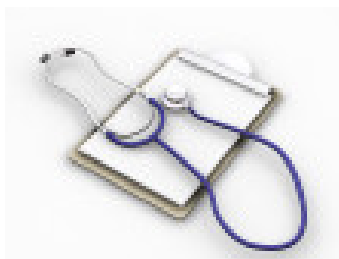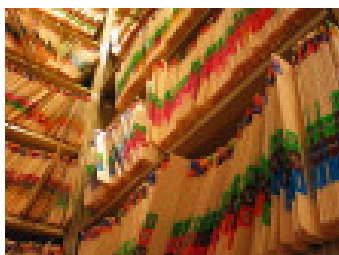# Level 2 Award/Certificate in Health Informatics (7450-02)

Qualification handbook for centres

Level 2 (Award)   : 501/1184/X
Level 2 (Certificate)   : 501/1182/6

City & Guilds

CF2 Support Workers

CF4 Assistant Practitioners

CF3 Senior Assistants / Technicians

CF5 Practitioners

Clinicians

About City & Guilds

City & Guilds is the UK's leading provider of vocational qualifications, offering over 500 awards across a wide range of industries, and progressing from entry level to the highest levels of professional achievement. With over 8500 centres in 100 countries, City & Guilds is recognised by employers worldwide for providing qualifications that offer proof of the skills they need to get the job done.

City & Guilds Group

The City & Guilds Group includes City & Guilds, ILM (the Institute of Leadership & Management, which provides management qualifications, learning materials and membership services), City & Guilds NPTC (which offers land-based qualifications and membership services), City & Guilds HAB (the Hospitality Awarding Body), and City & Guilds Centre for Skills Development. City & Guilds also manages the Engineering Council Examinations on behalf of the Engineering Council.

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Level 2 Award/Certificate in Health Informatics (7450-02)

Qualification title	Number	Ofqual ref.
Level 2 Award in Health Informatics (QCF)	7450-02	501/1184/X
Level 2 Certificate in Health Informatics (QCF)	7450-02	501/1182/6
Level 2 Award/Certificate in Health Informatics (QCF) – Unit Route	7450-92	501/1184/X 501/1182/6

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Contents

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1   Introduction to the qualifications

This document contains the information that centres need to offer the following qualifications:

Qualification title(s) and level(s)	City & Guilds qualification number(s)	Ofqual accreditation number(s)	Last registration date	Last certification date
Level 2 Award in Health Informatics (QCF)	7450-02	501/1184/X	31/12/2013	31/12/2015
Level 2 Certificate in Health Informatics (QCF)	7450-02	501/1182/6	31/12/2013	31/12/2015

Who is the qualification for?

These qualifications are intend to provide certification of competence for those working or wishing to work in the Health Informatics Career Framework in the following positions;

- Data entry clerks
- Clinical coder and clinical coding support worker
- Ward clerks
- Information assistants
- Health records clerks
- Receptionists
- Information officers
- Information governance assistant
- Information analyst
- Administrative assistant

It may also be suitable for Assistant Trainers who work with the above or non-informatics specialist roles, such as;

- Clinicians in both primary and secondary care who may be directly involved in retrieval, reporting and storage of data whether paper or IT based
- Information managers who may be responsible for those working directly with information as a springboard or underpinning qualification to other areas

What does the qualification cover?

The qualification provides learners with the competence to deal with data/information within a health environment. It covers the skills and knowledge for dealing with paper or electronic data/information in the following key areas;

- Input and handling of data
- Validation and quality assurance of data
- Production of reports from a variety of sources
- Dissemination of information including all aspects around its storage, security and disclosure.

Learners will be working with a data/information tasks that are straightforward or routine, but will also gain the confidence and competence to handle some elements or tasks that are unfamiliar.

What will learners be able to do?	With guidance a learner will be able to process, report and use data held in a paper based format or within an ICT system. When using an ICT system to gather, store or report on data the candidate may be using standard or bespoke software relevant to their organisation.
	The Outcomes and Assessment Criteria contained in this handbook are aligned to the National Occupational Standards (NOS) for Health Informatics developed by Skills for Health (Sector Skills Council for Health).
	- HI 1 - HI 7 - HI 12 - GEN 22 - GEN 25 - GEN 32
Is the qualification part of a framework or initiative?	The qualification is accredited for funding and to be part of the development of an entry point Apprenticeship for those wishing to work in the Health Informatics Career Framework or those clinicians that deal with data/information as part of their working practice.

1   Introduction to the qualifications

1.1   Qualification structure

To achieve the Level 2

Award in Health Informatics: learners must gain 12 credits all of which will come from the mandatory units.

Certificate in Health Informatics: learners must gain 18 credits of which 12 credits must come from the mandatory units and a minimum of 6 credits from the optional units.

Health Informatics Units

The diagram below shows the unit titles, the credit value of each unit followed by the list of excluded and exempt combination of units.

City & Guilds Units – Level 2

Accreditation unit reference	City & Guilds unit number	Unit title	Mandatory/ optional for full qualification	Credit value
M/602/0953	**201**	**Essentials in health informatics**	**Mandatory**	**2**
Y/601/2488	**202**	**Research information**	**Mandatory**	**4**
R/601/2487	**203**	**Organise and report data**	**Mandatory**	**3**
R/601/2490	**204**	**Store and retrieve information**	**Mandatory**	**3**
Y/502/4257	205	IT security for users	Optional	2
L/502/4207	206	IT user fundamentals	Optional	3
D/502/4292	207	IT communication fundamentals	Optional	2
J/502/4559	208	Data management software	Optional	3
F/502/4396	209	Bespoke software	Optional	3
R/502/4399	210	Specialist software	Optional	3

City & Guilds Units – Level 1

Accreditation unit reference	City & Guilds unit number	Unit title	Mandatory/ optional for full qualification	Credit value
R/502/4256	105	IT security for users	Optional	1
Y/502/4291	107	IT communication fundamentals	Optional	2

1   Introduction to the qualifications

1.1   Qualification structure

City & Guilds Units – titled alternatives for Bespoke and Specialist Software

Where a learner uses a particular proprietary software application they may wish to have this shown on their certificate. These units allow the learner/centre to substitute a titled unit for either the Bespoke or Specialist software unit, with the option of selecting two from the list - one for Bespoke software and one for Specialist software. Evidence for these units must meet the standards set out in the outcome and assessment criteria for the Bespoke and Specialist software units.

Accreditation unit reference	City & Guilds unit number	Unit title	Mandatory/ optional for full qualification	Credit value
F/502/4396 OR R/502/4399	501	PAS – Patient administration system	Optional	3
F/502/4396 OR R/502/43998	502	ESR – Electronic staff records	Optional	3
F/502/4396 OR R/502/4399	503	Q-Plus	Optional	3
F/502/4396 OR R/502/4399	504	A Scribe	Optional	3
F/502/4396 OR R/502/4399	505	RX Systems (Pharmacy)	Optional	3
F/502/4396 OR R/502/4399	506	Shire	Optional	3
F/502/4396 OR R/502/4399	507	Integra	Optional	3
F/502/4396 OR R/502/4399	508	Datiz	Optional	3
F/502/4396 OR R/502/4399	509	Practice Navigator	Optional	3
F/502/4396 OR R/502/4399	510	EMIS – Primary care system	Optional	3
F/502/4396 OR R/502/4399	511	Vision – Primary care system	Optional	3

Titled units may be added to this list on request to City & Guilds, but this must be done at the start of any course and at least 6 weeks before achievement is to be awarded.

Qualification Claim Units

Accreditation unit reference	City & Guilds unit number	Unit title	Mandatory/ optional for full qualification	Credit value
N/A	904	Level 2 **AWARD** claim unit	N/A	N/A
N/A	905	Level 2 **CERTIFICATE** claim unit	N/A	N/A

Once a learner has gain sufficient credit for the Award or Certificate sized qualification the centre will need to select the appropriate certification to be awarded to match the total credit value.

1   Introduction to the qualifications

1.1   Qualification structure

Excluded combination of units

As the qualification allows a 'spiky profile', candidates may not include the same unit at more than one level in any qualification, where a learner takes the same module at different levels only the highest level will be counted. Thus a candidate who has completed, for example, both IT Security at Level 1 (1 credits) and IT Security at Level 2 (2 credits) may only count credits from the higher level towards the qualification.

Where this occurs it may result in the learner not achieving enough credits to be awarded any form of certification.

Units 501 to 511 may be used to replace either the Bespoke software or Specialist software units or both. Where more than one unit is selected or the combination of units does not meet the Rules of Combination the learner will not be awarded any form of certification.

Certificates of unit credit

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

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

1.2   Rules of combination

To gain an Award in Health Informatics the following needs to be achieved - 12 Credits	**Core** 12 Credits from units 201 - 204	**Optional** None
To gain a Certificate in Health Informatics the following needs to be achieved - 18 Credits	**Core** 12 Credits from units 201 - 204	**Optional** 6 Credits from units 105, 107, 205 – 207, (208, 501 – 511), (209, 501-511)

1.3   Opportunities for progression

On completion of these qualifications learners may progress into or within employment within the Health Informatics Career Framework or to the further City & Guilds qualifications.

1   Introduction to the qualifications

1.4   Qualification support materials

City & Guilds also provides the following publications and resources specifically for these qualifications:

Description	How to access
Promotional materials	**www.cityandguilds.com**
Fast track approval forms	**www.cityandguilds.com**
Candidate logbook – recording forms	**www.cityandguilds.com**

1.5   Europass Certificate Supplement

A Europass Certificate Supplement is available for the Level 2 Award and Certificate in Health Informatics.

