

City & Guilds Diplomas in ICT Professional Competence (4520- 02/03/04)

Levels 1–4 Unit Handbook for Centres
(Units 301–396)

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City & Guilds Diplomas in ICT Professional Competence (4520-02/03/04)

Levels 1–4 Unit Handbook for Centres (Units 301–396)

Qualification title	Number	Ofqual number
City & Guilds Level 2 Diploma in ICT Professional Competence	4520-02	501/1789/0
City & Guilds Level 3 Diploma in ICT Professional Competence	4520-03	501/1788/9
City & Guilds Level 4 Diploma in ICT Professional Competence	4520-04	501/1787/7

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City & Guilds offers the following qualifications as part of its **ICT Professional Competence** qualification:

Qualification title	Number	Ofqual number
City & Guilds Level 2 Diploma in ICT Professional Competence	4520-02	501/1789/0
City & Guilds Level 3 Diploma in ICT Professional Competence	4520-03	501/1788/9
City & Guilds Level 4 Diploma in ICT Professional Competence	4520-04	501/1787/7

This unit handbook contains the units from Levels 1, 2, 3 and 4, which are part of the City & Guilds Level 2, 3 and 4 Diplomas in ICT Professional Competence.

The unit handbook should be read in conjunction with the *City & Guilds Diploma in ICT Professional Competence Qualification Handbooks* (4520-02, 4520-03, 4520-04), containing the following:

- Introduction to the qualifications
- Centre requirements
- Structure of the qualifications
- Course design and delivery.

These handbooks can be downloaded from www.cityandguilds.com

Structure of the units

The units in these qualifications are written in a standard format and comprise the following:

- City & Guilds unit number
- title
- level
- credit value
- Unit Accreditation Number (UAN)
- unit aim
- learning outcomes
- statement of guided learning hours
- how the unit is assessed
- assessment criteria.

Guidance for centres

A glossary (Appendix 1) contains a list of terms that appear in the units.

When first developed, units 301, 303, 305–317, 319, 321, 326–327, 371–380, 389–396 were endorsed by e-skills UK.

Barred combinations

Units that have a significant overlap in content are 'barred combinations'. Learners can take units that are barred and they will appear on the learner's Certificate of Unit Credit (CUC), but barred units will not both/all count towards the credit required for a qualification.

If a centre wishes to claim two (or more) barred units for a learner, they are advised to claim the unit that is most necessary to the rules of combination for the qualification and then wait until they receive the certification before they claim the other barred unit(s).

If a centre claims two (or more) barred units at the same time, they may not be recognised and therefore the learner will not be considered to have achieved the qualification.

Level: 3
Credit value: 12
UAN: F/500/7159

Unit aim

The aim of this unit is to teach the concepts of providing support to customers, and the techniques to do this correctly. The unit initially focuses on building a relationship of trust with the customer, and also helps the learner understand how to gain the information needed to provide the required support. Learners will also learn to understand the implications of customer satisfaction and looks at compliance with any organisational guidelines. The learner is also expected to contribute to the delivery of good customer service.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Understand how to provide ICT customer care by developing customer relationships
2. Be able to provide ICT customer care by developing customer relationships
3. Be able to contribute to improving the delivery of service

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **100** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-301 Customer care in ICT

Assessment Criteria

Outcome 1 Understand how to provide ICT customer care by developing customer relationships

The learner can:

1. Describe the uses of interpersonal communication techniques
2. Explain the different approaches and methods used for supporting technical and non-technical customers
3. Describe the organisational requirements for ICT customer care
4. Explain the effect of ICT customer care on the rest of the organisation

Outcome 2 Be able to provide ICT customer care by developing customer relationships

The learner can:

1. Monitor compliance with organisational requirements for ICT customer support
2. Follow organisational guidelines and procedures to communicate with customers
3. Interact effectively with customers to achieve agreed outcome

Outcome 3 Be able to contribute to improving the delivery of service

The learner can:

1. Describe the implications of customer satisfaction for the business
2. Describe the methods of measuring customer satisfaction levels
3. Suggest improvements to ICT service delivery
4. Handle complaints from customers following organisational guidelines
5. Gather specified customer satisfaction information
6. Analyse specified customer satisfaction information
7. Report on specified customer satisfaction information

Level: 3
Credit value: 12
UAN: H/602/2943

Unit aim

The aim of this unit is to give the learner a deeper understanding of health and safety. The learner will be expected to describe the difference between a hazard and a risk and be able to identify hazards associated with particular activities. The learner will also be expected to monitor compliance with any legislation that applies to health and safety.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Be able to carry out formal health and safety risk assessments in an ICT workplace
2. Be able to monitor compliance with relevant parts of health and safety procedures in an ICT workplace

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **90** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-302 Health and safety in ICT

Assessment Criteria

Outcome 1 Be able to carry out formal health and safety risk assessments in an ICT workplace

The learner can:

1. Describe the difference between hazards and risks
2. Describe the types of health and safety hazard that can arise as a result of work activities, covering:
 - use of display screens
 - incorrect use of protective equipment
 - improper use of tools and equipment
 - lifting or handling heavy objects
 - excessive noise
 - electricity
 - hazardous substances
3. Identify relevant legislation and regulations
4. Describe the relevant content of identified legislation and regulations
5. Undertake formal health and safety risk assessments

Outcome 2 Be able to monitor compliance with relevant parts of health and safety procedures in an ICT workplace

The learner can:

1. Participate in audits of working practices and inspections of work
2. Gather and record information on health and safety
3. Initiate suitable actions to deal with identified breaches of health and safety
4. Describe specified parts of organisational health and safety procedures
5. Provide guidance to immediate colleagues on health and safety

Unit 4520-303

Interpersonal and written communication

Level: 3
Credit value: 12
UAN: A/500/7208

Unit aim

The aim of this unit is to teach the learner how to communicate effectively both in writing and verbally. The unit will help the learner understand how to correctly verbalise what needs to be said, by using different tones and intonation, as well as adapting their style depending on the audience. This unit will help the learner listen to what people have to say through techniques, such as active listening.

This unit will also help the learner effectively communicate in writing; by looking at the way they structure their text. The unit will teach them the importance of using the correct grammar and spelling, as well as structuring their texts in certain ways depending on the intended need and audience.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Be able to send and receive complex information by communicating interpersonally
2. Understand and use written communication techniques
3. Be able to provide guidance to immediate colleagues on how to communicate information

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **100** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-303 Interpersonal and written communication

Assessment Criteria

Outcome 1 Be able to send and receive complex information by communicating interpersonally

The learner can:

1. Apply knowledge of the following interpersonal communication concepts:
 - verbal (eg intonation, tone and feedback (sometimes referred to as verbal attends)) and non-verbal techniques (eg smiling while talking on the phone, body language)
 - attentive listening (ie difference between hearing and listening)
 - positive and negative language
 - active listening (eg summarising, paraphrasing, body language)
 - listening barriers (eg background noise, distractions, lack of concentration)
 - types of question (eg open, closed and probing)
 - how to adapt style (eg intonation, inflexion, business or technical terminology and vocabulary) to audience needs
 - how to reduce listening barriers
 - cultural differences
2. Use the following interpersonal communication techniques:
 - modulating voice when speaking to suit the listener or audience
 - articulating and expressing ideas clearly and concisely
 - listening actively (eg by taking notes)
 - clarifying and confirming understanding (eg by paraphrasing or repetition)
 - responding to questions with accurate information
 - ensuring content is appropriate to the needs of the audience
 - identifying and avoiding listening barriers
 - maintaining focus on the purpose of the communication
 - select appropriate communication styles
 - adapt terminology and vocabulary to the needs of the audience
 - reduce barriers to listening
 - differentiate between facts and feelings

Outcome 2 Understand and use written communication techniques

The learner can:

1. Apply knowledge of the following written communication concepts:
 - Grammar, spelling
 - Business or technical terminology
 - Format and style for different communication channels (eg letter, memo, email and fax).
2. Use the following written communication techniques
 - following organisational guidelines and procedures
 - identifying and conveying key messages in writing (eg letter, fax, email, database notes)
 - using correct grammar and spelling
 - using and understanding appropriate business or technical terminology
 - ensuring content, format and style are appropriate to the audience and channel (eg letter, memo, fax, email, web chat)
 - structuring writing into a logical framework
 - conveying ideas and information in a clear and concise manner
 - identifying relevant information in written communications
 - reviewing or proofreading own written work
 - developing messages that convey alternative viewpoints
 - extracting key messages from written correspondence
 - reviewing and editing documents created by others

Outcome 3 Be able to provide guidance to immediate colleagues on how to communicate information

The learner can:

1. Provide guidance to immediate colleagues on how to communicate information

Level: 3
Credit value: 9
UAN: D/503/5549

Unit aim

The aim of this unit is to encourage the learner to look at themselves through understanding things such as their own development needs, how other people see them and understanding their role in their teams. This unit also teaches the learner about various legislations which govern the way we work in ICT. They are encouraged to look into professional bodies that are available to people working in this industry. This unit gives the learner an opportunity to reflect on working practices that could be improved.

