Qualification specification

NCFE Level 3 Certificate in Digital Support
QN: 610/0009/0

Qualification summary

Qualification title	**NCFE Level 3 Certificate in Digital Support**		
Ofqual qualification number (QN)	610/0009/0	**Aim reference**	61000090
Guided learning hours (GLH)	180	**Total qualification time (TQT)**	198
Minimum age	Pre-16		
UCAS	This qualification has been allocated UCAS points. Please refer to the UCAS website for further details of the points allocation and the most up-to-date information.		
Qualification purpose	This qualification is designed for learners who wish to gain the knowledge and skills required to work in the digital support sector. Learners will gain the relevant knowledge and skills by successfully completing the required units.		
Grading	Achieved/not yet achieved		
Assessment method	Internally assessed and externally quality assured portfolio of evidence.		
Work/industry placement experience	Work/industry placement experience is not required.		

Contents

Summary of changes

This document summarises the changes to this qualification specification since the last version (Version 1.0 November 2021). Please check the NCFE website for the most recent version.

Version	Publication date	Summary of amendments
v1.0	November 2021	First publication
v1.1	June 2022	Further information added to the how the qualification is assessed section to confirm that unless otherwise stated in this specification, all learners taking this qualification must be assessed in English and all assessment evidence presented for external quality assurance must be in English. Information added to the entry guidance section to advise that registration is at the discretion of the centre, in accordance with equality legislation and should be made on the Portal. Information added to the support handbook section about how to access support handbooks. Amended GDPR legislation to UK General Data Protection Regulation (UK GDPR).
v1.2	July 2023	Information regarding UCAS added to About this qualification, Qualification Summary.

Section 1: introduction

If you are using this qualification specification for planning purposes, please make sure that you are using the most recent version.

Aims and objectives

This qualification aims to:

- focus on the study of the digital support sector
- offer breadth and depth of study, incorporating a key core of knowledge
- provide opportunities to acquire a number of practical and technical skills

The objective of this qualification is to:

- provide opportunities to acquire knowledge and skills relevant to the digital support sector

Support handbook

This qualification specification must be used alongside the mandatory support handbook which can be found on the NCFE website. This contains additional supporting information to help with the planning, delivery and assessment.

This qualification specification contains all of the qualification-specific information you will need that is not covered in the support handbook.

Entry guidance

This qualification is designed for learners wishing to develop sector awareness. It will provide them with skills and knowledge required to gain employment in digital support roles.

It may also be useful to learners studying qualifications in the following area:

- information and communications technology (ICT)

Registration is at the discretion of the centre, in accordance with equality legislation and should be made on the Portal.

There are no specific prior skills/knowledge a learner must have for this qualification. However, learners may find it helpful if they have already achieved a level 2 qualification.

Centres are responsible for ensuring that all learners are capable of achieving the learning outcomes and complying with the relevant literacy, numeracy and health and safety requirements.

Learners registered on this qualification should not undertake another qualification at the same level, or with the same/a similar title, as duplication of learning may affect funding eligibility.

Achieving this qualification

To be awarded this qualification, learners are required to successfully achieve **6 mandatory units**.

Please refer to the list of units in appendix A or the unit summaries in section 2 for further information.

To achieve this qualification, learners must successfully demonstrate their achievement of all learning outcomes of the units as detailed in this qualification specification. A partial certificate may be requested for learners who do not achieve their full qualification but have achieved at least one whole unit.

Progression

Learners who achieve this qualification could progress to the following:

- employment:
  - digital support technician
  - digital applications technician
- further education:
  - T Level Technical Qualification in Digital Support Services (Level 3) (Delivered By NCFE) (603/6901/2)

Progression to higher level studies

Level 3 qualifications aim to facilitate progression to higher level study, which requires knowledge and skills different from those gained at levels 1 and 2. Level 3 qualifications enable learners to:

- apply factual, procedural and theoretical subject knowledge
- use relevant knowledge and methods to address complex, non-routine problems
- interpret and evaluate relevant information and ideas
- understand the nature of the area of study or work
- demonstrate an awareness of different perspectives and approaches
- identify, select and use appropriate cognitive and practical skills
- use appropriate research to inform actions
- review and evaluate the effectiveness of their own methods

Resource requirements

There are no mandatory resource requirements for this qualification, but centres must ensure learners have access to suitable resources to enable them to cover all the appropriate learning outcomes.

Real work environment (RWE) recommendation

Where the assessment guidance for a unit allows, it is essential that organisations wishing to operate a RWE do so in an environment that reflects a real work setting and replicates the key characteristics of the workplace in which the skill to be assessed is normally employed. This is often used to support simulation.

Work/industry placement experience

Work/industry placement experience is not required.

How the qualification is assessed

Assessment is the process of measuring a learner's skill, knowledge and understanding against the standards set in a qualification.

This qualification is internally assessed and externally quality assured.

The assessment consists of one component:

- an internally assessed portfolio of evidence, which is assessed by centre staff and externally quality assured by NCFE (internal quality assurance (IQA) must still be completed by the centre as usual)

Unless stated otherwise in this qualification specification, all learners taking this qualification must be assessed in English and all assessment evidence presented for external quality assurance must be in English.

Internal assessment

We have created some sample tasks for the internally assessed units, within a separate document on our website. These tasks are not mandatory. You can contextualise these tasks to suit the needs of your learners to help them build up their portfolio of evidence. The tasks have been designed to cover some learning outcomes for units 4 and 6 and provide opportunities for stretch and challenge. For further information about contextualising the tasks, please contact the curriculum team.

Each learner must create a portfolio of evidence generated from appropriate assessment tasks, which demonstrates achievement of all the learning outcomes associated with each unit. The assessment tasks should allow the learner to respond to a real-life situation that they may face when in employment. On completion of each unit, learners must declare that the work produced is their own and the assessor must countersign this. Examples of suitable evidence for the portfolio for each unit are provided in section 2.

A centre must create their own internal assessment tasks. There are 4 essential elements in the production of successful centre-based assessment tasks.

These are:

- ensuring the assessment tasks are meaningful with clear, assessable outcomes
- appropriate coverage of the content, learning outcomes, or assessment criteria
- having a valid and engaging context or scenario
- including sufficient opportunities for stretch and challenge for higher attainers.

Please see the guidance document for creation of internal assessment tasks on our website

Section 2: unit content and assessment guidance

This section provides details of the structure and content of this qualification.

The types of evidence listed are for guidance purposes only. Within learners' portfolios, other types of evidence are acceptable if all learning outcomes are covered and if the evidence generated can be internally and externally quality assured. For approval of methods of internal assessment other than portfolio building, please contact your external quality assurer.

The explanation of terms explains how the terms used in the unit content are applied to this qualification. This document can be found in section 3.