The Certificate Supplement is part of a European initiative called Europass which aims at facilitating mobility by making it easier to understand skills and qualifications, especially outside the issuing country.

The Certificate Supplement can be used to help learners find a job, get experience or enrol in an education or training programme abroad. It may also assist employers to identify the best applicant to work for their organisation.

The Certificate Supplement sits alongside the official certificate and is supplied by the awarding body which develops the qualification.

For more information on Europass and to download the Certificate Supplement for free, please visit **www.cityandguilds.com/europass**.

2   Centre requirements

This section outlines the approval processes for Centres to offer these qualifications and any resources that Centres will need in place to offer the qualifications including qualification-specific requirements for Centre staff.

2.1   Centre approval requirements

Centres already offering City & Guilds qualifications in specific subject area

Centres approved to offer the following qualifications:

- Level 2 Award/Certificate/Diploma for IT Users ITQ (QCF) (7574)
- Level 3 Award/Certificate/Diploma for IT Users ITQ (QCF) (7574)
- Level2 Certificate for IT Users (ITQ) (7541)
- Level 3 Diploma for IT Users (ITQ) (QCF) (7541)
- Level 2 N/SVQ for IT Users (ITQ) (4322)
- Level 3 N/SVQ for IT Users (ITQ) (4322)
- Level 2 Award/Certificate/Diploma in Business and Administration (4448)
- Level 3 Award/Certificate/Diploma in Business and Administration (4448)
- Level 2 N/SVQ in Business and Administration (4404)
- Level 3 N/SVQ in Business and Administration (4404)

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

Existing City & Guilds centres

To offer this qualification, centres already approved to deliver City & Guilds qualifications will need to gain **qualification approval**. Please refer to **www.cityandguilds.com/42992.html** for further information.

Centres not yet approved by City & Guilds

To offer this qualification, new centres will need to gain both **centre and qualification approval**. Please refer to **www.cityandguilds.com/42992.html** for further information.

2   Centre requirements

2.2   Resource requirements

Physical resources and site agreements

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

It is acceptable for centres to use specially designated areas within a centre to assess, for example, the installation of network, applications software, operating systems, setting up ICT equipment, etc. especially where the normal learning environment does not allow this to happen The equipment and systems must meet industrial or business standards and be capable of being used under normal working conditions.

Human resources

To meet the quality assurance criteria for this qualification, the centre must ensure that the following internal roles are undertaken:
- quality assurance co-ordinator
- trainer / tutor
- assessor
- internal verifier

To ensure the quality of assessment decisions, it is expected that centres will have in place methods to:
- ensure that assessors and internal verifiers have the necessary data/information management skills and experience to assess the units and qualifications they are making judgements on
- maintain a current register of curriculum vitae (CVs), including reference to continuing professional development
- access training and certification of assessors and internal verifiers to hold assessor qualifications that may be required by City & Guilds or regulatory body should these become necessary

Staff delivering these qualifications must be able to demonstrate that they meet the following occupational expertise requirements. They should:
- have recent relevant experience in the specific area they will be assessing
- be occupationally knowledgeable and competent in the area(s) of Health Informatics for which they are delivering training. This knowledge must be at least to the same level as the training being delivered
- have appropriate and credible experience of providing training, with a suitable qualification if required by the organisation within which they operate.

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

Assessors and internal verifiers

While the main assessment method is similar to that for those undertaking an NVQ, this is not an NVQ qualification. While the Assessor/Verifier (A/V) units are valued as qualifications for centre staff, there is no need for assessors to hold the A1 qualification, or for verifiers to hold the V1 qualification, or indeed to be working towards these qualifications.

2 Centre requirements

2.2 Resource requirements

Continuing professional development (CPD)

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

2.2 Quality assurance

Centres must use quality assurance systems that are fit for purpose for the assessment method(s) being used and are in line with the relevant regulatory requirements. For example:

- internal/external moderation of externally set examinations or online tests
- external moderation of externally set and internally marked tasks
- records to authenticate candidate's evidence for assessment
- internal standardisation/ external moderation of scenario based assignments set by centres
- internal moderation/verification of internally assessed evidence by a suitably qualified internal moderator/verifier using procedures approved by the awarding body
- external moderation/verification of internally assessed evidence by a suitably qualified external moderator/verifier using procedures specified by the awarding body.

2.3 Candidate entry requirements

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

There are no formal entry requirements for candidates undertaking these qualifications as candidates may have no prior experience, though some may have Level 1 experience/skills (such as defined in the QCF Level descriptors).

Centres must ensure that candidates have the potential and opportunity to gain the qualifications successfully.

Age restrictions

This qualification is available for anyone aged 16 or above, no other age limit is attached to the qualifications unless this is a legal requirement of the process or the environment.

Other legal considerations

Other legal considerations may apply to this qualification, such as Health and Safety using IT equipment and accessibility for all learners. It is the responsibility of centres to ensure compliance with all local, regional and national legislation which may affect delivery of the qualification, and to ensure that candidates are fully aware of any requirements.

3   Units

Availability of units

A complete set of units including the assessment criteria are provided in this handbook. The learning outcomes and assessment criteria are also viewable on the National Database of Accredited Qualifications (NDAQ) **www.accreditedqualifications.org.uk**

Structure of units

The units in these qualifications are written in a standard format and comprise the following:
- City & Guilds reference number and title
- Level and credit value
- unit aim
- endorsement by a sector or other appropriate body
- learning outcomes which are comprised of a number of assessment criteria
- notes for guidance – which are suggestions and should not be seen as a prescriptive list.

Definition of Levels

Level 2

A Level 2 user can make use of predefined or commonly used systems and processes for activities that are at times non-routine or unfamiliar, they will be able to maintain the secure use of data/information when retrieving, storing or creating reports. Any aspect that is unfamiliar may require support and advice from other people.

An activity will typically be 'non-routine or unfamiliar' because:
- the task or context is likely to require some preparation, clarification or research (to separate the components and to identify what factors need to be considered, for example, time available, audience needs, accessibility of source, types of content, message and meaning) before an approach can be planned; and
- the techniques required will involve a number of steps and at times be non-routine or unfamiliar.

Unit 201   Essentials in Health Informatics

Level: 2

Credit value:

Unit aims

This unit is to assess the competence of a candidate to:

- understand and describe the importance of policies, procedures and laws that affect the use of data within a health sector environment.
- ensure the quality of information and how it is used

Learning outcomes

There are **3** learning outcomes to this unit. The learner will be able to:

1. Understand how to comply with policies and procedures surrounding information within a health environment
2. Be able to take due care in the collection, storage and use of information in a health context
3. Be able to participate in responding to requests for information

Guided learning hours

It is recommended that **15** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by the Sector Skills Council, skills for Health.

Assessment

This unit will be assessed by:

- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario

Unit 201 Essentials of Health Informatics
Learning outcomes and assessment criteria

Outcome 1 Understand how to comply with policies and procedures surrounding information within a health environment

The learner can:
1. Explain the legal status of personal information records.
2. Describe the activities that may be undertaken with regards to editing existing data.
3. Describe the audit processes for information within a local context
4. Identify where duplicate, inaccurate or missing information and or data may exist and ensure appropriate action is taken.
5. Describe the flow of information and or data within an organisation, with emphasis on its importance, quality and use

Outcome 2 Be able to take due care in the collection, storage and use of information in a health context

The learner can:
1. Identify and respond to risks relating to the collection, storage and use of data and or information.
2. Describe the concept of personal responsibility when working with information and or data
3. State the issues surrounding the individual's rights when dealing with their information and or data.
4. Maintain confidentiality when processing or producing information, including information via fax, emails and verbal communication.
5. Describe the impact of inaccurate, incomplete or unavailable information/data.

Outcome 3 Be able to participate in responding to requests for information

The learner can:
1. Outline the relevant policies and procedures for dealing with requests to provide information.
2. Assist in handling requests for information, working within local and national guidelines.
3. Take appropriate action in response to requests from individuals to review data held about them in accordance with local guidelines and legislation
4. Describe how information may be used both in a local and national context.
5. Describe the pathways for sourcing, collecting and reporting information.

Unit 202   Research information

Level 2

Credit Value 4

Unit aims

This unit is about organising suitable data that has been researched using different sources of information.

Learning outcomes

There are **2** learning outcomes to this unit. The learner will be able to:
1. Understand procedures for researching information
2. Be able to research information for others.

Guided learning hours

It is recommended that **17** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health.

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by the Sector Skills Council, skills for Health.

Assessment

This unit will be assessed by:
- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario.

Unit 202   Research information
Learning outcomes and assessment criteria

Outcome 1 Understand procedures for researching information

The learner can:

1. Give reasons for agreeing objectives and deadlines for researching information
2. Give reasons for identifying and agreeing sources of information
3. Explain the purpose of recording and storing information researched.

Outcome 2 Be able to research information for others.

The learner can:

1. Describe what functions to apply to structure and layout information effectively
2. Agree aims, objectives and deadlines for the information search
3. Identify sources of information
4. Search for and obtain data
5. Check that data is suitable for the purpose of the research
6. Record the data and store it securely
7. Make a record of information sources used
8. Meet deadlines for completing research.