Learning outcomes

There are **five** learning outcomes to this unit. The learner will:

1. Be able to develop own personal and professional skills
2. Be able to work as a member of a team to achieve defined goals and implement agreed plans
3. Understand what is meant by professional practice
4. Understand the ethical and legislative environment relating to IT activities
5. Be able to Improve organisational effectiveness

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **45** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-304 Develop own effectiveness and professionalism

Assessment Criteria

Outcome 1 Be able to develop own personal and professional skills

The learner can:

1. Identify own development needs and the activities needed to meet them
2. Obtain and review feedback from others on performance
3. Agree personal goals and participate in development activities to meet them

Outcome 2 Be able to work as a member of a team to achieve defined goals and implement agreed plans

The learner can:

1. Effectively plan and manage own time
2. Recognise and respect diversity, individual differences and perspectives
3. Accept and provide feedback in a constructive and considerate manner
4. Understand the responsibilities, interests and concerns of colleagues
5. Identify and reduce obstacles to effective teamwork

Outcome 3 Understand what is meant by professional practice

The learner can:

1. Describe the implications, and applicability for IT professionals of:
 - Data Protection Act
 - Computer Misuse Act
2. Identify the role of professional bodies for IT, and the benefits of membership to individuals and organisations
3. Describe quality management systems and standards for systems development

Outcome 4 Understand the ethical and legislative environment relating to IT activities

The learner can:

1. Identify the types of conflicts of interest which can arise for IT professionals
2. Describe the impact on an IT organisation of legislation covering:
 - Processing of financial transactions
 - Health and safety
 - Privacy, Confidentiality and Security
 - Copyright and Intellectual Property Rights

Outcome 5 Be able to Improve organisational effectiveness

The learner can:

1. Describe the aims and objectives of the organisation
2. Describe the organisation's brand or image and how it can be promoted
3. Identify the organisation's structure, roles and responsibilities
4. Identify potential improvements to organisational effectiveness

Level: 3
Credit value: 12
UAN: R/601/3249

Unit aim

The aim of this unit is to teach the learner, how to investigate the needs of users by looking into their existing systems and will explore all of the techniques needed to do this effectively. The learner will then learn how to analyse this information, as well as learning the techniques needed to record the results on standard documentation.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Be able to investigate existing systems and processes
2. Be able to analyse information to identify needs and constraints

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **75** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Assessment Criteria**Outcome 1 Be able to investigate existing systems and processes**

The learner can:

1. Use three of the following investigative methods:
 - observations
 - examination of existing documents, records or software
 - questionnaires
 - site surveys
2. Record the results of investigations using standard documentation
3. Explain the importance of preserving the confidentiality of customer information

Outcome 2 Be able to analyse information to identify needs and constraints

The learner can:

1. Describe the type of defect, including inaccuracy, duplication and omission, which can arise in information
2. Describe the types of customer needs and constraints which can affect the design of an ICT system
3. Analyse information to identify customer needs for:
 - data to be stored and processed
 - functionality in terms of inputs, processes and outputs
 - capacity including numbers of users, throughput, and data storage
4. Analyse information to identify customer constraints
5. Record the results of analyses using standard documentation

Level: 3
Credit value: 12
UAN: D/500/7217

Unit aim

The aim of this unit is to teach some of the concepts of supporting IT systems remotely. Learners will learn which products can be supported and how they can be supported, as well as learning about any organisational requirements that govern this topic. Learners will also learn the customer care aspects of remote support, such as customer service procedures. Whilst doing this, learners will learn how to follow any legislation.

This unit will also teach the learners how to provide and log the support given to users remotely, as well as communicating with users about products and services that may be available to them.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Understand the organisational requirements for customer care and the supported products and services
2. Be able to support products or services

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **100** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Assessment Criteria**Outcome 1 Understand the organisational requirements for customer care and the supported products and services**

The learner can:

1. Describe the products and services to be supported including:
 - benefits of the products and services
 - frequently used product or service options
 - advanced features, benefits and options of products and services
 - how to identify alternative products or services to meet customers' needs
 - how the products or services interact with others commonly available
 - where to obtain information on infrequently used product or service features or options
 - the impact of introducing new products and services
2. Describe the organisational requirements for customer care including:
 - customer service procedures (eg how to log customer information, how to initiate service calls, how to complete a sale)
 - authorisation procedures (eg how to confirm caller identity, how to validate requests)
 - escalation, resolution and complaint handling
 - quality assurance procedures
 - compliance with relevant legislation and regulations (eg data protection, financial services)
 - maintenance and communication of organisational brand or image
 - organisational aims and objectives

Outcome 2 Be able to support products or services remotely

The learner can:

1. Comply with organisational requirements
2. Confirm customer identity, validate requests and inform customers when authorisation criteria are not met
3. Communicate information on specified products or services
 - identifying customers' needs
 - accurately collecting and logging relevant information from the customer
 - providing product and service features to customers
 - ensuring customer understanding of the information provided
 - categorising requests and directing customers appropriately
 - managing customer expectations (eg by confirming outcomes, timescales or costs)
 - discussing advantages and disadvantages of complex products and services
 - discussing how the service product best fits the customers' needs
 - keeping customer informed on progress
 - asking effective and appropriate probing questions
4. Make recommendations based on customer needs

5. Resolve and escalate requests and handle basic complaints

- using probing questions
- displaying patience and understanding with demanding or emotional customers
- diffusing volatile situations using appropriate communication techniques
- delivering difficult messages to customers and explaining the reasons behind the decision
- assessing priority of complaints
- resolving routine complaints

Level: 3
Credit value: 12
UAN: D/500/7220

Unit aim

The aim of this unit is to teach the learner some of the fundamentals surrounding the security of ICT systems. In order to do this the learner will learn to identify common types of security breaches. The learner will also learn to describe methods of protection for data and systems as well as applying some of the security measures they have learnt about.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Know the common types of security threat to an organisation, its IT system and its data, with relevant methods and procedures for protecting it
2. Be able to apply security measures
3. Be able to monitor security procedures

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **100** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-307 Security of ICT systems

Assessment Criteria

Outcome 1 Know the common types of security threat to an organisation, its IT system and its data, with relevant methods and procedures for protecting it

The learner can:

1. Describe the common types of security breach that can affect the organisation, such as:
 - unauthorised use of a system without damage to data
 - unauthorised removal or copying of data or code from a system
 - damage to or destruction of physical system assets and environment
 - damage to or destruction of data or code inside or outside the system
 - preventing normal use of a system (eg denial of service attack)
 - cultural differences
2. Describe specified data protection methods:
 - system data security facilities
 - surveillance and monitoring methods
 - effects of system configuration on data protection
3. Describe specified methods of providing physical security for ICT systems:
 - access control devices (eg locks, biometric controls, CCTV) and their configuration
 - limiting visibility of data (eg by positioning of monitors, using encryption)
 - shielding (eg cable screening, Faraday cages)
 - types and appropriate uses of access records and authorisations
 - how to allocate access authority
4. Describe relevant organisational security procedures

Outcome 2 Be able to apply security measures

The learner can:

1. Configure and apply specified security tools to identify and prevent breaches of security, such as:
 - internal system tools (eg passwords and permissions, malware scanning, firewall, VPN, authentication and encryption facilities)
 - external tools (eg access control devices)

Outcome 3 Be able to monitor security procedures

The learner can:

1. Assist in ensuring compliance with organisational security procedures, including:
 - participating in security audits
 - gathering and recording information on security
 - initiating suitable actions to deal with identified breaches of security

Level: 3
Credit value: 12
UAN: R/500/7330

Unit aim

The aim of this unit teaches the learner how to install and/or upgrade various pieces of software. The unit also aims to teach the learner how to record information associated with software installations. The learner will learn how to install and/or upgrade software from differing locations as well as learning how to follow organisational guidelines and record their actions.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Understand the installation/upgrade process
2. Be able to carry out or control a wide range of installations or upgrades

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **100** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-308 Software installation and upgrade

Assessment Criteria

Outcome 1 Understand the installation/upgrade process

The learner can:

1. Describe the software installation and upgrade process including:
 - procedures to be followed
 - procedures for information recording
 - software storage locations to be used
 - specifications of the software
2. Describe the capabilities of software loading facilities

Outcome 2 Be able to carry out or control a wide range of installations or upgrades

The learner can:

1. Provide guidance on installation/upgrade procedures to immediate colleagues
2. Obtain and allocate required materials
3. Select the installation/upgrade procedures to be followed
4. Select software loading facilities to be used

Level: 3
Credit value: 12
UAN: A/500/7340

Unit aim

The aim of this unit is to teach the learner how to operate different types of IT systems. In order to do this the learner will need to understand the procedures that are applicable to different systems. The learner will be able to describe functionality and the operational activities of particular systems, as well as knowing how to maintain and implement procedures for different systems.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Know how to operate the system
2. Be able to operate systems
3. Be able to maintain and implement system operating procedures