Unit 01 Working in the digital support sector (T/650/0021)

Unit summary	In this unit, learners will understand organisational policies, standards and legislation applicable to the digital support sector and the potential consequences of non-compliance. Learners will be able to demonstrate core transferable skills applicable to the digital support sector and understand career progression within the sector.
Guided learning hours	20
Level	3
Mandatory/optional	Mandatory

Learning outcome 1

The learner will:

1 Understand organisational policies, standards and legislation applicable to the digital support sector

The learner can:

1.1 Explain how **UK and international legislation and regulations** apply to the digital support sector
1.2 Explain the **potential consequences** of non-compliance with UK and international legislation and regulations
1.3 Describe the purposes of a range of **ISO standards** that relate to security, quality or safety within the digital support sector
1.4 Explain the purpose of a range of **common organisational IT policies**
1.5 Create an **acceptable usage policy** for an organisation

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
1.1	**UK and international legislation and regulations:** • Health and Safety Act at Work etc Act (1974) • Data Protection Act (2018) • Computer Misuse Act (1990) • UK General Data Protection Regulation (UK GDPR) • Copyright, Design and Patents Act (1988) • Privacy and Electronic Communications (EC Directive) Regulations (2003) • Waste Electrical and Electronic Equipment (WEEE) Regulations (2013)	• report • presentation

AC	Assessment guidance	Suggested assessment methods

1.2	**Potential consequences:**
	
	• financial, for example:
	  ○ fines
	  ○ loss of business/income
	• legal, for example:
	  ○ prosecution
	• professional, for example:
	  ○ termination of employment
	  ○ revoked responsibilities
	• reputational, for example:
	  ○ brand damage
	  ○ customer perception
		• report
		• presentation

1.3	**ISO standards**, must include: • ISO27001 • ISO9001 • ISO45001	• report • presentation

1.4	**Common organisational IT policies,** must include:
	
	• user policies:
	  ○ acceptable usage policy (AUP)
	  ○ bring your own device policy
	  ○ access control policy
	  ○ mobile device and teleworking policy
	  ○ password policy
	  ○ secure development policy
	• maintenance policies:
	  ○ back up policy
	  ○ disposal and destruction policy
	  ○ information classification scheme policy
	  ○ IT change management policy
	• security policies:
	  ○ information security incident management policy
	  ○ information security policy
	  ○ information transfer policy
	  ○ IT security policy
		• report
		• presentation

AC	Assessment guidance	Suggested assessment methods
1.5	**Acceptable usage policy,** must include: • scope of the policy • a policy statement • what is deemed acceptable usage within an organisation • what is deemed unacceptable usage within an organisation • violations or sanctions if the policy is breached	• presentation

Learning outcome 2

The learner will:

2 Be able to use transferable skills appropriate to the digital support sector

The learner can:

2.1 Explain the benefits of **transferable skills**
2.2 Explain a **decision-making process**
2.3 **Communicate effectively** in writing, verbally and face-to-face
2.4 **Collaborate effectively** as part of a team
2.5 **Effectively manage tasks**
2.6 Perform a **health and safety risk assessment** to ensure a safe working environment

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Assessment guidance

AC	Assessment guidance	Suggested assessment methods
2.1	**Transferable skills,** for example: • effective and timely communication • effective team working • effective task management • structured decision making • problem solving	• professional discussion supported by preparation notes
2.2	**Decision-making process:** • define the problem, challenge or opportunity • set a timeframe for making a decision and stick with it • generate possible solutions • evaluate the pros and cons of each • select a solution • implement • assess the impact	• professional discussion supported by preparation notes
2.3	**Communicate effectively:** • in a clear and unambiguous way, tailoring language and technical information to the audience • selecting the most appropriate way of communicating the information (for example, using images and other tools to clarify complex issues) • actively listening to others' contributions and asking questions to test understanding • speaking clearly and confidently, using appropriate tone and register	• role play supported by video recording or observation

AC	Assessment guidance	Suggested assessment methods
	In addition, for face-to-face communication: • using appropriate body language that reflects what is being said	
2.4	**Collaborate effectively:** • making relevant and constructive contributions • sharing thoughts, opinions and ideas • encouraging contributions from other participants • demonstrating respect and trust towards other team members • working together to find solutions and solve problems	• role play supported by video recording or observation
2.5	**Effectively manage tasks:** • listing tasks to be completed • prioritising and ranking tasks based on service level agreements, importance and urgency • allocating time to complete each task • setting and managing deadlines for each task • adjusting deadlines as required	• role play supported by video recording or observation
2.6	**Health and safety risk assessment:** • step 1: identifying the hazards (for example, exposed wires, trailing cables) • step 2: assessing the risks (for example, the likelihood, the potential impact of the hazard) • step 3: evaluating the risks and selecting control measures • step 4: recording findings, following the risk assessment and amending the control measures as necessary • step 5: reviewing the risk assessment and modifying methods where required	• role play supported by video recording or observation • professional discussion supported by preparation notes

Learning outcome 3

The learner will:

3 Be able to use tools to solve problems appropriate to the digital support sector

The learner can:

3.1 Evaluate a range of **tools** used to identify possible causes of a digital problem
3.2 Describe the **process** of solving a digital problem
3.3 Explain the **process** of continuous improvement
3.4 Describe the **benefits** of continuous improvement to an organisation

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Assessment guidance

AC	Assessment guidance	Suggested assessment methods
3.1	**Tools,** for example: • fish bone diagram – a visual tool used to establish cause and effect by grouping possible causes into different categories • 5 why's – an iterative interrogative questioning technique to identify underlying issues and causes • computational thinking – a sequential technique used to solve problems	• report • presentation
3.2	**Process:** • defining the problem • collecting relevant data • determining the cause • identifying a range of solutions to the problem • implementing the change • monitoring the implemented change	• report • presentation

3.3	**Process:**
	
	• plan:
	  ○ establishing the objective and desired outcome
	• do:
	  ○ executing the change
	• check:
	  ○ analysing the results of the change
	• act:
	  ○ rolling out the change or rolling back to its previous state
	  ○ using learning to feed into the next planning cycle
		• report
		• presentation
		• role play supported by video recording or observation

AC	Assessment guidance	Suggested assessment methods
3.4	**Benefits**, for example: • streamlining workflows • reducing costs • identifying inefficiencies • increasing productivity • improving customer satisfaction • reducing waste	• report • presentation

Learning outcome 4

The learner will:

4 Understand career progression opportunities within the digital support sector

The learner can:

4.1 Explain the **importance** of undertaking continuing professional development (CPD)
4.2 Research required **skills, knowledge and behaviours** for a chosen career path
4.3 Create a **CPD plan** for a chosen job role

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
4.1	**Importance,** for example: • career development • identifying career opportunities • upskilling • identifying relevant qualifications	• infographic (for example, a guide to working in the industry) • poster
4.2	**Skills, knowledge and behaviours:** • personal (for example, communication skills) • workplace (for example, health and safety training) • industry/technical (for example, technical skills or professional registration required for chosen career path) • occupation-specific (for example, additional skills required for leadership and management roles)	• infographic (for example, a guide to working in the industry) • poster
4.3	**CPD plan,** must include: • chosen job role • own current skills and attributes • entry requirements for the job role (for example, what qualifications, skills or attributes are needed to progress to that role) • skills gaps • any required professional registrations (for example, chartered status and industry membership)	• strengths, weaknesses, opportunities and threats (SWOT) analysis (for example, a career plan with long-term and short-term goals, with steps required for each) • CV and skills analysis