Unit 202   Research information
Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Understand procedures for researching information

Candidates can demonstrate skills or understanding via:

- **Reasons for agreeing objectives and deadlines**
    - Written report
    - Reflective account of activity
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer.
- **Identifying and agreeing resources:**
    - Written report
    - Reflective account of activity
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer.
- **Purpose of recording and storing information:**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Written evidence is also acceptable, but may not be appropriate in all cases.

Outcome 2 Be able to research information for others.

Candidates can demonstrate skills or understanding via:

- **Structure and layout information effectively**
    - Observation of workplace activities
    - Witness testimony
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Documents or other products, using evidence appropriate to the learner's job role, such as:
        - letters, emails, memos, notes of formal or informal meetings, reports.
- **Aims, objectives and deadlines for the information search**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Documents using evidence appropriate to the learner's job role
- **Identify sources of information**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Documents using evidence appropriate to the learner's job role.

Unit 202   Research information
Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 2 Be able to research information for others.

- **Search for and obtain data**
  - Observation of workplace activities
  - Witness testimony
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
  - Production of documents or other product, using evidence appropriate to the learner's job role, such as:
    - letters, emails, memos, notes of formal or informal meetings
    - web pages, articles, staff or patient notes.
- **Check that data is suitable for the purpose of the research**
  - Observation of workplace activities
  - Witness testimony
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
  - Production of documents or other product, using evidence appropriate to the learner's job role, such as:
    - reports, memos, notes.
- **Record the data and store it securely**
  - Observation of workplace activities
  - Witness testimony
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
  - Production of documents or other product, using evidence appropriate to the learner's job role, such as:
    - audit trail, screen shots (if IT based).
- **Make a record of information sources used**
  - Documents using evidence appropriate to the learner's job role
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
  - Production of documents or other product, using evidence appropriate to the learner's job role, such as:
    - audit trail, screen shots (if IT based).
- **Meet deadlines for completing research**
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
  - Audit trail.

Unit 203   Organise and report data

Level 2

Credit Value 3

Unit aims

This unit is about organising and reporting data to the agreed format and timescales.

Learning outcomes

There are **3** learning outcomes to this unit. The learner will be able to:

1. Understand how to organise and report data that has been researched
2. Be able to organise data
3. Be able to report data.

Guided learning hours

It is recommended that **9** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health.

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by the Sector Skills Council, skills for Health.

Assessment

This unit will be assessed by:

- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario.

Unit 203   Organise and report data
Learning outcomes and assessment criteria

Outcome 1   Understand how to organise and report data that has been researched

The learner can

1. Describe different ways of organising data that has been researched
2. Describe different ways of reporting data
3. Describe the purpose of presenting data to the agreed format and timescale

Outcome 2   Be able to organise data

The learner can

1. Organise data so that it can be reported
2. Check the accuracy of the data, and make adjustments, if required
3. Obtain feedback on data collected, if required

Outcome 3   Be able to report data.

The learner can

1. Present data in agreed format
2. Present data to agreed timescale

Unit 203 Organise and report data
Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Understand how to organise and report data that has been researched

The learner can

- **Describe different ways of organising data that has been researched**
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Audit trail
  - Personal report or reflective journal.
- **Describe different ways of reporting data**
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Audit trail
  - Personal report or reflective journal
- **Describe the purpose of presenting data to the agreed format and timescale**
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Audit trail
  - Personal report or reflective journal

Outcome 2 Be able to organise data

The learner can

- **Organise data so that it can be reported**
  - Observation of workplace activities
  - Witness testimony
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
- **Check the accuracy of the data, and make adjustments, if required**
  - Observation of workplace activities
  - Witness testimony
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
- **Obtain feedback on data collected, if required**
  - Observation of workplace activities
  - Witness testimony; feedback from those requesting the data
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal

Unit 203   Organise and report data

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 3 Be able to report data.

The learner can

- **Present data in agreed format**
  - ◆ Observation of workplace activities
  - ◆ Witness testimony
  - ◆ Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - ◆ Questioning by tutor or witness or other observer
  - ◆ Production of documents or other product, using evidence appropriate to the learner's job role, such as:
    - ➢ letters, emails, memos, reports, web pages, articles, staff or patient notes
    - ➢ personal report or reflective journal or other documents as required
- **Present data to agreed timescale**
  - ◆ Observation of workplace activities
  - ◆ Witness testimony
  - ◆ Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - ◆ Questioning by tutor or witness or other observer
  - ◆ Production of documents or other product, using evidence appropriate to the learner's job role, such as:
    - ➢ letters, emails, memos, reports, web pages, articles, staff or patient notes
    - ➢ personal report or reflective journal or other documents as required

Unit 204   Store and retrieve information

Level 2

Credit Value 3

Unit aims

This unit is about storing and retrieving information securely and within confidentiality requirements of the organisation.

Learning outcomes

There are **3** learning outcomes to this unit. The learner will be able to:
1. Understand processes and procedures for storing and retrieving information
2. Be able to store information
3. Be able to retrieve information

Guided learning hours

It is recommended that **17** hours should be allocated for this unit. This may be on a full-time or part-time basis.

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by the Sector Skills Council, skills for Health.

Assessment

This unit will be assessed by:
- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario.

Unit 204   Store and retrieve information

Outcome 1 Understand processes and procedures for storing and retrieving information

The learner can

1. Explain the purpose of storing and retrieving required information
2. Describe different information systems and their main features
3. Explain the purpose of legal and organisational requirements for the security and confidentiality of information
4. Explain the purpose of confirming information to be stored and retrieved
5. Describe ways of checking information for accuracy
6. Explain the purpose of checking information for accuracy
7. Explain the purpose of providing information to agreed format and timescales
8. Describe the types of information that may be deleted
9. Describe problems that may occur with information systems and how to deal with them, when necessary.

Outcome 2 Be able to store information

The learner can

1. Identify, confirm and collect information to be stored
2. Follow legal and organisational procedures for security and confidentiality of information to be stored
3. Store information in approved locations
4. Check and update stored information, if required
5. Delete stored information, if required
6. Deal with, or refer problems, if required.

Outcome 3 Be able to retrieve information

The learner can

1. Confirm and identify information to be retrieved
2. Follow legal and organisational procedures for security and confidentiality of information
3. Locate and retrieve the required information
4. Check and update information, if required
5. Provide information in the agreed format and timescale
6. Deal with, or refer problems if required.

Unit 204   Store and retrieve information
Teaching guidance
The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Understand processes and procedures for storing and retrieving information

The learner can
- **Explain the purpose of storing and retrieving required information**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal.
- **Describe different information systems and their main features**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal.
- **Explain the purpose of legal and organisational requirements for the security and confidentiality of information**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal.
- **Explain the purpose of confirming information to be stored and retrieved**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal.
- **Describe ways of checking information for accuracy**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal.
- **Explain the purpose of checking information for accuracy**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal.
- **Explain the purpose of providing information to agreed format and timescales**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal.
- **Describe the types of information that may be deleted**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal.
- **Describe problems that may occur with information systems and how to deal with them, when necessary**
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal.

Unit 204   Store and retrieve information

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 2 Be able to store information

The learner can

- **Identify, confirm and collect information to be stored**
    - Observation of workplace activities
    - Witness testimony
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal
    - Production of documents or other product, using evidence appropriate to the learner's job role;
        - letters, emails, memos, reports, web pages, articles, staff or patient notes
        - personal report or reflective journal or other information and data as required.
- **Follow legal and organisational procedures for security and confidentiality of information to be stored**
    - Observation of workplace activities
    - Witness testimony
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal
    - Audit trail.
- **Store information in approved locations**
    - Observation of workplace activities
    - Witness testimony
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal
    - Production of documents or other product, using evidence appropriate to the learner's job role
        - audit trail, screen shots (if IT based).
- **Check and update stored information, if required**
    - Observation of workplace activities
    - Witness testimony
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal
    - Production of documents or other product, using evidence appropriate to the learner's job role
        - audit trail, screen shots (if IT based).

Unit 204   Store and retrieve information

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 2 Be able to store information

- **Delete stored information, if required**
  - Observation of workplace activities
  - Witness testimony
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
  - Production of documents or other product, using evidence appropriate to the learner's job role
    - audit trail, screen shots (if IT based).
- **Deal with, or refer problems, if required**
  - Observation of workplace activities
  - Witness testimony
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
  - Production of documents or other product, using evidence appropriate to the learner's job role;
    - letters, emails, memos, reports, web pages, articles, staff or patient notes
    - personal report or reflective journal, other information or data as required.

Outcome 3 Be able to retrieve information

The learner can

- **Confirm and identify information to be retrieved**
  - Observation of workplace activities
  - Witness testimony
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
  - Production of documents or other product, using evidence appropriate to the learner's job role;
    - letters, emails, memos, reports, web pages, articles, staff or patient notes
    - personal report or reflective journal, other information or data as required.
- **Follow legal and organisational procedures for security and confidentiality of information**
  - Observation of workplace activities
  - Witness testimony
  - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
  - Questioning by tutor or witness or other observer
  - Personal report or reflective journal
  - Audit trail
  - Production of documents or other product, using evidence appropriate to the learner's job role.