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **100** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-309 System operation

Assessment Criteria

Outcome 1 Know how to operate the system

The learner can:

1. Explain the operating procedures that are applicable to the system, such as:
 - required service levels (eg availability, quality)
 - routine maintenance
 - monitoring
 - data integrity (eg backups, anti-virus)
 - consumables use, storage & disposal
 - health and safety
 - escalation
 - information recording and reporting
 - obtaining work permissions
 - security & confidentiality
2. Describe system functionality during normal operation
3. Describe the effects of operational activities on system functionality

Outcome 2 Be able to operate systems

The learner can:

1. Use and operate the system following appropriate procedures
2. Identify system faults and resolve or escalate system faults as appropriate
3. Gather and record specified operational information
4. Assess and minimise risks, such as:
 - loss or corruption of data
 - loss of service
 - damage to equipment
 - effects on customer operations

Outcome 3 Be able to maintain and implement system operating procedures

The learner can:

1. Provide advice and guidance on system operation to immediate colleagues
2. Select the procedures to be followed
3. Schedule operational activities to minimise disruption to system functionality
4. Collate operational information

Level: 3
Credit value: 12
UAN: J/601/3507

Unit aim

The aim of this unit is to teach the learner how to provide technical support and to identify the purpose of giving such support and guidance. In order to this the learner will learn how technical advice and guidance can be used and identify the types of information that can aid the user being supported.

As part of this unit the learner will identify the purposes of IT technical support through providing support to different user types and know what to do when support or guidance fails. All of this will be done whilst following organisational guidelines.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Understand the context for providing technical advice and guidance
2. Be able to provide reactive technical advice and guidance to customers on a range of topics
3. Be able to provide proactive technical advice and guidance to customers

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **75** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-310 Technical advice and guidance

Assessment Criteria

Outcome 1 Understand the context for providing technical advice and guidance

The learner can:

1. Describe how technical advice and guidance can be used to:
 - resolve problems
 - improve performance
2. Describe the types, sources and applicability of information which can form the basis of technical advice and guidance:
 - information from reference sources (eg manuals, handbooks, manufacturer's specifications)
 - information derived from the analysis of data (eg trend analysis, fault logs)
 - online information (eg manufacturer's websites, technical fora, discussion groups)
3. Describe the procedures and constraints which can apply to the provision of technical advice and guidance (eg escalation, commercial/contractual, legal/regulatory, information security)
4. Identify circumstances where technical advice and guidance should be provided proactively rather than reactively in response to customer requests (eg to rectify known faults, to provide new functionality)

Outcome 2 Be able to provide reactive technical advice and guidance to customers on a range of topics

The learner can:

1. Determine the purposes for which technical advice and guidance is required
2. Verify that customers are entitled to receive the requested technical advice and guidance
3. Communicate effectively with customers to elicit sufficient information to enable correct technical advice and guidance to be provided
4. Source and interpret relevant technical information to produce advice and guidance in response to customer requests
5. Communicate technical advice and guidance to customers in a format and style which meets their needs, confirming customer understanding of the information provided
6. Follow organisational procedures for responding to customer requests including the timely escalation of those for which technical advice and guidance cannot be provided or does not resolve the request

Outcome 3 Be able to provide proactive technical advice and guidance to customers

The learner can:

1. Identify the purposes for which the technical advice and guidance is required
2. Identify the customers, and their level of technical knowledge, to whom the technical advice and guidance should be provided
3. Develop technical advice and guidance in a format and style which takes into account the customers' level of technical knowledge
4. Follow organisational procedures for providing proactive technical advice and guidance

Level: 3
Credit value: 12
UAN: A/601/3293

Unit aim

The aim of this unit is to learn the processes involved in technical fault diagnosis, in order to do that the learner will be able to identify the steps involved in providing a diagnosis, including identifying the steps involved in validating the fault and gathering information. The learner will also learn how to use different diagnosing tools. They will explore, in depth, the steps involved in diagnosing faults and what to do when they need to escalate the issue. The learner will diagnose faults with a wide range of causes and select remedies for non-routine faults and understand the importance of maintaining records.

Learning outcomes

There are **four** learning outcomes to this unit. The learner will:

1. Understand the processes, methods and information that are used in the diagnostic process
2. Be able to diagnose faults with a wide range of causes
3. Be able to select remedies for non-routine faults
4. Be able to maintain diagnosis and remedy records

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **75** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-311 Technical fault diagnosis

Assessment Criteria

Outcome 1 Understand the processes, methods and information that are used in the diagnostic process

The learner can:

1. Describe the steps of the diagnostic process including:
 - fault validation
 - information gathering
 - information analysis
 - solution identification
2. Describe the types of diagnostic information that are commonly needed:
 - problem description
 - problem history
 - problem location
 - technical information on a specified range of products including the system under investigation
3. Explain the following diagnostic methods and give examples of their appropriate use:
 - substitution
 - replication
 - performance and functional testing
 - environment change
4. Explain how the following considerations can affect fault diagnosis:
 - minimisation of service disruption during diagnostics
 - individual responsibility and authority
 - escalation procedure
 - service level agreements
5. Interpret detailed technical information on a range of products

Outcome 2 Be able to diagnose faults with a wide range of causes

The learner can:

1. Select and correctly use appropriate diagnostic tools to carry out non-routine diagnosis
2. Select and use given sources of diagnostic and other technical information
3. Identify and interpret relevant information to support the diagnosis
4. Analyse information to diagnose faults with a wide range of causes, using at least three of the following approaches:
 - trend analysis
 - what-if scenarios
 - gap analysis
 - identification of cause and effect
 - flow charts
5. Describe possible ways to prevent reoccurrence of diagnosed faults

Outcome 3 Be able to select remedies for non-routine faults

The learner can:

1. Select a suitable remedy to rectify identified faults taking into account the following:
 - business or service impact
 - resource and skill availability
 - ease of implementation
 - cost effectiveness
 - performance
 - compatibility
 - time
 - permanence
2. Identify possible ways to prevent reoccurrence of diagnosed faults

Outcome 4 Be able to maintain diagnosis and remedy records

The learner can:

1. Accurately document the diagnosis activities undertaken including:
 - fault description
 - supporting information
 - diagnostic tools etc used
 - cause of fault
 - remedy selected

Level: 3
Credit value: 10
UAN: L/502/1114

Unit aim

The aim of this unit is to teach some of the key aspects involved in project management. In order to this the learner will learn about the roles and responsibilities of the people involved in project management. The learner will also learn how to identify the documentation used and the key criteria that must be satisfied in order to deliver a successful project.

This unit also aims to teach the learner how to collect information that is required during a project and to look at differing lifecycle examples used for the management of projects. This unit will enable within the project environment.

Learning outcomes

There are **seven** learning outcomes to this unit. The learner will:

1. Be able to describe programmes, projects and project management, and the key differences when compared to Business as Usual (BAU)
2. Be able to apply the principles of project risk management
3. Be able to apply the principles of project quality management, change control and configuration management
4. Be able to use different styles of management and types of communication within a project environment
5. Understand team building and team dynamics using standard models
6. Be able to describe typical activities and the practical problems of estimating throughout a project/system development lifecycle
7. Be able to apply project planning, monitoring, and control techniques

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **60** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-312 IT project management 3

Assessment Criteria

Outcome 1 Be able to describe programmes, projects and project management, and the key differences when compared to Business as Usual (BAU)

The learner can:

1. Draw representations of 3 different types of project organisation structure

Outcome 2 Be able to apply the principles of project risk management

The learner can:

1. Specify and prioritise project risks
2. Specify a risk as an opportunity or a threat in a work placement / business situation
3. Create and maintain a Risk Log / Register
4. Compile an assessment of Risk Exposure for a given project

Outcome 3 Be able to apply the principles of project quality management, change control and configuration management

The learner can:

1. Complete a supplier evaluation process from given data
2. Compose a quality plan for a given project
3. Devise suitable measurements for given quality characteristics
4. Decide the action to be taken for a Request for Change (RFC)
5. Devise a suitable Configuration Item Record (CIR) for a given product

Outcome 4 Be able to use different styles of management and types of communication within a project environment

The learner can:

1. Use communication methods to suit the purpose of the communication
2. Use a management style to suit the requirements of the situation

Outcome 5 Understand team building and team dynamics using standard models

The learner can:

1. Differentiate between the stages of team development recognising characteristic behaviours of each stage
2. Describe the desirable characteristics in terms of both skill and behaviour of a Project Manager
3. Describe the Tuckman model of team development
4. Explain the use of models, such as Tuckman in developing an effective team (team building)
5. List and characterise the main attributes of the nine Belbin Team Types

Outcome 6 Be able to describe typical activities and the practical problems of estimating throughout a project/system development lifecycle

The learner can:

1. Draw a system lifecycle for a project
2. Justify the choice of a system development lifecycle
3. Create a project estimate

Outcome 7 Be able to describe programmes, projects and project management, and the key differences when compared to Business as Usual (BAU)

The learner can:

1. Prepare a representative Work Breakdown Structure (WBS)
2. Construct a representative PBS
3. Produce an Activity on Node (AoN) Network from a list of activities and their dependencies
4. Identify the critical path on a complex project network
5. Calculate the earliest and latest start and finish dates (ES, EF, LS, LF.) and the resulting float (Free and Total)
6. Construct a Gantt chart from an activity network
7. Update a project schedule to reflect actual progress
8. Compile a Milestone Slippage Chart
9. Create a project progress report for the project sponsor
10. Demonstrate Resource Smoothing
11. Select resourcing priorities
12. Create a Cumulative resource chart
13. Interpret Earned Value figures
14. Create a graphical representation of progress information
15. Extrapolate Project Outcome using Earned Value Management (EVM) Data

Level: 3
Credit value: 12
UAN: F/500/7355

Unit aim

The aim of this unit is to introduce the principles of testing ICT systems. In order to do this the learner will learn how to select relevant tests, whilst performing these tests the learner will be shown how to record the outcomes and learn how to prepare their test environment correctly and safely. The learner will also learn to understand how to follow service level agreements and how to use different types of testing tools depending of the situation. The learner will learn how to present and record their findings and know the importance of doing so.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Know technical information about a wide range of products, testing procedures and associated activities, equipment to be used and the reasons for the test
2. Be able to carry out testing and support others in the testing process

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **100** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-313 Testing ICT systems

Assessment Criteria

Outcome 1 Know technical information about a wide range of products, testing procedures and associated activities, equipment to be used and the reasons for the test

The learner can:

1. Describe the testing process to be followed
 - how to select tests and collect relevant and sufficient information for the test to be successful
 - how to minimise service disruption during testing and avoid detrimental effects or changes to performance
 - ways to configure tests
 - how to record, maintain or restore configurations, data and functionality
 - types of service level agreements
 - individual responsibility and authority
 - escalation procedures and risks associated with using a testing process
 - information analysis (level 3)
2. Describe the purposes of testing
 - aiding the diagnostic process
 - comparing actual and expected performance
 - testing performance
3. Describe what test preparation and conclusion activities are necessary for specific tests, such as:
 - Health & safety legislation and regulations
 - need to obtain work permissions
 - site access and security
 - system or equipment integrity (eg ensuring network service continuity)
 - data integrity (eg taking data backups before commencing work)
 - resource availability
 - level of service allowed by the SLA
 - environmental legislation and regulations (eg disposal of materials)
 - work sign-off and reporting
 - site restoration system and equipment integrity (eg restoring service)
 - data integrity (eg restoring data backups as necessary)
4. Interpret detailed technical information on a specified range of products

Outcome 2 Be able to carry out testing and support others in the testing process

The learner can:

1. Provide technical advice to support testing
2. Select any necessary preparation and conclusion activities and ensure that they have been completed
3. Select, adapt and use appropriate testing tools:
 - electrical/electronic test instruments
 - on-board self-test programs
 - loopback devices
 - on-line/remote monitoring software
 - software debuggers
 - runtime analysers
 - diagnostic software
4. Gather, record and respond to test information and results by:
 - interpreting error codes/messages
 - comparing with specifications
 - identifying inconsistent data
 - examining results from multiple tests or trend analysis
 - using analytical tools to extract information from test data

Level: 3
Credit value: 12
UAN: M/500/7383

Unit aim

The aim of this unit is to teach the learner how to work effectively with ICT hardware and equipment, they will learn correct working processes and practice, depending on the equipment they are using, and be able to identify which tools might be required. They will also learn how to plan work and deal with the expectations of customers. The learner will be trained about any regulatory requirements that may affect work activities. They will also have the opportunity to work with ICT hardware and equipment and implement some of the techniques they have learnt, all the time communicating progress and avoiding any unnecessary disruptions to service.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Know how to plan and carry out or direct a wide range of work activities
2. Be able to plan and carry out or direct a wide range of work activities
3. Be able to minimise risks related to work activities

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **100** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-314 Working with ICT hardware and equipment

Assessment Criteria

Outcome 1 Know how to plan and carry out or direct a wide range of work activities

The learner can:

1. Describe the working process, such as:
 - tools and techniques to be used
 - procedures to be followed
 - procedures for information recording
 - customer requirements
 - product specifications
 - work planning
 - resource allocation
2. Describe the appropriate uses of tools and techniques
3. Explain which regulatory requirements affect work activities and how they do so

Outcome 2 Be able to plan and carry out or direct a wide range of work activities

The learner can:

1. Select, adapt and use relevant tools and techniques safely
2. Provide technical advice to support working procedures, such as:
 - health and safety
 - quality
 - use of tools
 - configuration
 - testing; logistics
 - waste disposal
 - problem escalation
 - information recording
 - obtaining work permissions
 - security and confidentiality
 - customer acceptance
 - commissioning
 - product registration
 - integration
3. Obtain and allocate required materials
4. Record relevant information
5. Communicate the progress and outcome of work to the appropriate people

Outcome 3 Be able to minimise risks related to work activities

The learner can:

1. Provide support and advice in assessing and minimising risks related to work activities, such as:
 - loss or corruption of data
 - loss of service
 - damage to equipment
 - effects on customer operations

Level: 3
Credit value: 10
UAN: F/601/3165

Unit aim

The aim of this unit is to teach computer game development; in order to do this the learner will explore the various architecture and hardware components. The learner will explore developments within the computer games industry that are required in the development of computer games. They will also evaluate existing games and will also look at the different features of a range of computer games.

The learner will propose a plan for developing a sample game and then move into planning and developing and testing elements of that game.

Learning outcomes

There are **five** learning outcomes to this unit. The learner will:

1. Understand computer game architecture and components
2. Understand the computer games industry
3. Be able to evaluate existing computer games
4. Be able to develop a computer game specification
5. Be able to implement elements of a computer game

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **71** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-315 Computer games development

Assessment Criteria

Outcome 1 Understand computer game architecture and components

The learner can:

1. Describe the hardware and software components of a video game system

Outcome 2 Understand the computer games industry

The learner can:

1. Describe the stages of evolution of computer game industry
2. Describe the roles and activities required to develop modern computer games
3. Explain computer game development processes and terminology
4. Explain computer game programming methods and techniques

Outcome 3 Be able to evaluate existing computer games

The learner can:

1. Produce a structured evaluation of an existing computer game

Outcome 4 Be able to develop a computer game specification

The learner can:

1. Produce a pre-production proposal document for a computer game project
2. Identify the components required to develop a computer game
3. Produce an implementation plan for a computer game development

Outcome 5 Be able to implement elements of a computer game

The learner can:

1. Design components of a computer game
2. Develop components of a computer game
3. Test components of a computer game

Level: 3
Credit value: 9
UAN: L/601/3203

Unit aim

The aim of this unit is to teach the concepts of data modelling. The learner will be taught about the basic concepts; including entities, attributes and relationships, and will also learn the objectives of normalisation to 3rd normal form as well as putting this into practice. The learner will use what they have learnt to produce logical data model.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Understand the concepts of logical data modelling
2. Be able to use data modelling techniques to create logical data models
3. Be able to use data modelling techniques to refine logical data models

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **75** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-316 Data modelling

Assessment Criteria

Outcome 1 Understand the concepts of logical data modelling

The learner can:

1. Describe entities and the types of attributes which can be assigned to them
2. Describe the type of relationships which can exist between entities
3. Explain the objectives of data normalisation and describe the Third Normal Form (3NF)
4. Explain the purpose of keys
5. Describe an application where un-normalized or de-normalised data may be used
6. Describe the types of standard notation which can be used to represent data sets as logical data models

Outcome 2 Be able to use data modelling techniques to create logical data models

The learner can:

1. Identify and name entities, assigning the correct attributes
2. Identify and represent entity relationships, assigning the correct type
3. Normalise a data set to Third Normal Form (3NF)

Outcome 3 Be able to use data modelling techniques to refine logical data models

The learner can:

1. Identify entities which will be accessed for enquiry and/or update
2. Identify access sequences and triggers
3. Create access rules/methods
4. Use a standard notation to describe the logical data model of a normalised data set

Level: 3
Credit value: 9
UAN: D/500/7332

Unit aim

The aim of this unit is to teach the concepts behind managing computer systems. The learner will gain knowledge of how the configuration of a computer system can affect the management of it. The learner will also be taught the importance of asset management. They will have an opportunity to use what they have learnt and modify a computer system according to guidelines given to them.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Understand how to administer a system
2. Be able to administer a system and change system configurations

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **75** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-317 System management

Assessment Criteria

Outcome 1 Understand how to administer a system

The learner can:

1. Describe how to configure the system
2. Describe ICT asset and configuration information applicable to the system, such as:
 - Physical attributes (eg manufacturer, type, revision, serial number, location, value)
 - Configuration (eg physical and logical addresses, options set, connections)
3. Describe how available options for system configuration affect functionality and capacity

Outcome 2 Be able to administer a system and change system configurations

The learner can:

1. Select configuration options to optimise system functionality and capacity
2. Make changes to system configuration
3. Specify items for which ICT asset and configuration information is to be recorded)

Level: 3
Credit value: 9
UAN: K/500/7379

Unit aim

The aim of this unit is to teach the learner how to create and modify user profiles. In order to this they will be taught how to create a user identifier and how to work with passwords and the frequency with which they need to be modified. The learner will also discover the differences between different user types and will have an opportunity to create new (and modify existing) user account settings.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Know how to administer user profiles
2. Be able to administer user profiles

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **80** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-319 User profile administration

Assessment Criteria

Outcome 1 Be able to administer user profiles

The learner can:

1. Describe the organisational policy on user profiles, such as:
 - user identifier (eg username)
 - password and related information (eg change frequency)
 - allowed system access (eg times, locations)
 - allowed access to facilities (eg data, software)
2. Describe how to create and edit user and standard profiles
3. Describe how user profiles affect access to system facilities, such as:
 - shared resources (eg data storage, printers)
 - software
 - data

Outcome 2 Be able to administer a system and change system configurations

The learner can:

1. Make specified changes to user profiles
2. Specify user profiles to meet individual requirements
3. Create standard profiles for groups of users
4. Provide guidance on user profiles to immediate colleagues

Unit 4520-321

Creating a procedural computer program using COBOL

Level: 3
Credit value: 12
UAN: R/601/3171

Unit aim

This unit covers more advanced concepts of procedural computer languages and their use to implement, refine and test computer programs.

The aim of this unit is to teach the concepts of procedural programming, as part of this unit the learner will learn some of the key elements of a procedural language, such as how to declare file structures and how to use some of the predefined functions. The learner will have an opportunity to use what they have learnt by modifying an existing program to improve its quality. The learner will test the revised code and record expected and actual results they will also learn to document a program and create a user guide.

Learning outcomes

There are **four** learning outcomes to this unit. The learner will:

1. Be able to implement a software design using procedural programming
2. Be able to refine a procedural program to improve quality
3. Be able to test the operation of a procedural driven program
4. Be able to document a computer program

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **90** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio or by means of a **set assignment** covering practical activities and underpinning knowledge.

Assessment Criteria**Outcome 1 Be able to implement a software design using procedural programming**

The learner can:

1. Identify the program modules and data and file structures required to implement a given design
2. Select, declare and initialise variable and data structure types and sizes to implement design requirements
3. Select and implement control structures to meet the design algorithms
4. Select and declare file structures to meet design file storage requirements
5. Select and use standard input/output commands to implement design requirements
6. Make effective use of operators and predefined functions
7. Correctly use parameter passing mechanisms

Additional guidance:

The learner will be able to

- describe the PICTURE clause required for a given data item: alphanumeric, alphabetic, numeric. numeric edited
- define the relationships between group and elementary data items
- describe the use of literals and figurative constants
- describe how a one-dimensional and two-dimensional array can be declared, initialised and accessed
- describe the operations that can be performed on a table (array)
- move data between tables
- set up initial values in a table
- search the data items in a table using a sequential search
- use the SEARCH statement to search a table
- sort the data items in a table using the PERFORM statement with the VARYING clause
- describe the operation of the COMPUTE statement
- describe control structures used for selection i.e. IF, IF ... ELSE, EVALUATE
- explain the meaning of each clause within the SELECT statement in the ENVIRONMENT DIVISION for an indexed sequential file or a relative file
- describe how an indexed sequential file or a relative file can be opened for INPUT, OUTPUT, I-O or EXTEND
- describe the process of inserting, amending and deleting a record in an indexed sequential or relative file
- explain the access modes SEQUENTIAL, RANDOM AND DYNAMIC that can be used for an indexed sequential or relative file
- explain the purpose of the START statement when an indexed sequential or relative file is in SEQUENTIAL access mode
- state the purpose of the INVALID KEY clause for input and output operations on an indexed sequential or relative file

- describe the use of the ACCEPT and DISPLAY statements for standard input and output
- describe the relational operators < (less than), > (greater than), <= (less than or equal to), >= (greater than or equal to), = (equal to), NOT= (not equal to)
- describe the logical operators AND, OR, NOT
- describe the arithmetic operators i.e. ADD, SUBTRACT, MULTIPLY and DIVIDE
- describe the use, in arithmetic statements, of the following clauses: ON SIZE ERROR, ROUNDED
- explain how the STRING statement can be used to combine two or more data items
- explain how the UNSTRING statement can be used to separate one data item into multiple data items.

Outcome 2 Be able to refine a procedural program to improve quality

The learner can:

1. Use an agreed standard for naming, comments and code layout
2. Define user functions to replace repeating code sequences
3. Implement data validation for inputs
4. Identify and implement opportunities for error handling and reporting

Additional guidance:

The learner will be able to

- describe the conventional use of indentation in code layout
- state that meaningful names should be used for variables
- state that meaningful comments are inserted in code to aid understanding of the code
- explain the use of the PERFORM statement to provide the execution of loops
- state that data validation is performed on data entered into a program to prevent incorrect data causing incorrect results or a run-time error
- describe the types of data validation that can be performed, such as presence check, range check, date check, type check (alphabetic or numeric), character count, check digit (modulus number), format check (eg AG145), use of a lookup table for defined values
- state the importance of trapping errors in a program so that the program does not crash at run-time
- state the types of error that can cause a run-time error eg division by zero, reading past end of file, reading from or writing to a file that has not been opened
- describe how screen prompts are used to provide information to a user about the actions that can be taken when an error occurs

Outcome 3 Be able to test the operation of a procedural driven program

The learner can:

1. Make effective use of available debugging tools
2. Prepare a test strategy
3. Select suitable test data and determine expected test results
4. Record actual test results to enable comparison with expected results
5. Analyse actual test results against expected results to identify discrepancies
6. Investigate test discrepancies to identify and rectify their causes

Additional guidance:

The learner will be able to:

- state that errors can be located when debugging a program by displaying the values held in variables
- explain the purpose of a test plan is, for each test to be performed, to identify the type of test, the test data required and the expected results of the test
- state that test data should contain valid and invalid data
- explain the purpose of a test log is to record the actual results of each test in the test plan, comment on any discrepancies between the actual results and the expected results and record if any amendments are made to correct an error
- state that testing is done to determine if a program executes correctly according to its specification and to aid in the location and correction of errors.

Outcome 4 Be able to document a computer program

The learner can:

1. Create documentation to assist the users of a computer program
2. Create documentation for the support and maintenance of a computer program

Additional guidance:

The learner will be able to:

- state that the purpose of end user documentation is to help the user to operate the software
- state that the purpose of technical documentation is to help the software developer support and maintain the software
- describe the contents of technical documentation i.e. program specification program listing, test plan and test results

Unit 4520-326

Managing software development

Level: 3
Credit value: 12
UAN: T/500/6798

Unit aim

The aim of this unit is to teach the learner how to manage the development of software. In order to do this the learner will learn what the organisational requirements are that govern the development of software, such as internal styles and runtime environments. The learner will also learn to provide guidance on organisational requirements to their immediate colleagues.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Understand the technical aspects of the software development work of others
2. Be able to supervise the technical aspects of the software development work of others

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **90** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-326 Managing software development

Assessment Criteria

Outcome 1 Understand the technical aspects of the software development work of others

The learner can:

1. Describe what organisational requirements to follow relating to:
 - form, content and structure of program designs
 - style for internal documentation of software components
 - conventions for naming of software components
 - format, content and presentation of maintenance documentation
2. Describe the software development procedures to be followed including:
 - creating detailed designs, software components and documentation
 - testing and installing software
 - creating outline designs
 - specifying runtime environments

Outcome 2 Be able to supervise the technical aspects of the software development work of others

The learner can:

1. Provide guidance on specified organisational requirements and procedures to immediate colleagues

Level: 3
Credit value: 12
UAN: T/500/7210

Unit aim

The aim of this unit is to teach the learner how understand the quality management of ICT products and services. In order to do this the learner will learn about the specified parts of organisational quality management procedures including, customer agreements, audit and inspection and customer feedback among others. The learner will also learn how to monitor any quality management procedures.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Understand specified organisational quality management procedures
2. Be able to monitor quality management procedures

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **100** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Assessment Criteria**Outcome 1 Understand specified organisational quality management procedures**

The learner can:

1. Explain specified parts of organisational quality management procedures including:
 - customer agreements
 - activity planning
 - third-party monitoring
 - change control
 - work-in-progress
 - testing
 - defects and defective components
 - audit and inspection
 - customer feedback
 - communication

Outcome 2 Understand specified organisational quality management procedures

The learner can:

1. Monitor compliance with relevant parts of procedures by:
 - participating in audits of working practices and inspections of work
 - gathering and recording information on quality
 - initiating suitable actions to deal with identified failures in quality
2. Provide guidance to immediate colleagues on quality

Unit 4520-360

Using and managing BOWMAN systems for advanced signallers

Level: 3
Credit value: 19
UAN: K/501/3912

Learning outcomes

There are **twelve** learning outcomes to this unit. The learner will:

1. Be able to command a radio detachment
2. Operate the Local Area Sub-system (LAS)
3. Be able to manage unit/sub-unit signals training
4. Attend briefings on BOWMAN Digitization functionality
5. Manage BOWMAN and non-BOWMAN equipment
6. Be able to supervise battery charging
7. Construct an antenna for advanced communications
8. Advise on communication security and electronic warfare matters
9. Establish communication using re-broadcast facilities
10. Operate the Communication Information Handler (CIH) application
11. Operate the Key Encryption Key (KEK) fill Device
12. Operation Common Battlefield Application Toolset (ComBAT)

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **150** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Assessment Criteria**Outcome 1 Be able to command a radio detachment**

The learner can:

1. Extract information from a briefing/orders group
2. Explain how to brief a signals detachment
3. Conduct a line reconnaissance
4. Explain how to brief a line party
5. Control the laying, testing and recovery of line
6. Explain how to brief a detachment on health and safety risks
7. Control the initialisation of communication equipment
8. Extract and interpret signals information from policies and procedures
9. Demonstrate how to control the handover or takeover of a communications detachment
10. Describe how to control cryptographic equipment and material
11. Identify health and safety risks

Outcome 2 Operate the Local Area Sub-system (LAS)

The learner can:

1. Demonstrate how to prepare the simple harness
2. Demonstrate how to prepare the basic functional LAS and remote connections
3. Demonstrate how to prepare the full functional LAS and remote connection

Outcome 3 Be able to manage unit/sub-unit signals training

The learner can:

1. Identify and plan unit or sub-unit signal training needs
2. Select appropriate methods of instruction
3. Carry out a minimum of 3 teaching practices in accordance with Defence Instruction and Techniques process
4. Pass the Defence Instruction and Technique course

Outcome 4 Attend briefings on BOWMAN Digitization functionality

The learner can:

1. Identify how voice and data technologies are utilised within the BOWMAN architecture
2. Identify the components and function of the BOWMAN Communication Management Systems (BCMS) applications
3. Identify the characteristics and capabilities of the GPS systems and components of Navigation warfare (NAVWAR)
4. Identify the components of the Apache BOWMAN Connectivity (ABC)

Outcome 5 Manage BOWMAN and non-BOWMAN equipment

The learner can:

1. Demonstrate how to maintain a sub-unit account of radios and associated equipment
2. Carry out functional tests on radio equipment

3. Demonstrate how to perform basic maintenance of communications equipment
4. Demonstrate how to perform tests and verification on suspect equipment
5. Locate faults to LRU level

Outcome 6 Be able to supervise battery charging

The learner can:

1. Establish DC (Direct Current) battery charging areas
2. Demonstrate how to maintain battery charging equipment

Outcome 7 Construct an antenna for advanced communications

The learner can:

1. State the principles applicable to electromagnetic theory and propagation of radio waves
2. Calculate, select and assemble a suitable antenna for high frequency (HF) communications

Outcome 8 Advise on communication security and electronic warfare matters

The learner can:

1. Demonstrate how to monitor insecure systems
2. Demonstrate how to debrief a detachment on security breaches
3. Advise commanders on communication security matters within the unit
4. Advise on electronic warfare
5. Describe ElectronicPM, Tactical and Technical
6. State electronic warfare procedures

Outcome 9 Establish communication using re-broadcast facilities

The learner can:

1. Operate communication systems to a number of outstations
2. Operate as a local re-broadcast using any two communication systems to a number of outstations

Outcome 10 10. Operate the Communication Information Handler (CIH) application

The learner can:

1. Prepare the CIH application for operation
2. Operate CIH application
3. Perform user maintenance on the CIH

Outcome 11 Operate the Key Encryption Key (KEK) fill Device

The learner can:

1. Prepare the Key Encryption Key (KEK) fill Device for operation
2. Operate the Key Encryption Key (KEK) fill Device
3. Perform user maintenance on KFD

Outcome 12 Operation Common Battlefield Application Toolset (ComBAT)

The learner can:

1. Explain how to create symbols
2. Explain how to create overlays
3. Describe how to view and/or amend location status board
4. Describe how to view track history playback
5. Configure CPR
6. Produce plans and orders using ComBAT
7. Demonstrate how to manage messages and data
8. Demonstrate how to Load ComBAT mapping

Level: 3
Credit value: 5
UAN: R/502/4614

Unit aim

The aim of this unit is to teach the learner how to use imaging software correctly. In order to do this the learner will describe what images are needed, describe any copyright and other constraints that effect those images that are going to be used, describe the context with which those images will be used and learn how to store them correctly. The learner will also learn to use imaging software and tools responding to problems with accuracy and to a high standard.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Be able to obtain, insert and combine information for images
2. Be able to use imaging software tools to create, manipulate and edit images

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **40** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-371 Imaging software

Assessment Criteria

Outcome 1 Be able to obtain, insert and combine information for images

The learner can:

1. Explain what images are needed
2. Explain how the context affects the way images should be prepared
3. Provide guidance on what and how any copyright or other constraints may apply to the use of own and others' images
4. Obtain, insert and prepare images
5. Explain how file format affects image quality, format and size and how to choose appropriate formats for saving images
6. Use appropriate techniques to organise and combine information of different types or from different sources
7. Store and retrieve files effectively, in line with guidelines and conventions where available

Outcome 2 Be able to use imaging software tools to create, manipulate and edit images

The learner can:

1. Explain what technical factors affecting images need to be taken into account and how to do so
2. Select and use suitable tools and techniques efficiently to create images
3. Use guidelines and dimensioning tools appropriately to enhance precision
4. Select and use appropriate tools and techniques to manipulate and edit images
5. Check images meet needs, using IT tools and making corrections as necessary
6. Identify and respond appropriately to quality problems to ensure that images are fit for purpose and meet needs

Level: 3
Credit value: 6
UAN: T/502/4556

Unit aim

The aim of this unit is to teach the learner how to use database software effectively. In order to do this the learner will learn to create and modify relational database tables, enter, edit and organise structured information checking that data has been entered correctly. The learner will also produce queries and reports that manipulate the data within the database and will check that outputs meet any customer requirements.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Be able to plan, create and modify relational database tables to meet requirements
2. Be able to enter, edit and organise structured information in a databases
3. Be able to use database software tools to create, edit and run data queries and produce reports

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **45** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-372 Database software

Assessment Criteria

Outcome 1 Be able to plan, create and modify relational database tables to meet requirements

The learner can:

1. Explain how a relational database design enables data to be organised and queried
2. Plan and create multiple tables for data entry with appropriate fields and properties
3. Set up and modify relationships between database tables
4. Explain why and how to maintain data integrity
5. Respond appropriately to problems with database tables
6. Use database tools and techniques to ensure data integrity is maintained

Outcome 2 Be able to enter, edit and organise structured information in a databases

The learner can:

1. Design and create forms to access, enter, edit and organise data in a database
2. Select and use appropriate tools and techniques to format data entry forms
3. Check data entry meets needs, using IT tools and making corrections as necessary
4. Respond appropriately to data entry errors

Outcome 3 Be able to use database software tools to create, edit and run data queries and produce reports

The learner can:

1. Explain how to select, generate and output information from queries according to requirements
2. Create and run database queries to display, amend or calculate selected data
3. Plan and produce database reports from a multiple-table relational database
4. Select and use appropriate tools and techniques to format database reports
5. Check reports meet needs, using IT tools and making corrections as necessary

Level: 3
Credit value: 3
UAN: T/502/4301

Unit aim

The aim of this unit is to teach the learner how to use email software effectively and correctly. In order to do this the learner will learn how to use the tools in an email client to compose and send emails. They will also explore methods to improve message transmission and learn how to use techniques to automate responses. The learner will be taught how to handle and manage incoming emails, for example how to archive emails, and they will learn how to respond to any email problems that may arise.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Be able to use email software tools and techniques to compose and send messages
2. Be able to manage use of email software effectively

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **20** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-373 Using email

Assessment Criteria

Outcome 1 Be able to use email software tools and techniques to compose and send messages

The learner can:

1. Select and use software tools to compose and format email messages, including attachments
2. Explain methods to improve message transmission
3. Send email messages to individuals and groups
4. Explain why and how to stay safe and respect others when using email
5. Use an address book to manage contact information

Outcome 2 Be able to manage use of email software effectively

The learner can:

1. Develop and communicate guidelines and procedures for using email effectively
2. Read and respond appropriately to email messages and attachments
3. Use email software tools and techniques to automate responses
4. Explain why, how and when to archive messages
5. Organise, store and archive email messages effectively
6. Customise email software to make it easier to use
7. Explain how to minimise email problems
8. Respond appropriately to email problems

Level: 3
Credit value: 5
UAN: F/502/4298

Unit aim

The aim of this unit is to teach the learner how to use the Internet correctly and safely. In order to do this the learner will learn how to connect to the Internet, how to use a web browser effectively and how to improve the performance of a web browser. The learner will also learn how to search for information on the Internet, how use a web browser to communicate information and how to protect themselves from online threats, whilst understanding any laws governing the use of the Internet and promote these to others.