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Unit 02 Network infrastructure and cloud services (Y/650/0022)

Unit summary	In this unit the learner will be able to manage a range of network devices, configure a range of server types and design a network infrastructure. Learners will also understand the application of cloud services and virtualisation.
Guided learning hours	40
Level	3
Mandatory/optional	Mandatory

Learning outcome 1

The learner will:

1 Be able to manage a range of network devices

The learner can:

1.1 Explain the **role** of **network devices** within a network architecture
1.2 Configure a range of **network devices**
1.3 Troubleshoot a range of **network devices**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
1.1	**Role:** • what the devices do • how the devices work together in a network architecture **Network devices:** • switch • router • firewall	• professional discussion supported by preparation notes • presentation • report
1.2	Learners must configure a small network, including the following network devices. Centres can use simulation software. **Network devices:** • switch • router • firewall	• practical demonstration supported by video recording or observation

AC	Assessment guidance	Suggested assessment methods
1.3	Learners must troubleshoot standard network issues on any one of the following devices. Centres can use simulation software. **Network devices:** • switch • router • firewall	• practical demonstration supported by video recording or observation

Learning outcome 2

The learner will:

2 Understand the role of servers and shared resources within a network architecture

The learner can:

2.1 Explain the function of a range of **server types**
2.2 Configure a range of **server types**
2.3 Describe the function of **shared network resources**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
2.1	**Server types:** • directory • Domain Name System (DNS) • Dynamic Host Configuration Protocol (DHCP) • file server • print server • mail servers • application servers • database servers • web, proxy and cache servers	• professional discussion supported by preparation notes • presentation • report
2.2	Centres can use simulation software. **Server types:** • directory • Domain Name System (DNS) • Dynamic Host Configuration Protocol (DHCP) • file server	• practical demonstration supported by video recording or observation
2.3	**Shared network resources:** • storage area network (SAN) • multi-function devices (MFD) • voice over internet protocol (VoIP) • Internet Protocol (IP) cameras	• professional discussion supported by preparation notes • presentation • report

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Learning outcome 3

The learner will:

3 Be able to design a network infrastructure

The learner can:

3.1 Describe the differences between a range of **network topologies**
3.2 Explain the **features** of network addressing
3.3 Describe the **differences** between on-premise, cloud and hybrid networks
3.4 Create a **network infrastructure diagram**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
3.1	**Network topologies:** • bus • ring • star • mesh	• professional discussion supported by preparation notes • presentation

3.2	**Features:**
	
	• Media Access Control (MAC) addresses
	• Internet Protocol (IP) addresses:
	  ○ IPv4
	  ○ IPv6
	• ports
	• subnets
	• number system associated with MAC and IP addresses
	• fully qualified domain name (FQDN)
		• professional discussion supported by preparation notes
		• presentation

3.3	**Differences,** in relation to: • location • cost • scalability • resilience • maintenance and management	• professional discussion supported by preparation notes • presentation

AC	Assessment guidance	Suggested assessment methods
3.4	**Network infrastructure diagram,** must include: • network devices • appropriate topology • appropriate symbols and variations • servers and clients • network addressing	• network infrastructure diagram with annotation • presentation

Learning outcome 4

The learner will:

4 Understand the applications of cloud services and virtualisation

The learner can:

4.1 Explain the purpose of a range of **cloud services**
4.2 Describe the **benefits and limitations** of cloud services
4.3 Describe the **concept** of virtualisation
4.4 Discuss where virtualisation may be **applied** within digital infrastructure
4.5 Explain the **benefits and limitations** of virtualisation

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Assessment guidance

AC	Assessment guidance	Suggested assessment methods
4.1	**Cloud services:** • Software as a Service (SaaS) • Platform as a Service (PaaS) • Infrastructure as a Service (IaaS)	• report
4.2	**Benefits and limitations,** in relation to: • location • cost • scalability • resilience • maintenance and management	• report
4.3	**Concept,** including: • role of the hypervisor • type 1 and type 2 hypervisors	• report
4.4	Learners must include: • why and where virtualisation is used • benefits and limitations of the different areas of virtualisation	• report

AC	Assessment guidance	Suggested assessment methods
	Applied: • network virtualisation • server virtualisation • desktop virtualisation • operating system virtualisation • data virtualisation	
4.5	**Benefits and limitations,** in relation to: • location • cost • scalability • resilience • maintenance and management	• report

Unit 03 Data management (A/650/0023)

Unit summary	In this unit the learner will understand the concepts and fundamentals of data, including the purpose and process of backing up data. Learners will understand how organisations use information systems, and be able to use information systems effectively, appropriately and securely. Learners will also be able to source, cleanse and save a data set for analysis.
Guided learning hours	35
Level	3
Mandatory/optional	Mandatory

Learning outcome 1

The learner will:

1 Understand the concepts and fundamentals of data

The learner can:

1.1 Explain the differences between a range of **data types** used in organisations
1.2 Describe how organisations use **various types of data**
1.3 Describe the advantages and limitations of different **search algorithms**
1.4 Describe the advantages and limitations of different **data storage methods and technologies**
1.5 Analyse the **differences** between a database, data warehouse and data lake
1.6 Explain the **considerations** for an organisation when storing data
1.7 Explain the **principles of organising data**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
1.1	**Data types:** • structured • unstructured • semi-structured	• report • infographic

AC	Assessment guidance	Suggested assessment methods
1.2	**Various types of data,** such as: • public (for example, market research) • government (for example, academic and journalistic research, official statistics) • competitor (for example, competitor market share, pricing and current offering) • sector/industry (for example, regional trends analysis, predictions and forecasting) • sales (for example, product performance analysis) • marketing (for example, customer engagement data, which provides insight into target audience) • financial (for example, profit and loss over a period) • employee (for example, workforce demographics) • customer data (for example, customer demographics) • usage data (for example, website traffic data)	• report • infographic
1.3	**Search algorithms:** • binary • linear • interpolation	• report • infographic
1.4	**Data storage methods and technologies:** • internal databases • solid state drive (SSD) and hard disk drive (HDD) • portable storage devices • network attached storage (NAS) devices • storage area network (SAN) • elastic cloud/scalable storage • cloud-based database services	• report • infographic

1.5	**Differences:**
	
	• database, for example:
	  ○ generic storage system, that stores data for a specific purpose
	• data lake, for example:
	  ○ stores big amounts of unstructured, raw data, the purpose of which may not yet be realised
	• data warehouse, for example:
	  ○ will store vast amounts of structured big data
		• report
		• infographic

AC	Assessment guidance	Suggested assessment methods
1.6	**Considerations,** in relation to**:** • data sovereignty • data security/privacy • cost • volume of data • technical requirements	• report • infographic

