in an organisation.*
	6.3.2	Recognise ways to help ensure a user's well-being while using a computer or device like: take regular breaks, ensure appropriate lighting and posture.
	6.3.3	Recognise the risks from using IT: hardware, cables, electrical connections, handling equipment.*
	6.3.4	Recognise computer and device energy saving practices: turning off, adjusting automatic shutdown, backlight, sleep mode settings.
	6.3.5	Recognise that computers, devices, batteries, printer cartridges and paper should be recycled.
	6.3.6	Identify some options available for enhancing accessibility like: voice recognition software, screen reader, screen magnifier, on-screen keyboard, high contrast.

* Items added to facilitate mapping to UK ITQ unit "IT User Fundamentals" at Level 1.

ONLINE COLLABORATION		
Assessment Time:	**45 minutes**	
Pass mark	**75%**	
1. Collaboration Concepts		
1.1 Key Concepts	1.1.1	Recognise that ICT (Information and Communication Technology) can support and promote online collaboration.
	1.1.2	Identify the main types of services supporting online collaboration like: cloud computing, mobile technology. Identify the main types of tools supporting online collaboration like: common productivity applications, social media, online calendars, online meetings, online learning environments.
	1.1.3	Identify key characteristics of online collaborative tools like: multiple users, real time, global reach, concurrent access.
	1.1.4	Outline the benefits of using online collaborative tools like: shared files and calendars, reduced travel expense, ease of communication, enhanced teamwork, global access.
	1.1.5	Be aware of the risks associated with using online collaborative tools like: unauthorised access to shared files, insufficient management of version control, malware threats, identity/data theft, service interruptions.
	1.1.6	Recognise the importance of intellectual property rights and the appropriate use of content when using online collaborative tools.
1.2 Cloud Computing	1.2.1	Understand ways in which cloud computing facilitates online and mobile collaboration like: storage of shared documents and files, access to a range of online applications and tools.
	1.2.2	Outline the benefits of cloud computing for users like: reduced costs, enhanced mobility, scalability, automatic updates.
	1.2.3	Outline the risks of cloud computing like: dependence on provider, data protection and control, potential loss of privacy.
2. Preparation for Online Collaboration		
2.1 Common Setup Features	2.1.1	Understand that additional applications, plug-ins may need to be installed to use certain online collaborative tools.
	2.1.2	Identify common equipment used to support online collaboration like: webcam, microphone, speakers.
	2.1.3	Recognise that firewall restrictions may cause access issues for users of a collaborative tool.
2.2 Setup	2.2.1	Download software to support online collaborative tools like: VOIP, IM, document sharing.
	2.2.2	Register and/or set up a user account for a collaborative tool. Deactivate, delete/close a user account.

3. Using Online Collaborative Tools		
3.1 Online Storage and Productivity Applications	3.1.1	Understand the concept of online storage solutions and identify common examples.
	3.1.2	Identify the limitations of online storage like: size limit, time limit, sharing restrictions.
	3.1.3	Upload, download, delete online files, folders.
	3.1.4	Understand that common productivity applications can be accessed via the web. Identify common examples of web-based productivity applications like: word processing, spreadsheets, presentations.
	3.1.5	Identify features of web-based productivity applications: allows files to be updated by multiple users in real-time, allows files to be shared.
	3.1.6	Create, edit and save files online.
	3.1.7	Share, unshare a file, folder to allow other users to view, edit, own a file, folder.
	3.1.8	View, restore previous versions of a file.
3.2 Online Calendars	3.2.1	Share a calendar. Grant permission to view, edit a shared calendar.
	3.2.2	Show, hide shared calendars.
	3.2.3	Use a shared calendar to create an event, recurring event.
	3.2.4	Set a reminder for an event.
	3.2.5	Invite, uninvite people, resources to an event. Accept, decline an invitation.
	3.2.6	Edit, cancel an existing event.
3.3 Social Media	3.3.1	Identify social media tools that support online collaboration like: social networks, wikis, forums and groups, blogs, micro blogs, content communities.
	3.3.2	Set up, modify available permissions/privacy options like: read access, write access, user invites.
	3.3.3	Find, connect to social media users, groups. Remove connections.
	3.3.4	Use a social media tool to post a comment, link.
	3.3.5	Use a social media tool to reply to, forward a comment.
	3.3.6	Use a social media tool to upload content like: images, videos, documents.
	3.3.7	Remove posts from social media. Be aware that permanently deleting posts and photos may be difficult.
	3.3.8	Use a wiki to add to or update a specific topic.
3.4 Online Meetings	3.4.1	Open, close online meeting application. Create a meeting: time, date, topic. Cancel the meeting.
	3.4.2	Invite, uninvite participants, set access rights.
	3.4.3	Start, end a meeting.
	3.4.4	Share, unshare desktop, files in an online meeting.
	3.4.5	Use available chat features in an online meeting.