Unit 204   Store and retrieve information
Teaching guidance
The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 3 Be able to retrieve information

- **Locate and retrieve the required information**
    - Observation of workplace activities
    - Witness testimony
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal
    - Production of documents or other product, using evidence appropriate to the learner's job role;
        - letters, emails, memos, reports, web pages, articles, staff or patient notes
        - personal report or reflective journal, other information or data as required.
- **Check and update information, if required**
    - Observation of workplace activities
    - Witness testimony
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal
    - Production of documents or other product, using evidence appropriate to the learner's job role;
        - letters, emails, memos, reports, web pages, articles, staff or patient notes
        - personal report or reflective journal, other information or data as required.
- **Provide information in the agreed format and timescale**
    - Observation of workplace activities
    - Witness testimony
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal
    - Production of documents or other product, using evidence appropriate to the learner's job role;
        - letters, emails, memos, reports, web pages, articles, staff or patient notes
        - personal report or reflective journal, other information or data as required.
- **Deal with, or refer problems if required**
    - Observation of workplace activities
    - Witness testimony
    - Professional discussion (PD) with tutor or witness (ensure that how to conduct a PD is clearly understood by those undertaking assessment in this manner)
    - Questioning by tutor or witness or other observer
    - Personal report or reflective journal
    - Production of documents or other product, using evidence appropriate to the learner's job role;
        - letters, emails, memos, reports, web pages, articles, staff or patient notes
        - personal report or reflective journal, other information or data as required.

Unit 105 IT security for users

Level: 1

Credit value: 1

Unit aims

This is the ability to protect hardware, software malfunction and unauthorised access.

On completion of this unit the candidate should be able to identify day-to-day security risks and the laws and guidelines that affect the use of IT; and use simple methods to protect software and personal data (eg risks from people getting access to it who are not authorised, from viruses or from hardware not working properly).

Examples of context: Regular change of password using a range of alphanumeric characters and symbols. Understanding the importance of applying organisational procedures for maintaining security consistently.

Learning outcomes

There are **1** learning outcomes to this unit. The learner will be able to:
1. Use appropriate methods to minimise security risks to IT systems and data

Guided learning hours

It is recommended that **10** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by e-skills UK, the sector skills council for Business and Information Technology.

Assessment

This unit will be assessed by:
- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario.

Unit 105 IT security for users
Learning outcomes and assessment criteria

Outcome 1 Use appropriate methods to minimise security risks to IT systems and data

The learner can:
1. Identify security issues that may threaten system performance
2. Take appropriate security precautions to protect IT systems and data
3. Identify threats to information security associated with the widespread use of technology
4. Take appropriate precautions to keep information secure
5. Follow relevant guidelines and procedures for the secure use of IT
6. Describe why it is important to backup data securely
7. Ensure personal data is backed up to appropriate media

Unit 105   IT security for users

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Use appropriate methods to minimise security risks to IT systems and data

The learner should be able to and understand:

- **Threats to system performance:**
  - Unwanted e-mail (often referred to as "spam"), malicious programs (including viruses, worms, trojans, spyware, adware and rogue diallers) and hackers; hoaxes
- **Security precautions:**
  - **Use access controls:** Physical controls, locks, passwords, access levels
  - Run anti-virus software, adjust firewall settings, adjust internet security settings; carry out security checks, report security threats or breaches
  - Backup; store personal data and software safely
  - Treat messages, files, software and attachments from unknown sources with caution
- **Threats to information security:**
  - From theft, unauthorised access, accidental file deletion, use of removable storage media
  - Malicious programs (including viruses, worms, trojans, spyware, adware and rogue diallers), hackers, phishing and identity theft
  - Unsecured and public networks, default passwords and settings, wireless networks, Bluetooth, portable and USB devices
- **Access to information sources:**
  - Username and password/PIN selection, how and when to change passwords; online identity/profile
  - Real name, pseudonym, avatar; what personal information to include, who can see the information
  - Respect confidentiality, avoid inappropriate disclosure of information
- **Security guidelines and procedures:**
  - Set by: employer or organisation; security, privacy

Unit 205 IT security for users

Level: 2

Credit value: 2

Unit aims

This is the ability to protect hardware, software malfunction and unauthorised access.

On completion of this unit the candidate should be bale to avoid common security risks and control access to software and data; and use a wider range of methods to protect software and data (eg from exchanging information by e-mail or when downloading software from the Internet).

Examples of context: Run anti-virus software to scan system and maintain security log. Home user ensuring their PC is protected by firewall and runs up-to-date anti-virus software routinely.

Learning outcomes

There are **1** learning outcomes to this unit. The learner will be able to:
1. Select and use appropriate methods to minimise security risk to IT systems and data

Guided learning hours

It is recommended that **15** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by e-skills UK, the sector skills council for Business and Information Technology.
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Assessment

This unit will be assessed by:
- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario.

Unit 205   IT security for users
Learning outcomes and assessment criteria

Outcome 1 Select and use appropriate methods to minimise security risk to IT systems and data

The learner can:

1. Describe the security issues that may threaten system performance
2. Apply a range of security precautions to protect IT systems and data
3. Describe the threats to system and information security and integrity
4. Keep information secure and manage personal access to information sources securely
5. Describe ways to protect hardware, software and data and minimise security risk
6. Apply guidelines and procedures for the secure use of IT
7. Describe why it is important to backup data and how to do so securely
8. Select and use effective backup procedures for systems and data

Unit 205   IT security for users

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Select and use appropriate methods to minimise security risk to IT systems and data

The learner should be able to and understand:

- **Threats to system performance:**
  - Unwanted e-mail (often referred to as "spam"), malicious programs (including viruses, worms, trojans, spyware, adware and rogue diallers) and hackers; hoaxes
- **Security precautions:**
  - Use access controls
  - Configure anti-virus software, adjust firewall settings, adjust internet security settings
  - Carry out security checks, report security threats or breaches
  - Backup, store personal data and software safely
  - Treat messages, files, software and attachments from unknown sources with caution; proxy servers; download security software patches and updates;
- **Threats to information security:**
  - From theft, unauthorised access, accidental file deletion, use of removable storage media; malicious programs (including viruses, worms, trojans, spyware, adware and rogue diallers), hackers, phishing and identity theft
  - Unsecured and public networks, default passwords and settings, wireless networks, Bluetooth, portable and USB devices
- **Access to information sources:**
  - Username and password/PIN selection and management, password strength; how and when to change passwords; online identity/profile
  - Real name, pseudonym, avatar; what personal information to include, who can see the information; Respect confidentiality, avoid inappropriate disclosure of information
- **Protect systems and data:**
  - **Access controls:** physical controls, locks, passwords, access levels
  - **Security measures:** anti-virus software, firewalls, security software and settings
  - Risk assessment
  - Anti-spam software, software updates
- **Security guidelines and procedures:**
  - **Set by:** employer or organisation or centre
  - Security, privacy, legal requirements
  - How to use products to ensure information security within organisations or at home or in centre

Unit 106 IT communication fundamentals

Level: 1

Credit value: 2

Unit aims

This is the ability to access, search for and retrieve information using browser software from the Internet and/or intranets and exchange information using e-mail or IT-based communication systems.

On completion of this unit a candidate should be able to use appropriate IT tools and techniques to find and evaluate information and send and receive messages using IT-based communication systems when undertaking routine and straightforward activities.

Examples of context: Finding the details of a journey, including the best match of convenience, speed and cost; gathering and evaluating information about competing products or services; using e-mail to arrange time and place of a meeting and agree agenda.

Learning outcomes

There are **3** learning outcomes to this unit. The learner will be able to:
1. Use a variety of sources of information to meet needs [FSI1:1]
2. Access, search for, select and use Internet-based information and assess its fitness for purpose [FSI1:2]
3. Select and use IT to communicate and exchange information [DPC1:5]

Guided learning hours

It is recommended that **15** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by e-skills UK, the sector skills council for Business and Information Technology.

Assessment

This unit will be assessed by:
- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario.

Unit 106 IT communication fundamentals
Learning outcomes and assessment criteria

Outcome 1 Use a variety of sources of information to meet needs [FSI1:1]

The learner can:
1. Use appropriate sources of IT-based and other forms of information to meet needs [FSI1:1.1]
2. Identify different features of information
3. Recognise copyright constraints on the use of information [FSI1:1.2]

Outcome 2 Access, search for, select and use Internet-based information and assess its fitness for purpose [FSI1:2]

The learner can:
1. Access, navigate and search Internet sources of information purposefully and effectively [FSI1:2.1] (IE2)
2. Use appropriate search techniques to locate and select relevant information [FSI1:2.2]
3. Outline how the information meets requirements and is fit for purpose [FSI1:2.3] (IE4)

Outcome 3 Select and use IT to communicate and exchange information [DPC1:5]

The learner can:
1. Create, access, read and respond appropriately to e-mail and other IT-based communication [DPC1:5.1]
2. Use IT tools to maintain an address book and schedule activities [DPC1:5.2] [UIS1:2.1]

Unit 106   IT communication fundamentals

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Use a variety of sources of information to meet needs [FSI1:1]

The learner should be able to and understand:

- **Sources of information:**
  - ♦ Newspapers, books, images, maps, conversations, CDs, DVDs, text messages, podcasts, Internet, intranet, web logs, web based reference sites
- **Features of information:**
  - ♦ Factual information, creative work, opinions, information that is continually updated (or live), interactive information, guides and directories
- **Copyright constraints:**
  - ♦ Effect of copyright law (eg on music downloads or use of other people's images), acknowledgment of sources, avoiding plagiarism, permissions

Outcome 2 Access, search for, select and use Internet-based information and assess its fitness for purpose [FSI1:2]

The learner should be able to and understand:

- **Access, navigate and search:**
  - ♦ Enter a web address, use a search engine, browse, save and use bookmarks
- **Search techniques:**
  - ♦ Search key words, quotation marks, search within results, relational operators, 'find' or search tool, turn questions into key words for an online query
- **Evaluate information:**
  - ♦ Recognise intention and authority of provider, currency of the information, relevance, accuracy, bias, level of detail

Outcome 3 Select and use IT to communicate and exchange information [DPC1:5]

The learner should be able to and understand:

- **Email and other IT-based communications:**
  - ♦ Open mailbox, read, reply to individuals, reply to all, reply with history, delete messages, use group list, forward; communicate using from, to, cc, bcc; subject and content fields, add and open attachments, use instant messaging, contribute to forums, web conferences, web logs or web based reference sites
- **Address book:**
  - ♦ Add, amend and delete contact entries, contacts list
- **Schedule activities:**
  - ♦ Task list
  - ♦ Calendar; send and respond to meeting invitations

Unit 206   IT communication fundamentals

Level: 2

Credit value: 2

Unit aims

This is the ability to access, search for and retrieve information using browser software from the Internet and/or intranets and exchange information using e-mail or IT-based communication systems.