1.7	**Principles of organising data:**
	
	• using an accepted file format for the data format:
	  ○ text (for example, JSON, CSV)
	  ○ still image (for example, JPEG, PNG)
	  ○ video (for example, MP4, MOV)
	  ○ audio (for example, WAV, MP3)
	  ○ database (for example, XML, CSV, TAB)
	• defining rules for the organisation of folders, for example:
	  ○ directory structures
	  ○ controlled permissions
	  ○ agreed naming conventions, which are meaningful, location independent
	  ○ file structure character limits
	• using version control, such as:
	  ○ minor versions (for example, v0.1, v0.2)
	  ○ major versions (for example, v1.0, v2.0)
	  ○ updates (for example, v1.1, v1.2)
		• report
		• infographic

Learning outcome 2

The learner will:

2 Understand the purpose and process of backing up data

The learner can:

2.1 Explain how data can be **classified**
2.2 Explain the **benefits** of backing up data
2.3 Explain the differences between a range of **backup approaches**
2.4 Explain **considerations** to make when backing up data
2.5 Perform a backup, following a **backup plan**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
2.1	**Data classification:** • public • internal only • confidential • restricted	• professional discussion supported by preparation notes
2.2	**Benefits,** in relation to: • regulation or legislative requirements • recovery (for example, quick access to files/easy recovery of files) • protection (for example, viruses, breaches or loss of data)	• professional discussion supported by preparation notes
2.3	**Backup approaches:** • full • incremental • differential	• professional discussion supported by preparation notes

AC	Assessment guidance	Suggested assessment methods
2.4	**Considerations,** for example: • the number of copies required • backup location (for example, local or offsite (cloud), online or offline) • back up medium (for example, on SSD) • separate schedules for different types of data • retention schedule • typical backup times (for example, outside work hours when there is not much activity on the network) • classification of the data • level of encryption required	• professional discussion supported by preparation notes
2.5	**Backup plan,** must include: • files to be backed up • frequency of the backup schedule • appropriate backup location The learner must then execute the backup plan.	• practical demonstration supported by video recording or observation • video tutorial

Learning outcome 3

The learner will:

3 Understand how organisations use information systems

The learner can:

3.1 Describe the **benefits** to an organisation of using information systems
3.2 Describe the purpose of a range of **common information systems**
3.3 Describe **functions** of information systems

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
3.1	**Benefits,** for example: • improve information maintenance • support service delivery • support best working practice in an organisation • provide operational efficiencies • improve communication within the organisation • improve customer service	• presentation • professional discussion supported by preparation notes • report
3.2	**Common information systems,** for example: • payroll in human resources (HR) • inventory management • customer relationship management (CRM) • purchase order systems • timesheets • helpdesk	• presentation • professional discussion supported by preparation notes • report
3.3	**Functions,** in relation to: • input • storage • processing • output • feedback loop	• presentation • professional discussion supported by preparation notes • report

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Learning outcome 4

The learner will:

4 Be able to use data and information systems effectively, appropriately and securely

The learner can:

4.1 Describe the differences between a **data system** and an **information system**
4.2 Demonstrate how to **secure a data system**
4.3 Demonstrate how to **use a data system effectively**
4.4 Demonstrate how to **link an information system to a data system**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
4.1	**Data system,** for example: • houses raw data **Information system,** for example: • accesses the data system • interprets and presents data in a system appropriate to the task	• presentation • professional discussion supported by preparation notes • recorded observation • video tutorial
4.2	**Secure a data system,** must include: • ensuring appropriate encryption between the server and the client • configuring appropriate access controls	• practical demonstration supported by video recording or observation • video tutorial
4.3	**Use a data system effectively,** must include: • ensuring data is downloaded securely (for example, via hypertext transfer protocol secure, (HTTPS)) • performing queries or searches (for example, searching, sorting or grouping)	• practical demonstration supported by video recording or observation • video tutorial

AC	Assessment guidance	Suggested assessment methods
4.4	**Link an information system to a data system,** must include: • ensuring secure connection • requesting data using an appropriate information system • displaying the data in the information system This could be accomplished through: • using simulation software (for example, packet tracer) • linking a dashboard to Microsoft (MS) SharePoint file • linking a spreadsheet to Google gauges • using any other suitable method	• practical demonstration supported by video recording or observation • video tutorial

Learning outcome 5

The learner will:

5 Understand the importance of preparing data for data analysis

The learner can:

5.1 Explain how to ensure the **quality of data**
5.2 Describe the stages of the **ETL data integration model**
5.3 Discuss the **considerations** to make when selecting a data analysis tool
5.4 **Source, cleanse and save** a data set for analysis

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
5.1	**Quality of data,** in relation to: • data cleansing • data validation • data sorting • indexing	• presentation • professional discussion supported by preparation notes • report
5.2	**ETL data integration model:** • Extract • Transform • Load	• presentation • professional discussion supported by preparation notes • report
5.3	**Considerations,** for example: • size of data • type of data (for example, raw or processed data) • cost implications of the tool • existing infrastructure (for example, any required upgrades) • security required for the data set being analysed • time (for example, server cluster or container versus single server)	• presentation • professional discussion supported by preparation notes • report

AC	Assessment guidance	Suggested assessment methods
5.4	**Source,** must include: • data from a secondary source (for example, gov.uk or Kaggle) • data with a minimum of 500 data entry points **Cleanse,** must include: • appropriate software to cleanse and validate the data (for example, MS Excel or Python) **Save,** must include: • an appropriate file format (for example, .csv or .xls)	• practical demonstration supported by video recording or observation • video tutorial

Learning outcome 6

The learner will:

6 Be able to use visualisation to present information about data

The learner can:

6.1 Explain the **purpose** of data visualisation
6.2 Explain the differences between a range of **data visualisation methods**
6.3 **Select, create and present** data visualisations based on a dataset

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Assessment guidance

AC	Assessment guidance	Suggested assessment methods
6.1	**Purpose,** for example: • to communicate the data • to help create a narrative from the data • identify patterns or trends	• professional discussion supported by preparation notes • report
6.2	**Data visualisation methods,** for example: • chart • graphs (for example, bar or line) • tables • charts (for example, pie, funnel or area) • maps • heatmaps • infographics • dashboards	• professional discussion • report
6.3	**Select,** must include: • an appropriate visualisation method for the data set (for example, when looking at the relationship between height and weight data, a line graph may be most appropriate) **Create,** must include: • an appropriate visualisation software (for example, MS Excel or Python)	• practical demonstration supported by video recording or observation • presentation

	Present, must include: • visualisations in an appropriate file format • clear, labelled and correctly formatted visualisations • trends and patterns identified in the data set	

Unit 04 Digital security (D/650/0024)

Unit summary	In this unit, learners will understand the importance of information security management and the mitigation controls used to protect organisational data. They will be able to use a security information and event management (SIEM) software and understand how to establish whether a vulnerability has been exploited.
Guided learning hours	30
Level	3
Mandatory/optional	Mandatory