	3.4.6	Use video, audio features in an online meeting.
3.5 Online Learning Environments	3.5.1	Understand the concept of an online learning environment. Identify online learning environments like: Virtual Learning Environments (VLEs) and Learning Management Systems (LMS).
	3.5.2	Understand the features, functions available within an online learning environment like: calendar, noticeboard, chat, assessment records.
	3.5.3	Access a course in an online learning environment.
	3.5.4	Upload and download a file in an online learning environment.
	3.5.5	Use a course activity like: quiz, forum.
4. Mobile Collaboration		
4.1 Key Concepts	4.1.1	Identify types of mobile devices like: smartphone, tablet.
	4.1.2	Understand that mobile devices use an operating system. Identify common operating systems for mobile devices.
	4.1.3	Understand the term Bluetooth and its use.
	4.1.4	Understand internet connection options available for mobile devices: wireless (WLAN), mobile internet (3G, 4G). Understand associated features of these options like: speed, cost, availability.
	4.1.5	Understand key security considerations for mobile devices like: use a PIN, backup content, turn wireless/Bluetooth on/off.
4.2 Using Mobile Devices	4.2.1	Connect to the Internet securely using wireless, mobile technology.
	4.2.2	Search the web.
	4.2.3	Send, receive email.
	4.2.4	Add, edit, remove a calendar event.
	4.2.5	Share pictures, videos using options like: email, messaging, social media, Bluetooth.
4.3 Applications	4.3.1	Identify common applications like: news, social media, productivity, maps, games, eBooks.
	4.3.2	Understand that applications are obtained from application stores. Identify common application stores for mobile devices.
	4.3.3	Search for a mobile device application in an application store. Recognise that there may be purchase, usage costs associated with an application.
	4.3.4	Install, uninstall an application on a mobile device.
	4.3.5	Update applications on a mobile device.
	4.3.6	Use an application on a mobile device like: voice or video communication, social media, map.
4.4 Synchronisation	4.4.1	Understand the purpose of synchronising content.
	4.4.2	Set up synchronisation settings.
	4.4.3	Synchronise mobile devices with mail, calendar, other devices.

PRESENTATION SOFTWARE		
Assessment Time:	**45 Minutes**	
Pass mark:	**75%**	
1. Using the Application		
1.1 Working with Presentations	1.1.1	Open, close a presentation application. Open, close presentation(s).
	1.1.2	Create a new presentation based on default template, other available template locally or online.
	1.1.3	Save a presentation to a location on a local, online drive. Save a presentation under another name to a location on a local, online drive.
	1.1.4	Save a presentation as another file type like: pdf, show, image file format.
	1.1.5	Switch between open presentations.
1.2 Enhancing Productivity	1.2.1	Set basic options/preferences in the application: user name, default folder to open, save files.
	1.2.2	Use available help resources.
	1.2.3	Use magnification/zoom tools.
	1.2.4	Display, hide built-in toolbars. Restore, minimise the ribbon.
2. Developing a Presentation		
2.1 Presentation Views	2.1.1	Understand the uses of different presentation view modes: normal, slide sorter, master, notes page, outline, slide show.
	2.1.2	Understand the uses of different presentation view modes: normal, slide sorter, master, notes page, outline, slide show.
	2.1.3	Recognise good practice in adding slide titles: use a different title for each slide to distinguish between slides in outline view, when navigating in slide show view.
2.2 Slides	2.2.1	Apply a different built-in slide layout to a slide.
	2.2.2	Apply a built-in design template, theme to a presentation.
	2.2.3	Apply background colour on specific slide(s), all slides in a presentation.
	2.2.4	Add a new slide with a specific slide layout like: title slide, title and content, title only, blank.
	2.2.5	Copy, move slides within the presentation, between open presentations.
	2.2.6	Delete slide(s).
2.3 Master Slide	2.3.1	Recognise good practice in maintaining a consistent design and format throughout a presentation by using the master slide.
	2.3.2	Insert a graphical object (picture, drawn object) into a master slide. Remove a graphical object from a master slide.
	2.3.3	Apply text formatting in a master slide: font sizes, font types, font colour.