On completion of this unit the candidate should be able to select and use a varied range of appropriate IT tools and techniques to find and review information and send and receive messages using IT-based communication systems to independently respond to activities that are at times non-routine or unfamiliar.

Examples of context: Setting up email folders; using the internet to research a new product and select a reliable supplier

Learning outcomes

There are **3** learning outcomes to this unit. The learner will be able to:
1. Select and use a variety of sources of information to meet needs [FSI2:1]
2. Access, search for, select and use Internet-based information and evaluate its fitness for purpose [FSI2:2]
3. Select and use IT to communicate and exchange information safely, responsibly and effectively [DPC2:5]

Guided learning hours

It is recommended that **15** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by e-skills UK, the Sector Skills Council for Business and Information Technology.

Assessment

This unit will be assessed by:
*   an assignment
*   portfolio of evidence – classroom or work based
*   professional discussion
*   expert witness
*   scenario

Unit 206   IT communication fundamentals
Learning outcomes and assessment criteria

Outcome 1 Select and use a variety of sources of information to meet needs [FSI2:1]

The learner can:
1. Select and use appropriate sources of IT-based and other forms of information which match requirements [FSI2:1.1]
2. Describe different features of information
3. Recognise copyright and other constraints on the use of information [FSI2:1.2]

Outcome 2 Access, search for, select and use Internet-based information and evaluate its fitness for purpose [FSI2:2]

The learner can:
1. Access, navigate and search Internet sources of information purposefully and effectively [FSI2:2.1] (IE2)
2. Use appropriate search techniques to locate relevant information [FSI2:2.2]
3. Use discrimination to select information that matches requirements and is fit for purpose [FSI2:2.3] (IE4)
4. Evaluate information to make sure it matches requirements and is fit for purpose

Outcome 3 Select and use IT to communicate and exchange information safely, responsibly and effectively [DPC2:5]

1. Create, access, read and respond appropriately to e-mail and other IT-based communication, including attachments, and adapt style to suit audience [DPC2:5.1]
2. Use IT tools to manage an address book and schedule activities [DPC2:5.2 part]
3. Manage storage of IT-based communications [DPC2:5.2 part]
4. Describe how to respond to common IT-based communication problems
5. Respond appropriately to common IT-based communication problems

Unit 206 IT communication fundamentals

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Select and use a variety of sources of information to meet needs [FSI2:1]

The learner should be able to and understand:

- **Sources of information:**
    - Newspapers, books, images, maps, conversations, CDs, DVDs, text messages, podcasts, Internet, intranet, web logs, web based reference sites
- **Features of information:**
    - Factual information, creative work, opinions, information that is continually updated (or live), interactive information, guides and directories
- **Copyright constraints:**
    - Effect of copyright law (eg on music downloads or use of other people's images), acknowledgment of sources, avoiding plagiarism, permissions

Outcome 2 Access, search for, select and use Internet-based information and evaluate its fitness for purpose [FSI2:2]

The learner should be able to and understand:

- **Access, navigate and search:**
    - Enter a web address, use a search engine, browse, save and use bookmarks
- **Search techniques:**
    - Search key words, quotation marks, search within results, relational operators, 'find' or search tool, choice of search engine, multiple search criteria, logical operators, wild cards, database query techniques
- **Evaluate information:**
    - Recognise intention and authority of provider, currency of the information, relevance, accuracy, bias, level of detail, sufficiency, synthesise information from a variety of sources

Outcome 3 Select and use IT to communicate and exchange information safely, responsibly and effectively [DPC2:5]

The learner should be able to and understand:

- **Email and other IT-based communications:**
    - Open mailbox, read, reply to individuals, reply to all, reply with history, delete messages, use group list, forward; communicate using from, to, cc, bcc; subject and content fields, add and open attachments, use instant messaging, contribute to forums, web conferences, web logs or web based reference sites
- **Address book:**
    - Add, amend and delete contact entries, contacts list, distribution list; sort, display selected fields
- **Schedule activities:**
    - Task list, calendar; send and respond to meeting invitations
- **Storage of IT-based communications:**
    - Create and maintain message folders and sub-folders; delete unwanted messages; compress, expand and save attachments; archive and retrieve messages
- **IT-based communication problems:**
    - Difficulties with attachments, e-mail from unknown or misrepresented users, inappropriate content, e-mail intended to cause problems (SPAM or chain mail), size limits, software that causes problems (viruses, spyware, key loggers)

Unit 207   IT user fundamentals

Level: 2

Credit value: 3

Unit aims

This unit is about the ability to use IT systems sensibly and purposefully to meet needs, to do so safely and securely in line with organisational guidelines, to respond appropriately to IT problems and to evaluate the use of IT systems.

On completion of this unit the candidate should be able to select and use suitable techniques to operate IT systems for a varied range of activities, some of which are at times non-routine or unfamiliar, and take some responsibility for responding appropriately to IT errors and problems.

Examples of context: Using a personal computer or laptop; organising and backing up own data files, as well as an understanding why it is important to undertake security measures, backups and what media could be used.

Learning outcomes

There are **4** learning outcomes to this unit. The learner will be able to:
1. Use IT systems to meet a variety of needs [UIS2:1 < not 1.3 – see ISF]
2. Manage information storage and retrieval appropriately [UIS2:3]
3. Follow and understand the need for safety and security practices [UIS2:4] (SM4)
4. Maintain system and troubleshoot IT system problems [UIS2:5] (EP3)

Guided learning hours

It is recommended that **20** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by e-skills UK, the Sector Skills Council for Business and Information Technology.

Assessment

This unit will be assessed by:
- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario

Unit 207   IT user fundamentals
Learning outcomes and assessment criteria

Outcome 1 Use IT systems to meet a variety of needs [UIS2:1 < not 1.3 – see ISF]

The learner can:
1. Use correct procedures to start and shutdown an IT system [UIS2:1.1]
2. Select and use interface features effectively to interact with IT systems [UIS:1.4]
3. Select and adjust system settings as appropriate to individual needs [UIS:1.5]
4. Select and use a communication service to access the Internet [UIS2:1.2]
5. Use appropriate terminology when describing IT systems

Outcome 2 Manage information storage and retrieval appropriately [UIS2:3]

The learner can:
1. Manage files and folders to enable efficient information retrieval [UIS2:3.1]
2. Identify when and why to use different types of storage media
3. Organise and store information, using general and local conventions where appropriate [UIS2:3.2]

Outcome 3 Follow and understand the need for safety and security practices [UIS2:4] (SM4)

The learner can:
1. Work safely and take steps to minimise physical stress [UIS2:4.1]
2. Describe the danger of computer viruses, and how to minimise risk [UIS2:4.3]
3. Keep information secure [UIS2:4.2]
4. Explain why it is important to stay safe and to respect others when using ICT-based communication [UIS2:4.4]
5. Follow relevant guidelines and procedures for the safe and secure use of IT

Outcome 4 Maintain system and troubleshoot IT system problems [UIS2:5] (EP3)

The learner can:
1. Describe why routine and non-routine maintenance is important and when to carry it out
2. Identify sources of help and how to get expert advice
3. Carry out regular routine maintenance of IT systems safely
4. Identify IT problems and take appropriate action [UIS2:5.1]

Unit 207   IT user fundamentals

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Use IT systems to meet a variety of needs [UIS2:1 < not 1.3 – see ISF]

The learner should be able to and understand:

- **Start and shutdown procedures**:
  - ♦ Log in, enter password, log out, shut down menu, lock, unlock
- **IT system:**
  - ♦ Will vary according to the set up for a PC or laptop or other system, processor and its operating system
  - ♦ Input device (eg keyboard, mouse or other pointing device), output device (eg screen, printer)
  - ♦ Storage media (eg memory, disk, CD, DVD, data/memory stick, hard drive, network drive)
- **Interface features:**
  - ♦ Desktop, window, dialog box, menu, submenu, toolbar, icon, scrollbar, button, drag and drop, zoom, minimise, maximise
- **System settings:**
  - ♦ Window size, mouse settings, icon size, screen resolution, desktop contrast, sound volume
- **Communication service:**
  - ♦ Broadband, dial up, wireless, network connections, mobile device

Outcome 2 Manage information storage and retrieval appropriately [UIS2:3]

- **File handling:**
  - ♦ **Files:** create, name, open, save, save as, print, close; move, copy, rename, delete; display file lists, sort, search
  - ♦ **Folders:** create and name folders and subfolders
- **Storage media:**
  - ♦ Disk, CD, DVD, data/memory stick, media card, hard drives, network drive, mobile device
- **Organise and store:**
  - ♦ Insert, remove, name, label, archive

Unit 204　　　Bespoke Software

Level: 2

Credit value: 3

Unit aims

This is the ability to select and use a suitable bespoke software application to carry out an appropriate data processing task. It includes understanding the capabilities of the software and the types of tasks for which it is suitable, as well as the skills and techniques needed to use the software application appropriately and effectively.