Learning outcome 1

The learner will:

1 Understand the importance of information security management in protecting organisational data

The learner can:

1.1 Identify a range of **organisational data** that may need to be kept secure
1.2 Describe **how to use** a data catalogue to identify an organisation's data source
1.3 Explain the **principles** of a Data Protection Impact Assessment (DPIA)
1.4 Describe the **principles** of information security
1.5 Discuss the **importance** of managing information security within an organisation
1.6 Describe the **protocols** to control access to information
1.7 Create a **data catalogue**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods

1.1	**Organisational data:**
	
	• company, for example:
	  ○ profit margins
	  ○ trade secrets
	  ○ cost of raw materials
	• personal, for example:
	  ○ identifiable colleague or customer data
	  ○ bank details
	  ○ colleague salaries
	  ○ medical information
	  ○ colleague appraisal/disciplinary information
		• report
		• podcast

AC	Assessment guidance	Suggested assessment methods
1.2	**How to use:** • establish where the data is stored • establish what the data is used for • identify whether the data is password protected or encrypted	• report • podcast
1.3	**Principles,** with reference to Information Commissioners Office (ICO) guidelines: • identifying the nature, scope, context and purposes of the processing • assessing the necessity, proportionality and compliance measures • identifying and assessing the risks to individuals • identifying any additional measures to mitigate those risks	• report • podcast
1.4	**Principles:** • confidentiality: o ensuring only authorised users have access to information • integrity: o preventing information being updated by unauthorised personnel, thus ensuring the information is trustworthy and accurate • availability: o ensuring the information is always available to authorised personnel, (for example, by ensuring backups of data) • accountability: o the ability to prove or disprove that something was, or has been, carried out and by whom, (for example, auditing data)	• report • podcast
1.5	**Importance,** for example: • ensures compliance with regulations • avoids financial, legal and reputational implications • protects organisational data • safeguards organisational technology • enables safe operation of the applications used on an organisation's IT system	• report • podcast

AC	Assessment guidance	Suggested assessment methods
1.6	**Protocols:** • authentication • authorisation • accounting	• report • podcast
1.7	**Data catalogue,** must include: • type of organisational data (for example, company profit margins, personal data) • location of data • data owners • protection methods (for example, encryption)	• production of a data catalogue

Learning outcome 2

The learner will:

2 Understand a range of mitigation controls used to support information security

The learner can:

2.1 Describe the interrelationship between **a threat, a vulnerability, weaponisation and an exploit**
2.2 Describe a range of digital security **threats and vulnerabilities**
2.3 Describe the **application** of a range of mitigation controls

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Assessment guidance

AC	Assessment guidance	Suggested assessment methods
2.1	**Threat:** • the assets/data an organisation is trying to protect **Vulnerability:** • weaknesses that can expose an organisation to threats (for example, a weak encryption mechanism, insecure login) **Weaponisation:** • taking a vulnerability and constructing an exploit for it **Exploit:** • the vulnerability being exploited, resulting in the loss, damage or destruction of assets or data	• infographic
2.2	Descriptions must include how the threats and vulnerabilities may be used against an organisation **Threats,** to include technical and non-technical, for example: • hacking • malicious spam • malware • phishing	• infographic

AC	Assessment guidance	Suggested assessment methods
	Vulnerabilities, to include technical and non-technical, for example: • social engineering attacks • unlocked doors to building • lack of training • unpatched end points	
2.3	**Application,** for example: • vulnerability management • penetration testing • controlling access • anti-malware software • software updates • encryption • strong password protection and authentication (for example, 2-factor authentication (2FA)) • secure Wi-Fi • disaster recovery and business continuity • device hardening	• infographic

Learning outcome 3

The learner will:

3 Be able to use security Information and event management (SIEM) software

The learner can:

3.1 Describe the **purpose** of SIEM software
3.2 Describe the **SIEM process**
3.3 Identify **different types of data** that SIEM captures
3.4 **Interpret** the output of a SIEM report for an event

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
3.1	Descriptions must include the benefits of using SIEM software. **Purpose,** for example: • detects threats • monitors security • supports incident response • collects security data	• written guide • video tutorial
3.2	**SIEM process:** • collects log and event data • combines information from different sources into a centralised platform (for example, anti-virus and firewall) • analyses and categorises the data • identifies threats and generates alerts • defines threat levels	• written guide • video tutorial
3.3	**Different types of data,** for example: • timestamps • logon events • directory access • changes to account privileges • process tracking	• written guide • video tutorial

AC	Assessment guidance	Suggested assessment methods
3.4	**Interpretation,** must include: • type of activity • threat level • remediation actions	• written guide • video tutorial

Learning outcome 4

The learner will:

4 Understand how to establish if a vulnerability has been exploited

The learner can:

4.1 Describe the concept of **common vulnerabilities exposure (CVE) and common vulnerability scoring system (CVSS)**
4.2 Describe the **scoring matrix** within the CVSS
4.3 Explain the **process of risk management**
4.4 Investigate a range of **remediation techniques**
4.5 Identify known weaknesses within a device, network or application, using a vulnerability scan

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Assessment guidance

AC	Assessment guidance	Suggested assessment methods
4.1	**CVE**: • is a list of publicity available information that details cybersecurity vulnerabilities and exposures **CVSS**: • provides a uniformed way to identify and categorise threats associated with a particular vulnerability	• presentation • professional discussion supported by preparation notes • report • video tutorial
4.2	**Scoring matrix:** • 0–10 • severity ratings	• presentation • professional discussion supported by preparation notes • report • video tutorial
4.3	Learners must cover the purpose of each stage of the risk management process. **Process of risk management:** • identification • probability • impact • prioritisation • mitigation	• presentation • professional discussion supported by preparation notes • report • video tutorial

AC	Assessment guidance	Suggested assessment methods
4.4	**Remediation techniques,** for example: • patch • replace or decommission • air gap • upgrade/migrate • transfer the risk	• presentation • professional discussion supported by preparation notes • report • video tutorial
4.5	Learners may use vulnerability software to perform a vulnerability scan, linked to the CVSS database. Alternatively, learners may be provided with a vulnerability scan, to identify known weaknesses within a device, network or application.	• practical demonstration supported by video recording or observation • video tutorial

Unit 05 Supporting digital services (F/650/0025)

Unit summary	In this unit, learners will understand common digital problems and helpdesk requests, and will be able to resolve a helpdesk ticket. Learners will also be able to use a system log (syslog) and install, configure and deploy an operating system and software applications.
Guided learning hours	30
Level	3
Mandatory/optional	Mandatory

Learning outcome 1

The learner will:

1 Be able to manage a ticket when dealing with end users' digital problems

The learner can:

1.1 Summarise the **functions** of a helpdesk
1.2 Analyse the **helpdesk process** for managing tickets
1.3 Explain the **purpose** of a service level agreement (SLA)
1.4 Explain the **purpose** of performance and progress reporting
1.5 Describe the difference between the **levels of support** within an escalation route
1.6 **Resolve a helpdesk ticket**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
1.1	**Functions,** for example: • facilitates troubleshooting and early diagnosis • provides single point of contact • aids prioritisation of incidents or request • provides updates on incident or request • resolves issues or incidents • provides reporting facilities	• professional discussion supported by preparation notes • report • presentation