3. Text		
3.1 Handling Text	3.1.1	Recognise good practice in creating slide content: use short concise phrases, bullet points, numbered lists.
	3.1.2	Enter text in a placeholder in normal view. Enter text in outline view.
	3.1.3	Edit text in a presentation.
	3.1.4	Copy, move text within a presentation, between open presentations.
	3.1.5	Delete text.
	3.1.6	Use the undo, redo command.
	3.1.7	Apply, modify, remove indents on text, bulleted lists, numbered lists.
3.2 Formatting	3.2.1	Apply text formatting: font size, font type.
	3.2.2	Apply text formatting: bold, italic, underline, shadow.
	3.2.3	Apply font colour to text.
	3.2.4	Apply case changes to text.
	3.2.5	Align text: left, centre, right in a text frame.
	3.2.6	Apply spacing above, below text, bulleted lists, numbered lists. Apply line spacing within text, bulleted lists, numbered lists: single, 1.5 lines, double.
	3.2.7	Switch between the different standard bullet, number styles in a list.
	3.2.8	Insert, edit, remove a hyperlink.
3.3 Tables	3.3.1	Create, delete a table.
	3.3.2	Enter, edit text in a table.
	3.3.3	Select cells, rows, columns, entire table.
	3.3.4	Insert, delete rows and columns.
	3.3.5	Modify column width, row height.
4. Charts		
4.1 Using Charts	4.1.1	Input data to create built-in charts in a presentation: column, bar, line, pie.
	4.1.2	Select a chart.
	4.1.3	Change the chart type.
	4.1.4	Add, remove, edit a chart title.
	4.1.5	Add data labels to a chart: values/numbers, percentages.
	4.1.6	Change the background colour of a chart.
	4.1.7	Change the column, bar, line, pie slice colours in a chart.
4.2 Organisation Charts	4.2.1	Create an organisation chart with a labelled hierarchy using a built-in organisation chart feature.
	4.2.2	Change the hierarchical structure of an organisation chart.
	4.2.3	Add, remove co-workers, subordinates in an organisation chart.

5. Graphical Objects		
5.1 Insert, Manipulate	5.1.1	Insert a graphical object (picture, drawn object) into a slide.
	5.1.2	Select graphical object(s).
	5.1.3	Copy, move graphical objects, charts within the presentation, between open presentations.
	5.1.4	Resize a graphical object maintaining, not maintaining aspect ratio. Resize a chart.
	5.1.5	Delete a graphical object, chart.
	5.1.6	Rotate, flip a graphical object.
	5.1.7	Align graphical object(s) relative to a slide: left, centre, right, top, bottom.
	5.1.8	Align graphical objects relative to each other: left, centre, right, top, bottom, middle.
5.2 Drawing	5.2.1	Add different types of drawn object to a slide: line, arrow, block arrow, rectangle, square, oval, circle, text box.
	5.2.2	Enter text into a text box, block arrow, rectangle, square, oval, circle.
	5.2.3	Change drawn object background colour, line colour, line width, line style.
	5.2.4	Change arrow start style, arrow finish style.
	5.2.5	Apply a shadow to a drawn object.
	5.2.6	Group, ungroup drawn objects in a slide.
	5.2.7	Bring a drawn object one level forward, one level backward, to the front, to the back of other drawn objects.
6. Prepare Outputs		
6.1 Preparation	6.1.1	Add, remove built-in transition effects between slides.
	6.1.2	Add, remove preset animation effects for different slide elements.
	6.1.3	Add presenter notes to slide(s).
	6.1.4	Hide, show slide(s).
	6.1.5	Enter text into footer of specific slide(s), all slides in a presentation.
	6.1.6	Apply automatic slide numbering, automatically updated date, fixed date to the footer of specific slide(s), all slides in a presentation.
6.2 Check and Deliver	6.2.1	Spell check a presentation and make changes like: correcting spelling errors, ignoring specific words, deleting repeated words.
	6.2.2	Change slide orientation to portrait, landscape. Select appropriate output format for slide presentation like: paper, on-screen show.
	6.2.3	Print a presentation using output options like: entire presentation, specific slide(s) , handouts, notes pages, outline view of slides, number of copies of a presentation.
	6.2.4	Start a slide show from first slide, from current slide. End a slide show.
	6.2.5	Navigate to next slide, previous slide, specified slide during a slide show