On completion of this unit a candidate should be able to select and use a wide range of intermediate bespoke software tools and techniques for information that is at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Bespoke software tools and techniques will be defined as 'intermediate' because:
- the software tools and functions involved will at times be non-routine or unfamiliar;
- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements and at times be multi-step; and
- the user will take some responsibility for inputting, manipulating and outputting the information.

Learning outcomes

There are **3** learning outcomes to this unit. The learner will be able to:
1. Input and combine information using bespoke applications
2. Use appropriate structures to organise and retrieve information efficiently
3. Use the functions of the software effectively to process and present information

Guided learning hours

It is recommended that **20** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by e-skills UK, the Sector Skills Council for Business and Information Technology.

Assessment

This unit will be assessed by:
- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario

Unit 204   Bespoke Software
Learning outcomes and assessment criteria

Outcome 1 Input and combine information using bespoke applications

The learner can:

1. Input relevant information accurately so that it is ready for processing
2. Select and use appropriate techniques to link and combine information of different forms or from different sources within the software
3. Respond appropriately to data entry error messages

Outcome 2 Use appropriate structures to organise and retrieve information efficiently

The learner can:

1. Describe what functions to apply to structure and layout information effectively
2. Select and use appropriate structures and/or layouts to organise information
3. Apply local and/or legal guidelines and conventions for the storage and use of data where available

Outcome 3 Use the functions of the software effectively to process and present information

The learner can:

1. Select and use appropriate tools and techniques to edit, process and format information
2. Check information meets needs, using IT tools and making corrections as necessary
3. Select and use appropriate methods to present information

Unit 204 Bespoke Software
Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Input and combine information using bespoke applications

The learner should be able to and understand:

- **Types of bespoke information:**
  - Information will vary according to the software for example:
    - text, numbers, photos, scanned images, graphic elements, digital recorded sound, graphs, charts, tables
- **Inputting information:**
  - Inputting tools and techniques will vary according to the technology being used for example:
    - interface devices (eg keyboard, mouse, stylus, touch screen)
    - microphone (eg headset, built-in)
    - camera (eg web cam, video camera, mobile phone camera)
- **Combining information techniques:**
  - Insert, size, position, wrap, order, group, import data, links and references to external data

Outcome 2 Use appropriate structures to organise and retrieve information efficiently

The learner should be able to and understand:

- **Structures and layouts:**
  - Apply and change existing templates, set up templates for inputting or retrieving information, apply or change existing styles
- **Guidelines for the storage and use of data:**
  - Set by employer or organisation or centre
  - Policies relating to security, backup and data protection
  - Guidelines for data format
  - Compliance, audit and reporting requirements
  - File management will vary according to the application

Outcome 3 Use the functions of the software effectively to process and present information

The learner should be able to and understand:

- **Editing, analysis and formatting techniques:**
  - Techniques will vary according to the software and task, for example:
    - **Editing:** select, insert, delete, cut, copy, paste, drag and drop, find, replace, page layout, labelling, alignment, orientation, colour, resolution, size, pitch
    - **Analysis:** design queries, mathematical, logical or statistical functions
    - **Formatting:** characters, lines, paragraphs, pages, file type
- **Check information:**
  - Checks will vary according to the type of information and software, but could include:
    - spell check, grammar check
    - accuracy of figures
    - labelling and size of images
    - quality of images and sound, volume of sound
    - line, paragraph and page breaks fall appropriately
    - formatting is consistent
    - the use of headings and subheadings aid clarity
    - the placing of images or sound clips

Unit 204 Bespoke Software

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 3 Use the functions of the software effectively to process and present information

The learner should be able to and understand:

- **Presentation methods:**
    - Methods will vary according to the software and task, for example:
        - on screen display, publishing on a web site, hard copy print out, digital file
    - Organisational house style, branding

Unit 205   Specialist Software

Level: 2

Credit value: 3

Unit aims

This is the ability to select and use a suitable specialist software application to carry out an appropriate data processing task. It includes understanding the capabilities of the software and the types of tasks for which it is suitable, as well as the skills and techniques needed to use the software application appropriately and effectively.

On completion of this unit a candidate should be able to select and use a wide range of intermediate specialist software tools and techniques for information that is at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Specialist software tools and techniques will be defined as 'intermediate' because:
* the software tools and functions involved will at times be non-routine or unfamiliar;
* the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements and at times be multi-step; and
* the user will take some responsibility for inputting, manipulating and outputting the information.

Learning outcomes

There are **3** learning outcomes to this unit. The learner will be able to:
1. Input and combine information using specialist applications
2. Use appropriate structures to organise and retrieve information efficiently
3. Use the functions of the software effectively to process and present information

Guided learning hours

It is recommended that **20** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by e-skills UK, the Sector Skills Council for Business and Information Technology.

Assessment

This unit will be assessed by:
* an assignment
* portfolio of evidence – classroom or work based
* professional discussion
* expert witness
* scenario

Unit 205 Specialist Software
Learning outcomes and assessment criteria

Outcome 1 Input and combine information using specialist applications

The learner can:

1. Input relevant information accurately so that it is ready for processing
2. Select and use appropriate techniques to link and combine information of different forms or from different sources within the software
3. Respond appropriately to data entry error messages

Outcome 2 Use appropriate structures to organise and retrieve information efficiently

The learner can:

1. Describe what functions to apply to structure and layout information effectively
2. Select and use appropriate structures and/or layouts to organise information
3. Apply local and/or legal guidelines and conventions for the storage and use of data where available

Outcome 3 Use the functions of the software effectively to process and present information

The learner can:

1. Select and use appropriate tools and techniques to edit, process and format information
2. Check information meets needs, using IT tools and making corrections as necessary
3. Select and use appropriate methods to present information

Unit 205   Specialist Software
Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Input and combine information using specialist applications

The learner should be able to and understand:

- **Types of bespoke information:**
    - Information will vary according to the software for example:
        - text, numbers, photos, scanned images, graphic elements, digital recorded sound, graphs, charts, tables
- **Inputting information:**
    - Inputting tools and techniques will vary according to the technology being used for example:
        - interface devices (eg keyboard, mouse, stylus, touch screen)
        - microphone (eg headset, built-in)
        - camera (eg web cam, video camera, mobile phone camera)
- **Combining information techniques:**
    - Insert, size, position, wrap, order, group
    - Import data
    - Links and references to external data

Outcome 2 Use appropriate structures to organise and retrieve information efficiently

The learner should be able to and understand:

- **Structures and layouts:**
    - Apply and change existing templates, set up templates for inputting or retrieving information, apply or change existing styles
- **Guidelines for the storage and use of data:**
    - Set by employer or organisation or centre
    - Policies relating to security, backup and data protection
    - Guidelines for data format
    - Compliance, audit and reporting requirements
    - File management will vary according to the application

Outcome 3 Use the functions of the software effectively to process and present information

The learner should be able to and understand:

- **Editing, analysis and formatting techniques:**
    - Techniques will vary according to the software and task, for example:
        - **Editing:** select, insert, delete, cut, copy, paste, drag and drop, find, replace, page layout, labelling, alignment, orientation, colour, resolution, size, pitch
        - **Analysis:** design queries, mathematical, logical or statistical functions
        - **Formatting:** characters, lines, paragraphs, pages, file type
- **Check information:**
    - Checks will vary according to the type of information and software, but could include:
        - spell check, grammar check, accuracy of figures
        - labelling and size of images, quality of images and sound,
        - the placing of images or sound clips, volume of sound
        - line, paragraph and page breaks fall appropriately
        - formatting is consistent
        - the use of headings and subheadings aid clarity

Unit 205   Specialist Software
Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 3 Use the functions of the software effectively to process and present information

The learner should be able to and understand:

- **Presentation methods:**
    - Methods will vary according to the software and task, for example:
        - on screen display, publishing on a web site, hard copy print out, digital file
    - organisational house style, branding

Unit 210 Data management software

Level: 2

Credit value: 3

Unit aims

This is the ability to use a software application designed to store and retrieve data needed for a variety of business functions. It also includes an understanding of the features and facilities of the software and the purpose for which the data is stored.

On completion of this unit a candidate should be able to select and use intermediate data management software tools and techniques to:

- enter information into data management systems that is at times non-routine or unfamiliar;
- retrieve information using multiple selection criteria; and
- produce customised reports from the system.

The data management system tools, functions and techniques will be described as 'intermediate' because:

- the software tools and functions involved will at times be non-routine or unfamiliar; and
- the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements.

Examples of context: Setting up a new query to interrogate a CRM system and output selected records to another application

Learning outcomes

There are **2** learning outcomes to this unit. The learner will be able to:

1. Enter, edit and maintain data records in a data management system
2. Retrieve and display data records to meet requirements

Guided learning hours

It is recommended that **20** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards

This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body

This unit is endorsed by e-skills UK, the Sector Skills Council for Business and Information Technology.