1.2	**Helpdesk process:**
	• user:
	  ○ logs ticket
	• helpdesk:
	  ○ automatically acknowledges ticket
	• technician:
	  ○ determines whether the ticket is an incident or a request
	  ○ uses diagnostic or analytical tools to establish a probable cause
		• professional discussion supported by preparation notes
		• report
		• presentation

AC	Assessment guidance	Suggested assessment methods
	○ reviews fault history to identify any potential trends, issues or known faults ○ prioritises the ticket ○ creates an action plan to resolve the ticket or escalate ○ implements the required solution ○ logs resolution and closes ticket	
1.3	**Purpose,** for example: • setting expectations for the resolution of the request or incident • helping to prioritise workloads • setting out the quality of service provided to a business • setting out the services provided to a business • protecting brand reputation	• professional discussion supported by preparation notes • report • presentation
1.4	**Purpose:** • performance reporting, for example, identifying: the number of outstanding tickets: ○ fault trends ○ infrastructure stability ○ number of tickets resolved ○ number of tickets that fulfil SLAs ○ cost per ticket • progress reporting, for example, identifying: ○ progress of the ticket ○ resolution timescale ○ attempted solutions	• professional discussion supported by preparation notes • report • presentation
1.5	**Levels of support:** • 1st line • 2nd line • 3rd line	• professional discussion supported by preparation notes • report • presentation

AC	Assessment guidance	Suggested assessment methods
1.6	**Resolve a helpdesk ticket,** must include: • working within the service level agreements • reviewing ticket to ensure all required information is present • prioritising the ticket • attempting 1st line resolution or escalating the ticket • logging actions in the ticket • using appropriate communication skills (for example, using technical/non-technical language appropriate to the user)	• practical demonstration supported by video recording or screenshots

Learning outcome 2

The learner will:

2 Understand digital problems and helpdesk requests in the digital support sector

The learner can:

2.1 Describe **common digital problems**
2.2 Describe **common helpdesk requests**
2.3 Describe the application of **tools and techniques** used to resolve users' digital problems
2.4 Explain **best practice principles** for incident and request management
2.5 **Resolve digital problems**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
2.1	**Common digital problems:** • hardware (for example, hardware not plugged in, obvious damage) • software (for example, missing user profile, software not running as planned) • user (for example, lack of training, password reset) • connectivity (for example, slow or no network/internet connectivity)	• professional discussion supported by preparation notes • report • presentation
2.2	**Common helpdesk requests,** such as: • password management • access permissions (for example, allowing or restricting access) • user setup • software upgrade requests, including patching • mobile device management (for example, segregation) • new software installation and licencing check	• professional discussion supported by preparation notes • report • presentation
2.3	**Tools and techniques,** for example: • system alerts • dashboards • live traces • activity/error logs • system recovery tools	• professional discussion supported by preparation notes • report • presentation

AC	Assessment guidance	Suggested assessment methods
2.4	**Best practice principles:** • detection • response • intelligence	• professional discussion supported by preparation notes • report • presentation
2.5	**Resolving a digital problem,** must include: • identifying and using an appropriate tool or technique • applying incident management principles **Digital problems,** for example: • hardware problem • software problem • connectivity	• practical demonstration supported by video recording or observation

Learning outcome 3

The learner will:

3 Be able to use a system log (syslog)

The learner can:

3.1 Describe the **purpose** of a syslog server
3.2 Identify **different types of information** that a syslog captures
3.3 Demonstrate the **installation** of a syslog server
3.4 **Interpret** the output of a syslog during and after an event

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Assessment guidance

AC	Assessment guidance	Suggested assessment methods
3.1	Learner must include in the description the benefits of using a syslog server. **Purpose,** for example: • collects logs from different machines for monitoring of activities and failures • helps diagnose issues quicker • supports with the troubleshooting process	• professional discussion supported by preparation notes • report • presentation

3.2	**Different types of information,** for example:
	
	• host IP addresses
	• timestamps
	• event-based messages, such as:
	  ○ content
	  ○ application
	  ○ transport
	• severity labels:
	  ○ informational
	  ○ warning
	  ○ high
	  ○ critical
		• professional discussion supported by preparation notes
		• report
		• presentation

3.3	**Installation,** must include: • installing the software • configuring the device to the syslog server (devices could include desktop PC, network switches, firewalls and servers) • checking the firewalls allowing syslog communication • analysing data captured in the syslog server	• practical demonstration supported by video recording or observation • video tutorial

AC	Assessment guidance	Suggested assessment methods
3.4	Learners must analyse the results of their installation from 3.3 (tutors may need to engineer faults if there are none). **Interpret** the output of a syslog to identify: • host IP addresses • timestamps • event-based messages • severity labels • what has caused/is causing the issue (for example, content, application, transport)	• professional discussion supported by preparation notes • report • presentation

Learning outcome 4

The learner will:

4 Be able to install, configure and deploy an operating system

The learner can:

4.1 Describe how a range of **common operating systems** are used
4.2 Explain **installation, configuration and deployment requirements** for operating systems
4.3 Describe the **purpose** of using disk images to deploy operating systems
4.4 Explain the advantages and disadvantages of a range of **deployment methods** for operating systems
4.5 **Install, configure and deploy** an operating system

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
4.1	**Common operating systems,** for example: • Windows • Mac OS • Linux • iOS • Android	• video tutorial • professional discussion supported by preparation notes • report • presentation
4.2	**Installation, configuration and deployment requirements,** for example: • system requirements • hardware configuration • resource setup for performance optimisation • security considerations • boot methods • partitioning • file system types and formatting	• video tutorial • professional discussion supported by preparation notes • report • presentation
4.3	**Purpose,** for example: • ensures standardised and efficient deployment • minimises ongoing support costs • provides full systems backup	• video tutorial • professional discussion supported by preparation notes • report • presentation

AC	Assessment guidance	Suggested assessment methods
4.4	**Deployment methods,** for example: • remote • in-person • networked • manual • manual clean install • multi-boot	• video tutorial • professional discussion supported by preparation notes • report • presentation
4.5	**Install,** must include: • selecting the correct operating system for the purpose • choosing the correct installation media **Configure,** must include: • installing required hardware drivers • testing the configuration **Deploy,** must include: • creating a new image of the system • using an appropriate deployment tool • deploying locally and remotely	• practical demonstration supported by video recording or observation • video tutorial

Learning outcome 5

The learner will:

5 Be able to install, configure and deploy software applications

The learner can:

5.1 Describe a range of **application types**
5.2 Explain installation and configuration **requirements** for software applications
5.3 Explain a range of software application **deployment methods**
5.4 **Install, configure test and deploy** software applications on to end-user devices