SPREADSHEET SOFTWARE		
Assessment Time:	**45 Minutes**	
Pass mark:	**75%**	
1. Using the Application		
1.1 Working with Spreadsheets	1.1.1	Open, close a spreadsheet application. Open, close spreadsheet(s).
	1.1.2	Create a new spreadsheet based on default template, other available template locally or online.
	1.1.3	Save a spreadsheet to a location on a local, online drive. Save a spreadsheet under another name to a location on a local, online drive.
	1.1.4	Save a spreadsheet as another file type like: text file, pdf, csv, software specific file extension.
	1.1.5	Switch between open spreadsheets.
1.2 Enhancing Productivity	1.2.1	Set basic options/preferences in the application: user name, default folder to open, save spreadsheets.
	1.2.2	Use available help resources.
	1.2.3	Use magnification/zoom tools.
	1.2.4	Display, hide built-in toolbars. Restore, minimise the ribbon.
	1.2.5	Recognise good practice in navigating within a spreadsheet: use shortcuts, go to tool.
	1.2.6	Use go to tool to navigate to a specific cell.
2. Cells		
2.1 Insert, Select	2.1.1	Understand that a cell in a worksheet should contain only one element of data, for example, quantity in one cell, description in adjacent cell.
	2.1.2	Recognise good practice in creating lists: avoid blank rows and columns in the main body of list, ensure cells bordering list are blank.
	2.1.3	Enter a number, date, text in a cell.
	2.1.4	Select a cell, range of adjacent cells, range of non-adjacent cells, entire worksheet.
2.2 Edit, Sort	2.2.1	Edit cell contents.
	2.2.2	Use the undo, redo command.
	2.2.3	Use a simple search command for specific content in a worksheet.
	2.2.4	Use a simple replace command for specific content in a worksheet.
	2.2.5	Sort a cell range by one criterion in ascending, descending numeric order, ascending, descending alphabetic order.
2.3 Copy, Move, Delete	2.3.1	Copy the contents of a cell, cell range within a worksheet, between worksheets, between open spreadsheets.
	2.3.2	Use the autofill tool/copy handle tool to copy, increment data, formula, function.

	2.3.3	Move the contents of a cell, cell range within a worksheet, between worksheets, between open spreadsheets.
	2.3.4	Delete cell contents.
3. Manage Worksheets		
3.1 Rows and Columns	3.1.1	Select a row, range of adjacent rows, range of non-adjacent rows.
	3.1.2	Select a column, range of adjacent columns, range of non-adjacent columns.
	3.1.3	Insert, delete rows and columns.
	3.1.4	Modify column width, row height to a specified value, to optimal width or height.
	3.1.5	Freeze, unfreeze row and/or column titles.
3.2 Worksheets	3.2.1	Switch between worksheets.
	3.2.2	Insert a new worksheet, delete a worksheet.
	3.2.3	Recognise good practice in naming worksheets: use meaningful worksheet names rather than the default names.
	3.2.4	Copy, move a worksheet within a spreadsheet, between spreadsheets. Rename a worksheet.
4. Formulas and Functions		
4.1 Arithmetic Formulas	4.1.1	Recognise good practice in formula creation: use cell references rather than numbers in formulas.
	4.1.2	Create formulas using cell references and arithmetic operators (addition, subtraction, multiplication, division).
	4.1.3	Identify and understand standard error values associated with formulas: #NAME?, #DIV/0!, #REF!, #VALUE!.
	4.1.4	Understand and use relative, absolute cell referencing in formulas.
4.2 Functions	4.2.1	Use sum, average, minimum, maximum, count, counta, round functions.
	4.2.2	Use the logical function if (yielding one of two specific values) with comparison operator: =, >, <.
5. Formatting		
5.1 Numbers/Dates	5.1.1	Format cells to display numbers to a specific number of decimal places, to display numbers with, without a separator to indicate thousands.
	5.1.2	Format cells to display date style, currency symbol.
	5.1.3	Format cells to display numbers as percentages.
5.2 Contents	5.2.1	Apply text formatting to cell contents: font size, font type.
	5.2.2	Apply text formatting to cell contents: bold, italic, underline, double underline.
	5.2.3	Apply different colours to cell contents, cell background.
	5.2.4	Apply an autoformat/table style to a cell range.
	5.2.5	Copy the formatting from a cell, cell range to another cell, cell range.