Assessment

This unit will be assessed by:

- an assignment
- portfolio of evidence – classroom or work based
- professional discussion
- expert witness
- scenario

Unit 210 Data management software
Learning outcomes and assessment criteria

Outcome 1 Enter, edit and maintain data records in a data management system

The learner can:

1. Describe the risks to data security and procedures used for data protection
2. Enter data accurately into groups of records to meet requirements
3. Locate and amend data associated with groups of records
4. Check data records meet needs, using IT tools and making corrections as necessary
5. Respond appropriately to data entry and other error messages
6. Apply local and/or legal guidelines for the storage and use of data where available

Outcome 2 Retrieve and display data records to meet requirements

The learner can:

1. Identify what queries and reports need to be run to output the required information
2. Select and use queries to search for and retrieve information to meet given requirements
3. Create and view reports to output information from the system to meet given requirements

Unit 210 Data management software
Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Enter, edit and maintain data records in a data management system

The learner should be able to and understand:

- **Benefits of data management system:**
    - Accessible, reliable, rapid access
    - Shared view, up-to-date, accurate, secure
    - Simplifies data handling
- **Enter data:**
    - Use of data entry form, create new record, add record to table
    - Select and update fields, groups of records
- **Amend data records:**
    - Find, search and replace
    - Edit record
    - Sort, filter, use wildcards and search operators
    - Category
- **Check data records:**
    - Spell check, format, accuracy, consistency, remove duplication
    - Verify data, data validation techniques
    - Record housekeeping
- **Error messages:**
    - Due to field size, data type, validation checks
    - Duplicate records, format
    - Using help
    - System access
- **Security risks and procedures:**
    - Access control
    - Authorised use, confidentiality, personal data, password protection and management, user authentication
- **Guidelines for data storage and use:**
    - Set by employer or organisation or centre
        - ➢ **Topics covered:** security, backup, data format, compliance and reporting, data protection, confidentiality

Outcome 2 Retrieve and display data records to meet requirements

The learner should be able to and understand:

- **Search and retrieve:**
    - Alphanumeric sort, filter, single criteria, multiple criteria, save queries and output
- **Reports:**
    - Standard reports, customised reports
    - Reports with multiple parameters

Unit 5xx   Titled bespoke and specialist software

Level: 2

Credit value: 3

Unit aims
Some applications specific to the health environment have been given unit numbers as part of this qualification. This is not an exhaustive list and others may be added on request to City & Guilds, as long as suitable notice is given to ensure that they can be made available for use when entering results.

The titled units use the same Outcomes and Assessment Criteria as the Bespoke and Specialist Software units, which have been repeated here for convenience. A maximum of two titled units may be used, one to replace each of the Bespoke and Specialist Software units.

On completion of this unit a candidate should be able to select and use a the appropriate software tools and techniques for handling information that is at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Use of the specific software tools and techniques will be defined as 'intermediate' because:
* the software tools and functions involved will at times be non-routine or unfamiliar;
* the choice and use of input, manipulation and output techniques will need to take account of a number of factors or elements and at times be multi-step; and
* the user will take some responsibility for inputting, manipulating and outputting the information.

Learning outcomes
There are **3** learning outcomes to this unit. The learner will be able to:
1. Input and combine information using bespoke applications
2. Use appropriate structures to organise and retrieve information efficiently
3. Use the functions of the software effectively to process and present information

Guided learning hours
It is recommended that **20** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards
This unit is linked to the Level 2 the National Occupational Standards for Health Informatics devised by Skills for Health

Endorsement of the unit by a sector or other appropriate body
This unit is endorsed by e-skills UK, the Sector Skills Council for Business and Information Technology.

Assessment
This unit will be assessed by:
* an assignment
* portfolio of evidence – classroom or work based
* professional discussion
* expert witness
* scenario

Unit 5xx   Titled bespoke and specialist software
Learning outcomes and assessment criteria

Outcome 1 Input and combine information using bespoke applications

The learner can:

1. Input relevant information accurately so that it is ready for processing
2. Select and use appropriate techniques to link and combine information of different forms or from different sources within the software
3. Respond appropriately to data entry error messages

Outcome 2 Use appropriate structures to organise and retrieve information efficiently

The learner can:

1. Describe what functions to apply to structure and layout information effectively
2. Select and use appropriate structures and/or layouts to organise information
3. Apply local and/or legal guidelines and conventions for the storage and use of data where available

Outcome 3 Use the functions of the software effectively to process and present information

The learner can:

1. Select and use appropriate tools and techniques to edit, process and format information
2. Check information meets needs, using IT tools and making corrections as necessary
3. Select and use appropriate methods to present information

Unit 5xx   Titled bespoke and specialist software

Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 1 Input and combine information using bespoke applications

The learner should be able to and understand:

- **Types of bespoke information:**
    - Information will vary according to the software for example:
        - text, numbers, photos, scanned images, graphic elements, digital recorded sound, graphs, charts, tables
- **Inputting information:**
    - Inputting tools and techniques will vary according to the technology being used for example:
        - interface devices (eg keyboard, mouse, stylus, touch screen)
        - microphone (eg headset, built-in)
        - camera (eg web cam, video camera, mobile phone camera)
- **Combining information techniques:**
    - Insert, size, position, wrap, order, group, import data, links and references to external data

Outcome 2 Use appropriate structures to organise and retrieve information efficiently

The learner should be able to and understand:

- **Structures and layouts:**
    - Apply and change existing templates, set up templates for inputting or retrieving information, apply or change existing styles
- **Guidelines for the storage and use of data:**
    - Set by employer or organisation or centre
    - Policies relating to security, backup and data protection
    - Guidelines for data format
    - Compliance, audit and reporting requirements
    - File management will vary according to the application

Outcome 3 Use the functions of the software effectively to process and present information

The learner should be able to and understand:

- **Editing, analysis and formatting techniques:**
    - Techniques will vary according to the software and task, for example:
        - **Editing:** select, insert, delete, cut, copy, paste, drag and drop, find, replace, page layout, labelling, alignment, orientation, colour, resolution, size, pitch
        - **Analysis:** design queries, mathematical, logical or statistical functions
        - **Formatting:** characters, lines, paragraphs, pages, file type
- **Check information:**
    - Checks will vary according to the type of information and software, but could include:
        - spell check, grammar check
        - accuracy of figures
        - labelling and size of images
        - quality of images and sound, volume of sound
        - line, paragraph and page breaks fall appropriately
        - formatting is consistent
        - the use of headings and subheadings aid clarity
        - the placing of images or sound clips

Unit 5xx   Titled bespoke and specialist software
Teaching guidance

The following guidance is not a prescriptive list of activities; they are suggested areas that a learner could show competence in to achieve this unit. Centres may use some or all these activities or some of their own devising to teach and help learners complete this unit successfully.

Outcome 3 Use the functions of the software effectively to process and present information

The learner should be able to and understand:

- **Presentation methods:**
  - ♦ Methods will vary according to the software and task, for example:
    - ➢ on screen display, publishing on a web site, hard copy print out, digital file
  - ♦ Organisational house style, branding

4   Assessment

4.1   Summary of assessment methods

For these qualifications, candidates will be required to complete at least one of the following methods or a combination of methods of assessment for each unit undertaken to clearly demonstrate the learning outcomes and assessment criteria have been met. This may be done by one or a mix of the following assessment methods:

- Assessment decisions for competence units (e.g. those including learning outcomes that begin with 'to be able to' or 'understand') must be made by an occupationally competent assessor.
- Any knowledge evidence integral to the learning outcomes may be generated outside of the work environment.
- Competence based units must include direct observation as the primary source of evidence, though simulation may be utilised where real source of data/information is deemed to be of a sensitive nature and disclosure would breach local or national guidelines.
- Expert witnesses can be used for direct observation where: they have occupational expertise for specialist areas or the observation is of a particularly sensitive nature. The use of expert witnesses should be determined and agreed by the assessor.
- It may be appropriate to assess this unit through e-assessment or undertaken according to a set grid, with the assessment decisions being made by the person who has set the answers.

Note:
- The use of the term information and data are interchangeable and may be: electronic or paper based
- Where a unit requires editing to be undertaken this may include: deletion, amendment or adding information
- In respect of individuals that may wish to have access to data, other than members of staff, these may be: a patient, a client or a relation

The assessment guidelines follow those provided by Skills for Health as part of their Skills for Health QCF Assessment Principles, which can be found at www.skillsforhealth.org.uk.

Assessments must also take into account the additional information provided in the unit Purpose and Aims relating to the level of demand of:
- the activity, task, problem or question and the context in which it is set
- the information input and output type and structure involved
- the IT tools, techniques or functions when used

4 Assessment

Optional unit assessment

City & Guilds provides the following to help with assessments:

- City & Guilds provides Recording Forms for candidates producing a paper based portfolio of evidence, which includes Witness Statement forms – these are available in Word format for Centres to adapt to their own house style and approach to candidates.

Time constraints

The following time constraints must be applied to the assessment of these qualifications:

- Each assignment provided by City & Guilds has a stated time within which a candidate should be able complete it. These are suggested timings and a Centre should make the judgement for extension based on their knowledge of their candidates. The suggested timings for each level are as follows:
  - o Level 1: 1 ½ hours
  - o Level 2: 2 hours
  - o Level 3: 2 ½ hours
- Centres finding that assignments are taking longer, should contact the external verifier for guidance
- All assignments must be completed and assessed within the candidate's period of registration. Centres should advise candidates of any internal timescales for the completion and marking of individual assignments
- Centre staff should guide candidates to ensure excessive evidence gathering is avoided for portfolios
- Centre staff should cross reference evidence where appropriate

4.2 Assignments

While assignments from are only Pass/Fail. All assignments for the IT units have been created based on candidates requiring a minimum of 65% to pass.