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Assessment guidance

AC	Assessment guidance	Suggested assessment methods
5.1	**Application types,** for example: • enterprise software (such as, word processing applications) • communication software (such as, web conferencing applications) • web software (such as, web browser)	• video tutorial • report • presentation • professional discussion supported by preparation notes
5.2	**Requirements,** for example: • security considerations (such as, using approved software) • software licencing (such as, concurrent and non-concurrent licences) • user permissions • network permissions	• video tutorial • report • presentation • professional discussion supported by preparation notes
5.3	**Deployment methods,** for example: • local (such as, single user) • network (such as, multi-user) • server • cloud Learners must include in their explanations: • the differences between the deployment methods • when to use the different methods	• video tutorial • report • presentation • professional discussion supported by preparation notes

AC	Assessment guidance	Suggested assessment methods
5.4	**Install,** must include: • choosing the correct installation method • checking the licence requirement for the install **Configure,** must include: • configuring user preferences • configuring the network ports **Test and deploy,** must include: • testing the configuration • using local and network deployment method	• practical activity supported by observation • video tutorial

Unit 06 Supporting digital transformation (H/650/0026)

Unit summary	In this unit, the learner will understand the fundamentals of digital transformation and be able to create a digital strategy. They will understand digital project management methodologies and working practices, be able to use a range of digital applications, and act as a digital champion by providing end-user support.
Guided learning hours	25
Level	3
Mandatory/optional	Mandatory

Learning outcome 1

The learner will:

1 Apply the fundamentals of digital transformation to develop a digital strategy

The learner can:

1.1 Explain the **purpose** of digital transformation
1.2 Explain the **characteristics** of successful digital transformations
1.3 Describe **barriers** to digital transformation
1.4 Evaluate **current, emerging and fringe digital technologies** and how they may contribute to a digital transformation strategy
1.5 Create a **digital strategy** for a given organisation

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
1.1	**Purpose,** for example: • integrating digital technology into business models, processes or cultural practice • responding to client expectations • promoting efficient working practices for processes and people • allowing an organisation to remain competitive	• presentation • professional discussion supported by preparation notes • report
1.2	**Characteristics,** for example: • having a digital strategy • having a digital-first culture • using technology innovatively • using data to inform decision making • focusing on the customer experience • defining operational processes	• presentation • professional discussion supported by preparation notes • report

AC	Assessment guidance	Suggested assessment methods
1.3	**Barriers,** for example: • financial • poor communication of the strategy • resistance to change within the organisation • negative attitudes from employees • lack of management support	• presentation • professional discussion supported by preparation notes • report

1.4	**Current, emerging and fringe digital technologies,** such as:
	
	• connectivity, for example:
	  ○ 5G
	• faster processing, for example:
	  ○ quantum computing/internet
	  ○ artificial intelligence (AI)/machine learning
	  ○ natural language processing
	  ○ serverless computing (aka Function as a Service (FaaS))
	• automation, for example:
	  ○ robotics
	  ○ Internet of Things (IoT)
	  ○ drones
	  ○ application of 3D printing
	• mixed reality, for example:
	  ○ augmented reality
	  ○ virtual reality
	• blockchain, for example:
	  ○ cryptocurrencies
	  ○ data storage
		• presentation
		• professional discussion supported by preparation notes
		• report

1.5	Learners must be presented with an organisation for which they must create a digital strategy. **Digital strategy,** must include: • key clients/audience of the organisation • the vision for the organisation • short-term and long-term goals • relevant digital technologies that could be used • definition of how success will be measured • timescales (for example, phased implementation of new technologies)	• report • infographic timeline • presentation outlining the strategy

Learning outcome 2

The learner will:

2 Understand digital project management methodologies and working practices

The learner can:

2.1 Describe the **differences** between waterfall and agile methodologies
2.2 Explain the **advantages and limitations** of waterfall and agile methodologies
2.3 Explain the **stages** of waterfall and agile methodologies
2.4 Explain the **purpose** of Development and Operations (DevOps) in software development
2.5 Explain the **purpose** of Continuous Innovation with Continuous Development (CI/CD) in software development

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Assessment guidance

AC	Assessment guidance	Suggested assessment methods

2.1	**Differences:**
	
	• waterfall (for example):
	  ○ structured approach
	  ○ linear, sequential process, completes one step at a time
	  ○ no scope for changing requirements
	• agile (for example):
	  ○ systematic approach to process management
	  ○ development and testing activities are concurrent
	  ○ flexible approach
	  ○ allows scope for changing requirements
	  ○ allows for more client feedback
		• infographic
		• presentation
		• professional discussion supported by preparation notes
		• report

2.2	**Advantages** of waterfall methodology, for example: • suited to smaller-sized projects • easier to manage • quicker implementation of the project • easier to manage dependencies within a project • easier to consistently document the process and results	• infographic • presentation • professional discussion supported by preparation notes • report

AC	Assessment guidance	Suggested assessment methods
	Limitations of waterfall methodology, for example: • requirements must be explicit from the start • lack of flexibility to make changes in the previous stages • testing is at the end of the process, so there is a greater chance of bugs and it can be more expensive to fix **Advantages** of agile methodologies, for example: • clear roles and responsibilities of all team members • more efficient and cost-effective, as development and testing take place concurrently • easier to meet clients' evolving requirements **Limitations** of agile methodologies, for example: • requires more intensive project management • easier for the project to go off-track • can be more costly in practice	
2.3	**Stages:** • project initiation • planning the requirements of the project • designing the outcome • project development • integration and testing • deployment • feedback	• infographic • presentation • professional discussion supported by preparation notes • report
2.4	**Purpose,** for example: • uses agile principles to promote collaboration between development and operation teams	• infographic • presentation • professional discussion supported by preparation notes • report
2.5	**Purpose,** for example: • enables continuous integration, continuous delivery, and continuous deployment of software/app development	• infographic • presentation • professional discussion supported by preparation notes • report

Learning outcome 3

The learner will:

3 Be able to use a range of digital applications

The learner can:

3.1 Describe the **use cases** for a range of **digital applications**
3.2 Communicate using a range of **office systems and web technologies**

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
3.1	**Use cases,** for example: • purpose of the system, including how they may be used within an organisation • licencing requirements • examples of software **Digital applications,** for example: • customer relationship management (CRM) • case management tool (CMT) (for example, ITIL case management tools) • enterprise resource planning (ERP) • financial management tools • unified communications • document storage	• presentation • professional discussion supported by preparation notes • report
3.2	**Office systems and web technologies,** must include: • using video conferencing technology • creating a mass email list and using a mass email tool to distribute to a defined internal distribution list • creating and publishing a survey using an appropriate tool set (for example, SurveyMonkey or Microsoft Forms) • interacting using instant messaging • creating and recording a webinar	• practical demonstration supported by video recording, observation or screenshots

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Learning outcome 4

The learner will:

4 Act as a digital champion by providing end user support

The learner can:

4.1 Describe the **purpose** of coaching
4.2 Identify **situations** where coaching may be required
4.3 Use the **GROW model** to give practical and technical support and guidance
4.4 Apply a range of **communication techniques** when supporting end users
4.5 Create a **training session** on a new type of software

Assessment guidance

AC	Assessment guidance	Suggested assessment methods
4.1	The learners' description of the **purpose** must include: • how coaching informs self-analysis • how coaching can help end users adapt to change • how coaching can help improve productivity and performance	• presentation • professional discussion supported by preparation notes • report
4.2	**Situations,** for example: • 1st line support, (such as, helpdesk or chat function) • implementing new software to the business • staff training and upskilling, (such as, change in job role or new responsibilities added to existing job role)	• presentation • professional discussion supported by preparation notes • report
4.3	**GROW model (Whitmore, 1992):** • goal setting: agreeing and understanding the goals for the task • reality checking: identifying the current situation, what resources are required • options/obstacles: exploring the options, solutions or barriers to help resolve the task • will/way forward: defining actions and agreeing timescales	• role play supported by video recording or observation

AC	Assessment guidance	Suggested assessment methods

4.4	**Communication techniques,** such as:
	
	• effective questioning, for example:
	  ○ using a range of questioning techniques (for example, open and closed questions)
	  ○ using appropriate body language
	  ○ using the appropriate level of vocabulary (for example, technical and non-technical language)
	  ○ using instructional scaffolding (for example, inexperienced individuals may need more support than experienced individuals)
	• active listening, for example:
	  ○ interpreting and evaluating
	  ○ interpreting non-verbal cues (for example, body language)
	  ○ paraphrasing/reflecting back for confirmation
	• positive communication, for example:
	  ○ being open and honest when communicating
	  ○ using constructive, non-confrontational language
	  ○ using a reassuring tone
		• role play supported by video recording, observation or screenshots
		• practical demonstration supported by video recording, observation or screenshots

4.5	The training session can be on any type of software the learner chooses. **Training session,** must include: • introduction • purpose of the software • features/benefits of the software • basic functions of the software • intermediate functions of the software • demonstration of functions of the software	• presentation • video tutorial • practical demonstration supported by video recording or observation

Assessment strategies and principles relevant to this qualification

The units we offer have been developed in line with the specific assessment strategies or principles of different Sector Skills Councils (SSCs) or by us where there is no SSC lead.

The key requirements of the assessment strategies or principles that relate to units in this qualification are summarised below.

The centre needs to ensure that individuals undertaking assessor or quality assurer roles within the centre conform to the SSC or our assessment requirements for the unit they are assessing or quality assuring.

Assessment strategy

Knowledge learning outcomes:

- assessors will need to be both occupationally knowledgeable and qualified to make assessment decisions
- internal quality assurers will need to be both occupationally knowledgeable and qualified to make quality assurance decisions

Competence/skills learning outcomes:

- assessors will need to be both occupationally competent and qualified to make assessment decisions
- internal quality assurers will need to be both occupationally knowledgeable and qualified to make quality assurance decisions

Section 3: explanation of terms

This table explains how the terms used at level 3 in the unit content are applied to this qualification (not all verbs are used in this qualification).

Apply	Explain how existing knowledge can be linked to new or different situations in practice.
Analyse	Break the subject down into separate parts and examine each part. Show how the main ideas are related and why they are important. Reference to current research or theory may support the analysis.
Clarify	Explain the information in a clear, concise way.
Classify	Organise according to specific criteria.
Collate	Collect and present information arranged in sequential or logical order.
Compare	Examine the subjects in detail and consider the similarities and differences.
Critically compare	This is a development of compare where the learner considers the positive aspects and limitations of the subject.
Consider	Think carefully and write about a problem, action or decision.
Demonstrate	Show an understanding by describing, explaining or illustrating using examples.
Describe	Write about the subject giving detailed information in a logical way.
Develop (a plan/idea which…)	Expand a plan or idea by adding more detail and/or depth of information.
Diagnose	Identify the cause based on valid evidence.
Differentiate	Identify the differences between 2 or more things.
Discuss	Write a detailed account giving a range of views or opinions.
Distinguish	Explain the difference between 2 or more items, resources, pieces of information.
Draw conclusions (which…)	Make a final decision or judgement based on reasons.
Estimate	Form an approximate opinion or judgement using previous knowledge or considering other information.
Evaluate	Examine strengths and weaknesses, arguments for and against and/or similarities and differences. Judge the evidence from the different perspectives and make a valid conclusion or reasoned judgement. Reference to current research or theory may support the evaluation.

Explain	Provide detailed information about the subject with reasons showing how or why. Responses could include examples to support these reasons.
Extrapolate	Use existing knowledge to predict possible outcomes that might be outside the norm.
Identify	Recognise and name the main points accurately. (Some description may also be necessary to gain higher marks when using compensatory marking).
Implement	Explain how to put an idea or plan into action.
Interpret	Explain the meaning of something.
Judge	Form an opinion or make a decision.
Justify	Give a satisfactory explanation for actions or decisions.
Perform	Carry out a task or process to meet the requirements of the question.
Plan	Think about and organise information in a logical way using an appropriate format.
Provide	Identify and give relevant and detailed information in relation to the subject.
Reflect	Learners should consider their actions, experiences or learning and the implications of this for their practice and/or professional development.
Review and revise	Look back over the subject and make corrections or changes.
Select	Make an informed choice for a specific purpose.
Show	Supply evidence to demonstrate accurate knowledge and understanding.
State	Give the main points clearly in sentences or paragraphs.
Summarise	Give the main ideas or facts in a concise way.

Section 4: support

Support materials

The following support materials are available to assist with the delivery of this qualification and are available on the NCFE website:

- learner's evidence tracking log (LETL)
- qualification factsheet

Useful websites

Centres may find the following website helpful for information, materials and resources to assist with the delivery of this qualification:

- www.kaggle.com/datasets

These links are provided as sources of potentially useful information for delivery/learning of this subject area. NCFE does not explicitly endorse any learning resources available on these websites. For official NCFE-endorsed learning resources, please see the additional and teaching materials sections on the qualification page on the NCFE website.

Other support materials

The resources and materials used in the delivery of this qualification must be age-appropriate and due consideration should be given to the wellbeing and safeguarding of learners in line with your institute's safeguarding policy when developing or selecting delivery materials.

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Appendix A

Units

To make cross-referencing assessment and quality assurance easier, we have used a sequential numbering system in this document for each unit

 Knowledge-only units are indicated by a star. If a unit is not marked with a star, it is a skills unit or contains a mix of knowledge and skills.

Mandatory units

Unit number	Regulated unit number	Unit title	Level	GLH
Unit 01	T/650/0021	Working in the digital support sector	3	20
Unit 02	Y/650/0022	Network infrastructure and cloud services	3	40
Unit 03	A/650/0023	Data management	3	35
Unit 04	D/650/0024	Digital security	3	30
Unit 05	F/650/0025	Supporting digital services	3	30
Unit 06	H/650/0026	Supporting digital transformation	3	25