5.3 Alignment, Border, Effects	5.3.1	Apply, remove text wrapping to contents within a cell, cell range.
	5.3.2	Align cell contents: horizontally, vertically. Adjust orientation of cell contents.
	5.3.3	Merge and centre cell contents in a merged cell. Unmerge cells.
	5.3.4	Apply, remove border effects to a cell, cell range: lines, colours.
6. Charts		
6.1 Create	6.1.1	Understand the uses of different types of chart: column chart, bar chart, line chart, pie chart.
	6.1.2	Create different types of charts from spreadsheet data: column chart, bar chart, line chart, pie chart.
	6.1.3	Select a chart.
	6.1.4	Change the chart type.
	6.1.5	Move, resize, delete a chart.
6.2 Edit	6.2.1	Add, remove, edit a chart title.
	6.2.2	Add, remove a chart legend.
	6.2.3	Add, remove data labels in a chart: values/numbers, percentages.
	6.2.4	Change chart area background colour, legend fill colour.
	6.2.5	Change the column, bar, line, pie slice colours in the chart.
	6.2.6	Change font size and colour of chart title, chart axes, chart legend text.
7. Prepare Outputs		
7.1 Setup	7.1.1	Change worksheet margins: top, bottom, left, right.
	7.1.2	Change worksheet orientation: portrait, landscape. Change paper size.
	7.1.3	Adjust page setup to fit worksheet contents on a specified number of pages.
	7.1.4	Add, edit, delete text in headers, footers in a worksheet.
	7.1.5	Insert, delete fields: page numbering, date, time, file name, worksheet name into headers, footers.
7.2 Check and Print	7.2.1	Check and correct spreadsheet calculations and text.
	7.2.2	Turn on, off display of gridlines, display of row and column headings for printing purposes.
	7.2.3	Apply automatic title row(s) printing on every page of a printed worksheet.
	7.2.4	Preview a worksheet.
	7.2.5	Print a selected cell range from a worksheet, an entire worksheet, number of copies of a worksheet, the entire spreadsheet, a selected chart.

WORD PROCESSING SOFTWARE		
Assessment Time:	**45 minutes**	
Pass mark	**75%**	
1. Using the Application		
1.1 Working with Documents	1.1.1	Open, close a word processing application. Open, close document(s).
	1.1.2	Create a new document based on default template, other available template locally or online.
	1.1.3	Save a document to a location on a local, online drive. Save a document under another name to a location on a local, online drive.
	1.1.4	Save a document as another file type like: text file, pdf, software specific file extension.
	1.1.5	Switch between open documents.
1.2 Enhancing Productivity	1.2.1	Set basic options/preferences in the application: user name, default folder to open, save documents.
	1.2.2	Use available help resources.
	1.2.3	Use magnification/zoom tools.
	1.2.4	Display, hide built-in toolbars. Restore, minimise the ribbon.
	1.2.5	Recognise good practice in navigating within a document: use shortcuts, go to tool.
	1.2.6	Use go to tool to navigate to a specific page.
2. Document Creation		
2.1 Enter Text	2.1.1	Understand the uses of available document view modes like: print, draft.
	2.1.2	Switch between document view modes.
	2.1.3	Enter text into a document.
	2.1.4	Insert symbols or special characters like: ©, ®, ™.
2.2 Select, Edit	2.2.1	Display, hide non-printing formatting marks like: spaces, paragraph marks, manual line break marks, tab characters.
	2.2.2	Select character, word, line, sentence, paragraph, entire body text.
	2.2.3	Edit content by entering, removing characters, words within existing text, by over-typing to replace existing text.
	2.2.4	Use a simple search command for a specific character, word, phrase.
	2.2.5	Use a simple replace command for a specific character, word, phrase.
	2.2.6	Copy, move text within a document, between open documents.
	2.2.7	Delete text.
	2.2.8	Use the undo, redo command.