Learning outcomes

There are **five** learning outcomes to this unit. The learner will:

1. Be able to select and set up an appropriate connection to access the Internet
2. Be able to set up and use browser software to navigate webpages
3. Be able to use browser tools to search effectively and efficiently for information from the Internet
4. Be able to use browser software to communicate information online
5. Be able to develop and apply appropriate safety and security practices and procedures when working online

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **40** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-374 Using the Internet

Assessment Criteria

Outcome 1 Be able to select and set up an appropriate connection to access the Internet

The learner can:

1. Identify different types of connection methods that can be used to access the Internet
2. Explain the benefits and drawbacks of different connection methods
3. Analyse the issues affecting different groups of users
4. Select and set up an Internet connection using an appropriate combination of hardware and software
5. Recommend a connection method for Internet access to meet identified needs
6. Diagnose and solve Internet connection problems

Outcome 2 Be able to set up and use browser software to navigate webpages

The learner can:

1. Select and use browser tools to navigate webpages effectively
2. Explain when to change browser settings to aid navigation
3. Adjust and monitor browser settings to maintain and improve performance
4. Explain when and how to improve browser performance
5. Customise browser software to make it easier to use

Outcome 3 Be able to use browser tools to search effectively and efficiently for information from the Internet

The learner can:

1. Select and use appropriate search techniques to locate information efficiently
2. Evaluate how well information meets requirements
3. Manage and use references to make it easier to find information another time
4. Download, organise and store different types of information from the Internet

Outcome 4 Be able to use browser software to communicate information online

The learner can:

1. Identify and analyse opportunities to create, post or publish material to websites
2. Select and use appropriate tools and techniques to communicate information online
3. Share and submit information online using appropriate language and moderate content from others

Outcome 5 Be able to develop and apply appropriate safety and security practices and procedures when working online

The learner can:

1. Explain the threats to system performance when working online
2. Work responsibly and take appropriate safety and security precautions when working online
3. Explain the threats to information security and integrity when working online
4. Keep information secure and manage user access to online sources securely
5. Explain the threats to user safety when working online
6. Explain how to minimise Internet security risks
7. Develop and promote laws, guidelines and procedures for safe and secure use of the Internet

Level: 3
Credit value: 6
UAN: T/502/4623

Unit aim

The aim of this unit is to teach the learner how to produce presentations properly using presentation software. In order to do this the learner will learn how to combine text and other information within presentation slide, they will learn how to enhance their presentations, how to use some of tools in presentation that aid the structure and edit slide sequences. Lastly the learner will use all that they have learnt to prepare an interactive slideshow for presentation.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Be able to input and combine text and other information within presentation slides
2. Be able to use presentation software tools to structure, edit and format presentations
3. Be able to prepare interactive slideshow for presentation

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **45** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-375 Presentation software

Assessment Criteria

Outcome 1 Be able to input and combine text and other information within presentation slides

The learner can:

1. Explain what types of information are required for the presentation
2. Enter text and other information using layouts appropriate to type of information
3. Insert charts and tables and link to source data
4. Insert images, video or sound to enhance the presentation
5. Identify any constraints which may affect the presentation
6. Organise and combine information for presentations in line with any constraints
7. Store and retrieve presentation files effectively, in line with local guidelines and conventions where available

Outcome 2 Be able to use presentation software tools to structure, edit and format presentations

The learner can:

1. Explain when and how to use and change slide structure and themes to enhance presentations
2. Create, amend and use appropriate templates and themes for slides
3. Explain how interactive and presentation effects can be used to aid meaning or impact
4. Select and use appropriate techniques to edit and format presentations to meet needs
5. Create and use interactive elements to enhance presentations
6. Select and use animation and transition techniques appropriately to enhance presentations

Outcome 3 Be able to prepare interactive slideshow for presentation

The learner can:

1. Explain how to present slides to communicate effectively for different contexts
2. Prepare interactive slideshow and associated products for presentation
3. Check presentation meets needs, using IT tools and making corrections as necessary
4. Evaluate presentations, identify any quality problems and discuss how to respond to them
5. Respond appropriately to quality problems to ensure that presentations meet needs and are fit for purpose

Level: 3
Credit value: 6
UAN: J/502/4626

Unit aim

The aim of this unit is to teach the learner how to use spreadsheet software effectively. In order to do this the learner will learn how to identify which numerical information is needed and how it should be structured. They will also learn how to enter data correctly, how to save the data correctly, how to use the correct formula and analysis tools to meet the given requirements. Lastly the learner will learn how to explain and present their findings to meet the audience's requirements.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Be able to use a spreadsheet to enter, edit and organise numerical and other data
2. Be able to select and use appropriate formulas and data analysis tools and techniques to meet requirements
3. Be able to use tools and techniques to present, and format and publish spreadsheet information

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **45** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Assessment Criteria**Outcome 1 Be able to use a spreadsheet to enter, edit and organise numerical and other data**

The learner can:

1. Identify what numerical and other information is needed in the spreadsheet and how it should be structured
2. Enter and edit numerical and other data accurately
3. Combine and link data from different sources
4. Store and retrieve spreadsheet files effectively, in line with local guidelines and conventions where available

Outcome 2 Be able to select and use appropriate formulas and data analysis tools and techniques to meet requirements

The learner can:

1. Explain what methods can be used to summarise, analyse and interpret spreadsheet data and when to use them
2. Select and use a wide range of appropriate functions and formulas to meet calculation requirements
3. Select and use a range of tools and techniques to analyse and interpret data to meet requirements
4. Select and use forecasting tools and techniques

Outcome 3 Be able to use tools and techniques to present, and format and publish spreadsheet information

The learner can:

1. Explain how to present and format spreadsheet information effectively to meet needs
2. Select and use appropriate tools and techniques to format spreadsheet cells, rows, columns and worksheets effectively
3. Select and use appropriate tools and techniques to generate, develop and format charts and graphs
4. Select and use appropriate page layout to present, print and publish spreadsheet information
5. Explain how to find and sort out any errors in formulas
6. Check spreadsheet information meets needs, using IT tools and making corrections as necessary
7. Use auditing tools to identify and respond appropriately to any problems with spreadsheets

Level: 3
Credit value: 5
UAN: Y/502/4632

Unit aim

The aim of this unit is to teach the learner how to produce effective websites using website software. In order to do this the learner will describe the content and layout of the website that will be produced, they will be able to describe any copyright issues related to the content of the website and provide guidance on this. The learner will learn to use software to create their designs by using the website software features correctly. Finally, the learner will learn how to correctly publish their websites complete with multimedia and interactive features.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Be able to create structures and styles and use them to produce websites
2. Be able to select and use website software tools and features to develop multiple page websites with multimedia and interactive features
3. Be able to publish and test multiple page websites with multimedia and interactive features

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **40** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Assessment Criteria**Outcome 1 Create structures and styles and use them to produce websites**

The learner can:

1. Determine what website content and layout will be needed for each page and for the site
2. Plan and create web page templates to layout content
3. Select and use website features and structures to enhance website navigation and functionality
4. Create, select and use styles to enhance website consistency and readability
5. Provide guidance on laws, guidelines and constraints that affect the content and use of websites
6. Explain what access issues may need to be taken into account
7. Explain when and why to use different file types for saving content
8. Store and retrieve files effectively, in line with local guidelines and conventions where available

Outcome 2 Be able to select and use website software tools and features to develop multiple page websites with multimedia and interactive features

The learner can:

1. Prepare content for web pages so that it is ready for editing and formatting
2. Organise and combine information needed for web pages in line with any copyright constraints, including across different software
3. Select and use appropriate editing and formatting techniques to aid meaning
4. Select and use appropriate programming and development techniques to add features and enhance websites
5. Select and use file formats that make information easier to download
6. Check web pages meet needs, using IT tools and making corrections as necessary

Outcome 3 Be able to publish and test multiple page websites with multimedia and interactive features

The learner can:

1. Select and use appropriate testing methods to check that all elements and features of complex websites are working as planned
2. Identify any quality problems with websites and explain how to respond to them
3. Select and use an appropriate programme to upload and publish the website and make sure that it will download efficiently
4. Respond appropriately to quality problems with websites to ensure outcomes are fit for purpose