3. Formatting		
3.1 Text	3.1.1	Apply text formatting: font size, font type.
	3.1.2	Apply text formatting: bold, italic, underline.
	3.1.3	Apply text formatting: subscript, superscript.
	3.1.4	Apply font colour to text.
	3.1.5	Apply case changes to text.
	3.1.6	Apply automatic hyphenation.
	3.1.7	Insert, edit, remove a hyperlink.
3.2 Paragraphs	3.2.1	Create, merge paragraph(s).
	3.2.2	Insert, remove soft carriage return (line break).
	3.2.3	Recognise good practice in text layout: use align, indent, tab tools rather than inserting spaces.
	3.2.4	Align text: left, centre, right, justified.
	3.2.5	Indent paragraphs: left, right, first line, hanging.
	3.2.6	Set, remove and use tabs: left, centre, right, decimal.
	3.2.7	Recognise good practice in paragraph spacing: apply spacing between paragraphs rather than inserting several paragraph marks.
	3.2.8	Apply spacing above, below paragraphs. Apply single, 1.5 lines, double line spacing within paragraphs.
	3.2.9	Add, remove bullets, numbers in a single level list. Switch between different standard bullet, number styles in a single level list.
	3.2.10	Apply border style, line style, line colour, line width, shading/background colour to a paragraph.
3.3 Styles	3.3.1	Apply an existing character style to selected text.
	3.3.2	Apply an existing paragraph style to one or more paragraphs.
	3.3.3	Use copy format tool.
4. Objects		
4.1 Table Creation	4.1.1	Create, delete a table.
	4.1.2	Insert, edit data in a table
	4.1.3	Select rows, columns, cells, entire table
	4.1.4	Insert, delete rows and columns.
4.2 Table Formatting	4.2.1	Modify column width, row height.
	4.2.2	Modify cell border line style, width, colour.
	4.2.3	Apply shading/background colour to cell(s).
4.3 Graphical Objects	4.3.1	Insert an object (picture, drawn object) to a specified location in a document.
	4.3.2	Select an object.

	4.3.3	Copy, move an object within a document, between open documents.
	4.3.4	Resize an object maintaining, not maintaining aspect ratio. Delete an object.
5. Mail Merge		
5.1 Preparation	5.1.1	Open, prepare a document, as a main document (letters, address labels) for a mail merge.
	5.1.2	Select a mailing list, other data file, for use in a mail merge.
	5.1.3	Insert data fields in a mail merge main document.
5.2 Outputs	5.2.1	Merge a mailing list, other data file with a letter, label document as a new file.
	5.2.2	Print mail merge outputs: letters, labels.
6. Prepare Outputs		
6.1 Setup	6.1.1	Change document orientation: portrait, landscape. Change paper size.
	6.1.2	Change margins of entire document: top, bottom, left, right.
	6.1.3	Recognise good practice in adding new pages: insert a page break rather than inserting several paragraph marks.
	6.1.4	Insert, delete a page break.
	6.1.5	Add, edit, delete text in headers, footers.
	6.1.6	Add, delete fields in headers, footers: date, page numbering, file name, author.
6.2 Check and Print	6.2.1	Spell check a document and make changes like: correcting spelling errors, ignoring specific words, deleting repeated words.
	6.2.2	Add words to a built-in custom dictionary using a spell checker.
	6.2.3	Preview a document.
	6.2.4	Print a document using output options like: entire document, specific page(s), selected text, number of copies.

Resources

There are a range of useful resources available to help you and your learners make the most of the Level 2 Certificate for IT Systems Administrators qualification. These are available from Skillsbox and the Atlas Cloud platform.

AVAILABLE RESOURCES

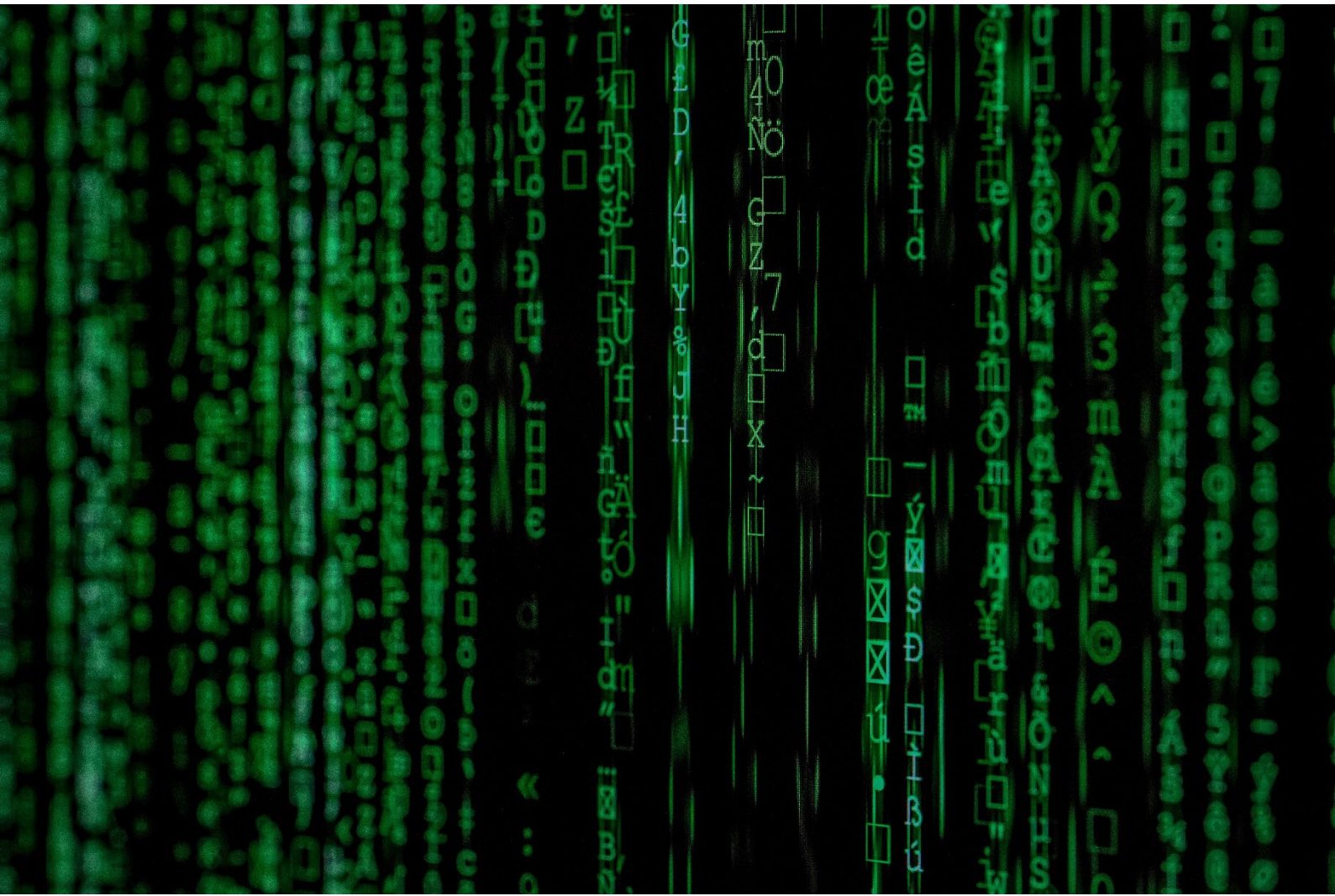
Diagnostic test

This test enables learners to practise and determine if they are ready to progress to the assessment. It is accessed via the Skillsbox online platform. There are questions in different formats, including:

- Multiple-choice.
- Drag-and-drop.
- Hotspot.