Level: 3
Credit value: 6
UAN: Y/502/4629

Unit aim

The aim of this unit is to teach the learner how to use word processing software correctly and effectively. In order to do this the learner will learn how to enter, combine and merge text and information accurately within word processing documents. They will learn to use a range a range tools and features within the application. The learner will also learn how create and modify the structure of a document using different styles. Lastly the learner will learn to produce documents that meet the requirements of the intended audiences and ensure that they are fit for purpose.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Be able to enter and combine text and other information accurately within word processing documents
2. Be able to create and modify appropriate layouts, structures and styles for word processing documents
3. Be able to use word processing software tools and techniques to format and present documents effectively to meet requirements

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **45** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Outcome 1 Be able to enter and combine text and other information accurately within word processing documents

The learner can:

1. Summarise what types of information are needed for the document and how they should be linked or integrated
2. Use appropriate techniques to enter text and other types of information accurately and efficiently
3. Create, use and modify appropriate templates for different types of documents
4. Explain how to combine and merge information from other software or multiple documents
5. Combine and merge information within a document from a range of sources
6. Store and retrieve document and associated files effectively, in line with local guidelines and conventions where available
7. Select and use tools and techniques to work with multiple documents or users
8. Customise interface to meet needs

Outcome 2 Be able to create and modify appropriate layouts, structures and styles for word processing documents

The learner can:

1. Analyse and explain the requirements for structure and style
2. Create, use and modify columns, tables and forms to organise information
3. Define and modify styles for document elements
4. Select and use tools and techniques to organise and structure long documents

Outcome 3 Be able to use word processing software tools and techniques to format and present documents effectively to meet requirements

The learner can:

1. Explain how the information should be formatted to aid meaning
2. Select and use appropriate techniques to format characters and paragraphs
3. Select and use appropriate page and section layouts to present and print multi-page and multi-section documents
4. Check documents meet needs, using IT tools and making corrections as necessary
5. Evaluate the quality of the documents produced to ensure they are fit for purpose
6. Respond appropriately to any quality problems with documents to ensure that outcomes meet needs and are fit for purpose

Level: 3
Credit value: 5
UAN: H/502/4567

Unit aim

The aim of this unit is to teach the learner to produce effective publications using desktop publishing software. In order to do this the learner will describe the information they will use to produce a document and provide guidance on the use of this information in terms of legislation and copyright. The learner will also learn to combine their text with other information to produce professional presentations. Lastly the learner will use what they have learnt to produce and edit a publication that is fit for purpose.

Learning outcomes

There are **three** learning outcomes to this unit. The learner will:

1. Be able to select and use appropriate designs and page layouts for publications
2. Be able to input and combine text and other information within publications
3. Be able to use desktop publishing software techniques to edit and format publications

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **40** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Assessment Criteria**Outcome 1 Be able to select and use appropriate designs and page layouts for publications**

The learner can:

1. Explain what types of information are needed
2. Explain when and how to change page design and layout to increase effectiveness of a publication
3. Select, change, define, create and use appropriate page design and layout for publications in line with local guidelines, where relevant
4. Select and use appropriate media for the publication

Outcome 2 Be able to input and combine text and other information within publications

The learner can:

1. Find and input information into a publication so that it is ready for editing and formatting
2. Organise and combine information for publications in line with any copyright constraints, including importing information produced using other software
3. Provide guidance on how copyright constraints affect use of own and others' information
4. Explain which file format to use for saving designs and images
5. Store and retrieve publication files effectively, in line with local guidelines and conventions where available

Outcome 3 Be able to use desktop publishing software techniques to edit and format publications

The learner can:

1. Determine and discuss what styles, colours, font schemes, editing and formatting to use for the publication
2. Create styles, colours and font schemes to meet needs
3. Select and use appropriate techniques to edit publications and format text
4. Manipulate images and graphic elements accurately
5. Control text flow within single and multiple columns and pages
6. Check publications meet needs, using IT tools and making corrections as necessary
7. Identify and respond appropriately to quality problems with publications to ensure that outcomes are fit for purpose and meet needs

Level: 3
Credit value: 5
UAN: A/502/4574

Unit aim

The aim of this unit is to teach the learner to use design software to produce professional designs. In order to do this the learner will describe what designs are needed whilst describing what copyrights and constraints apply to their designs. The learner will also use design software to create, manipulate and edit designs. They will be able to identify and respond to quality problems with designs also confirming designs are fit for purpose.

Learning outcomes

There are **two** learning outcomes to this unit. The learner will:

1. Be able to obtain, insert and combine information for designs
2. Be able to use design software tools to create, manipulate and edit designs

Guided learning hours

Although patterns of delivery are likely to vary considerably, it is recommended that **40** hours should be allocated for this unit.

How is this unit assessed?

Assessment is by a learner portfolio.

Unit 4520-380 Design software

Assessment Criteria

Outcome 1 Be able to obtain, insert and combine information for designs

The learner can:

1. Explain what designs are needed
2. Explain how the context affects the way designs should be prepared
3. Provide guidance on what and how any copyright or other constraints may apply to the use of own and others' designs
4. Obtain, insert and prepare designs
5. Explain how file format affects design quality, format and size and how to choose appropriate formats for saving designs
6. Use appropriate techniques to organise and combine information of different types or from different sources
7. Store and retrieve files effectively, in line with guidelines and conventions where available

Outcome 2 Be able to use design software tools to create, manipulate and edit designs

The learner can:

1. Explain what technical factors affecting designs needs to be taken into account and how to do so
2. Select and use suitable tools and techniques efficiently to create designs
3. Use guidelines and dimensioning tools appropriately to enhance precision
4. Select and use appropriate tools and techniques to manipulate and edit designs
5. Check designs meet needs, using IT tools and making corrections as necessary
6. Identify and respond appropriately to quality problems to ensure that outcomes are fit for purpose and meet needs

Agree	to reach a joint decision (with one or more person(s))
Analyse	to study or examine a topic in detail, in order to discover more about it
Annotation	words/notes written on material (eg photographs or text) usually to personalise or clarify the material
Assessor observation	written evidence produced by the assessor to record what they have observed the learner doing
Attitude	the way a person views something (NB learners do not have to distinguish between skills, qualities and attitudes)
Learner portfolio	see 'portfolio'
Learner statement	information provided by the learner which can be handwritten, typed or presented as a video or audio recording
Choose	select from a number of alternatives
Decide	reach a decision eg by considering options (these options may be suggested by the learner or another person)
Define	say (orally or in writing) what the meaning of something, especially a word, is (eg defining a particular term)
Demonstrate	show how something should be done. This is evidence of performance.
Describe	give details, to say or write what someone or something is like
Evaluate	to judge or calculate the quality, importance, amount or value of something
Explain	to make something clear or easy to understand by describing or giving information about it
Identify	to recognise something (or someone) and say (or prove) what (or who) they are
List	to make a list of at least two items. This could be a written list produced by the learner (eg hand written, using ICT, by highlighting or cutting and pasting from given source materials). Oral evidence could be recorded as an assessor observation, audio recording or a record of questioning.
Outline	give a general explanation or description without detail
Portfolio	a collection of evidence which meets the assessment criteria. This can be paper based and/or stored electronically (i.e. e-portfolio).
Qualities	distinguishing characteristics or attributes; a feature of personality (NB learners do not have to distinguish between skills, qualities and attitudes)
Range	at least three
Research	find information eg from a variety of oral and/or written sources
Skill	special ability or expertise, often acquired through training (NB learners do not have to distinguish between skills, qualities and attitudes)
State	can be written or oral evidence. Evidence for oral contribution could be an assessor record of questioning.
UAN	Unit accreditation number
Use	to put something, such as a tool or skill to a particular purpose
Witness statement	written evidence produced by someone other than the assessor to record what they have observed the learner doing

Appendix 2

Change detail

Version and date	Change detail	Section
1.1 Oct 2012	Amendment to the credit value for unit 208	Structure of the units
2.0 Jan 2013	Missing Units 190 & 191 Added	Structure of the units
2.1 March 2013	Amendment to GLH for unit 214 and corrected unit formatting.	Structure of the units
3.0 October 2013	Missing Unit 360 added.	Structure of the units
3.1 January 2014	Correct GLH and credit value of unit 220	Units
3.2 March 2014	Corrected assessment criteria 2.1 in unit 308 to match Ofqual Register	Units
3.3 March 2014	Corrected UAN number for unit 304	Units
4.0 June 2014	Units 501 – 505 units added	Structure of the units
6.0 December 2015	Units 438-451 and 580 added.	Structure of the units
	Unit 288 – assessment method corrected to Portfolio Unit 384 title corrected Unit 416 title corrected Unit 580 credit value corrected to 14	Units
7.0 February 2017	Unit 4520-416 title corrected	Unit title
8.0 February 2022	Units deleted and added as part of a structural amendment to the qualification. References to e-skills UK removed. Minor amendments to text for clarity.	Units

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City & Guilds

Giltspur House

5-6 Giltspur Street

London EC1A 9DE

www.cityandguilds.com