Learner material eBook

The eBooks cover the entire contents of each of the ICDL modules, introducing the learner to key concepts and features used within specific software. They also contain activities to allow the learner to practice and apply the techniques covered in the modules.



Assessment

Online test

The online tests assess the competencies outlined in the individual module syllabi. Learners must be registered on the modules in order to take a test.

The online tests are invigilated and take place in a registered test centre. The test is delivered through Skillsbox, an automated test system.

There are a variety of question types used in the test to assess the learner's mastery of the knowledge and skills outlined in the syllabi. The question type and format are primarily determined by the type of knowledge or skill being measured. Question types may include multiple-choice, drag-and-drop, hotspots, match-ups, fill-in-the-blanks, or practical in-application tasks. The marking of these assessments is automated.

The test duration and pass mark are specified for each individual module as listed within the 'Module Criteria' section.

Reasonable Adjustments

Centres will receive guidance on reasonable adjustments in accordance with Equalities Law including, but not exclusively, ensuring there is an environment which will allow access by a disabled learner or to make alternative arrangements such as a different venue or different equipment suitable for the learner.

Outcomes and Reassessment

When a learner completes the online test using the Skillsbox platform, the results are submitted directly to BCS.

Resits are available for this qualification.

Appeals

If situations arise that call into question the validity of an awarding decision, for example, via an appeal or an enquiry in accordance with our Appeals Policy, or an error has been made and a learner has incorrectly been awarded, or not awarded, a qualification achievement issue will be brought to the attention of the Service Delivery Manager - Qualifications. Our Appeals Policy is available from the Approved Centre Forum.

Skillsbox

Accessing the online assessments

The test may be completed via the Skillsbox online platform on an on-demand basis. Centres will have access to add and manage users and tests.

You can access Skillsbox by logging in **here**.

System Requirements

SYSTEM CHECK	REQUIREMENTS	ADDITIONAL INFORMATION
Operating System	Windows 7/8/10	Only Microsoft Windows is supported for in-application testing
Browser	Internet Explorer 11 Firefox Google Chrome	A plugin is required for in-application testing
Plugin Installation	PSI in-application Plugin is required for tests	All Supported Browsers: Ensure the plugin is fully installed and detected. Additional Chrome Requirements: Ensure the extension has been installed Additional Firefox Requirements: Ensure the Firefox extension and the plugin are installed
.NET Framework	.NET 3.X Framework is required	.NET 3.X framework is required for applications to run**
Microsoft Office	Microsoft Office applications must be installed.	In-application testing will not work with browser versions of Office365
Access to Work Files (Z:/)	Skillsbox Atlas Cloud uses a drive mapping script to create Z:/ on the machine to store test files.	The mapped drive must be visible to candidates if there is already a Z:/ drive on the network the script will work backwards to find the next available letter to map the drive to.
Registry Access	User must have read/write access to HKEY_CURRENT_USER	This is default in Windows

Further guidance around using Skillsbox can be found here on the BCS website.

Frequently Asked Questions

Q) How long does this qualification take to complete?

A) This qualification has 114 guided learning hours, and a total qualification time of 142 hours.

Q) What learning materials or courseware are available?

A) Learners will be able to access a diagnostic test via the Skillsbox online platform, to practice and determine if they are ready to progress to the live assessment, the test. Ebooks are also available to support the delivery of each ICDL module.

Q) Can this qualification be delivered remotely?

A) As all candidates will have access to the online learning materials and assessments, it is possible to deliver this qualification remotely or as part of a blended learning programme; with additional support, guidance and complimentary learning activities (e.g. webinars) being delivered by the provider. based on the requirements of the cohort/learners.

Q) What are GLH and TQT?

A) Guided Learning Hours (GLH) indicates the approximate time (in hours) that the learner will be supervised during any teaching, learning or assessment activities.

Total Qualification Time (TQT) is a prediction of the total time a learner with no prior knowledge might need to complete the course. TQT is made up of two elements: GLH, and all other hours (an estimate of the number of hours a learner will reasonably spend on any unsupervised learning or assessment activities including homework, research, exam preparation and formal assessment) so that they can successfully achieve the qualification.

Q) What practice tests are available?

A) A diagnostic test is available through the Skillsbox platform.

CONTACT

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