Only assignments developed or approved for use by City & Guilds are acceptable as evidence for completion of units for this qualification. Where a Centre devised assignment is approved, City & Guilds reserve the right to make this part of their public offering through the City & Guilds website.

4   Assessment

4.3   Evidence requirements

Centres may provide evidence using anyone of the assessment methods listed in section 4. Where a centre requires clarification of an assessment method or wishes to use an alternative to those listed they should contact their External Verifier through the City & Guilds Regional Office.

Valid evidence can arise from:
- activities undertaken at work or in the classroom (where these are not tutor lead)
- enterprise activities (e.g. appointment entry, budgeting, medication or diagnosis detail transcription)
- exercises and scenarios designed for the purpose of assessment

There will be times when, in order to provide evidence it will be appropriate for a candidate to take a 'screenshot' (a copy of the screen). This need not be printed out, but can be copied from the clipboard into a word processing or presentation graphics document and saved to an appropriate area or printed to PDF and stored, where applicable commentary can be added.

Activities can be carried out in a variety of locations not confined to the traditional workplace or classroom setting.

Unit requirements

- no prescribed number of tasks for the units
- no need for the evidence requirements to be demonstrated a prescriptive/specific number of times
- candidate is required to demonstrate, at least once, that the learning outcomes and assessment criteria have been fully met or a City & Guilds approved assignment has been undertaken
- units are complete when the person assessing the work is confident that the candidate is proficient.

4.4   Recording forms

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.
- City & Guilds has developed a set of recording forms specifically for this qualification;
  - 7450 Health Informatics Level 2 Recording forms are available from the City & Guilds website.

Although it is expected that new centres may use these forms for convenience, centres may devise or customise alternative forms, which must be approved for use by the external verifier, before they are used by candidates and assessors at the centre. Amendable (MS Word) versions of the forms are also available for centre to place in their own house style.

4   Assessment

4.5   Accreditation of prior learning and experience (APEL)

Accreditation of Prior Learning (APL) and Accreditation of Prior Experience and Learning (APEL) recognise the contribution a person's previous experience could contribute to a qualification.

For candidates starting their studies towards the Health Informatics qualification the process for accreditation of prior achievement is straightforward. Many people may have developed their skills in IT, NHS Governance or business administration through undertaking existing or 'legacy' accredited units, qualifications or from non-accredited units and employer training schemes, such as:

- trial QCF ITQ from September 07 (7541)
- old ITQ known as Scottish or National Vocational Qualification [S/NVQ] (4322)
- current ITQ (7574)
- NHS Elite
- NHS
- old NVQ in Business Administration (4404)
- current NVQ in Business Administration (4428)
- Functional Skills ICT, ICT Skills for Life [Basic Skills] and in Essential Skills ICT (Northern Ireland);
- legacy units from VQs or VRQs, e.g. e-Quals for IT Users (7266), accredited on the National Qualifications Framework (NQF) or accredited by the Scottish Qualifications Authority (SQA);
- vendor units and qualifications; and
- employer training schemes

Acceptance of contributing qualifications will be undertaken if the following conditions are met:
- the candidate presents the original qualification, unit certificate or other agreed record of achievement for inspection by the ITQ Health Informatics centre; and
- the unit was achieved no more than three years prior to the date of presentation to the centre
- it is the responsibility of the centre to ensure that a representative sample of certificated skills and knowledge are still current.

5 Course design and delivery

5.1 Initial assessment and induction

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

The initial assessment should identify:

- any specific training needs the candidate has, and the support and guidance they may require when working towards their qualifications. This is sometimes referred to as diagnostic testing.
- any units the candidate has already completed, or credit they have accumulated which is relevant to the qualifications they are about to begin.

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

Further guidance about initial assessment and induction, as well as a learning contract that centres may use, are available on the City & Guilds website.

5   Course design and delivery

5.2 Recommended delivery strategies

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

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

City & Guilds recommends that centres address the wider curriculum, where appropriate, when designing and delivering the course. Centres should also consider links to the Key/Core Skills and other related qualifications. Relationship tables are provided in Appendix 1 Relationships to other qualifications to assist centres with the design and delivery of the qualification.

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

Appendix 1   Relationships to other qualifications

Links to other qualifications and frameworks

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

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that candidates meet requirements of all units/qualifications. For example, units within a QCF qualification may be similar in content to units in the NQF qualification which the candidate may have already undertaken and this may present opportunities for APL.

These qualifications have connections to the:
* Level 2 NVQ Certificate in Business administration (4428)
* Level 2 S/NVQ Certificate in Business administration (4404)
* Level 2 Award/Certificate/Diploma for IT Users (7574)
* Level 2 Award/Certificate/Diploma for IT Users (7574)
* Level 2 iTQ Certificate for IT Users (7541)
* Level 2 iTQ Certificate for IT Users (7541)
* Level 2 N/SVQ for IT Users (ITQ) (4322)
* Level 2 N/SVQ for IT Users (ITQ) (4322)

Appendix 1.1   Links to NVQ in Business administration (4428) - QCF

Level 2 Business Administration (4428-02)		Level 2 Health Informatics (7450-02)	
Unit Number/Title		**Unit Number/Title**	
Y/601/2488	Research information	Y/601/2488	Research information
R/601/2487	Organise and report data	R/601/2487	Organise and report data
R/601/2490	Store and retrieve information	R/601/2490	Store and retrieve information

Appendix 1.2   Links to S/NVQ in Business administration (4404) – NQF

It has been noted that the following units from this qualification have content that closely resembles that of units within 7450-02. These may not be an exact match and it is the centres responsibility to ensure candidate evidence is sufficient to cover the new units before accepting these for APL.

Level 2 Business Administration (4404-02)		Level 2 Health Informatics (7450-02)	
Unit Number/Title		**Unit Number/Title**	
H/103/1641	Research and report information	Y/601/2488	Research information
D/103/1640	Store, retrieve and archive information	R/601/2490	Store and retrieve information

Appendix 1.3   Links to Award/Certificate/Diploma for IT Users (7574) - QCF

Level 2 ITQ (7574-02)		**Level 2 Health Informatics (7450-02)**	
Unit Number/Title		**Unit Number/Title**	
L/502/4207	IT user fundamentals	L/502/4207	IT user fundamentals
Y/502/4257	IT security for users	Y/502/4257	IT security for users
D/502/4292	IT communication fundamentals	D/502/4292	IT communication fundamentals
F/502/4396	Bespoke software	F/502/4396	Bespoke software
R/502/4399	Specialist software	R/502/4399	Specialist software
J/502/4559	Data management software	J/502/4559	Data management software

Level 1 ITQ (7574-01)		**Level 2 Health Informatics (7450-02)**	
Unit Number/Title		**Unit Number/Title**	
R/502/4256	IT security for users	R/502/4256	IT security for users
Y/502/4291	IT communication fundamentals	Y/502/4291	IT communication fundamentals

Appendix 1.4   Links to Certificate for IT Users (7541) - QCF

Level 2 ITQ (7541-02)		**Level 2 Health Informatics (7450-02)**	
Unit Number/Title		**Unit Number/Title**	
A/501/0786	IT security for users 2	Y/502/4257	IT security for users
K/500/7317	Bespoke and Specialist software	F/502/4396	Bespoke software
K/500/7317	Bespoke and Specialist software	R/502/4399	Specialist software
A/501/2067	Data management software 2	J/502/4559	Data management software

Level 1 ITQ (7541-01)		**Level 2 Health Informatics (7450-02)**	
Unit Number/Title		**Unit Number/Title**	
T/501/0785	IT security for users 1	R/502/4256	IT security for users

Only one option may be selected where a unit maps twice

Appendix 1.5 Links to S/NVQ for IT Users (4322) - NQF

Level 2 S/NVQ for IT Users (4322-02)		**Level 2 Health Informatics (7450-02)**	
Unit Number/Title		**Unit Number/Title**	
J/102/5718	IT security for users 2	Y/502/4257	IT security for users
K/102/5727	Bespoke and Specialist software	F/502/4396	Bespoke software

Level 1 S/NVQ for IT Users (4322-01)		**Level 2 Health Informatics (7450-02)**	
Unit Number/Title		**Unit Number/Title**	
F/102/5698	IT security for users 2	Y/502/4257	IT security for users

* Only one option may be selected where a unit maps twice

Appendix 2   Data protection and confidentiality

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

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

Appendix 2.1   Protecting identity

It is extremely important to protect the identity of the individuals encountered by candidates in the work setting or as part of an assignment, eg customers, clients, patients, other students, family and friends.

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

When recording evidence towards this qualification, candidates are expected in particular to protect the identity of children they may encounter during the execution of assignments by disguising their names and other personal details.

Appendix 2.2   Images of minors being used as evidence

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

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

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

Appendix 2.3   Legal requirements

Other legal considerations may apply to this qualification, such as Health and Safety using IT equipment and accessibility for all learners. It is the responsibility of centres to ensure compliance with all local, regional and national legislation which may affect delivery of the qualification, and to ensure that candidates are fully aware of any requirements.

Appendix 3 Sources of general information

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

Centre Guide – Delivering International Qualifications contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification. Specifically, the document includes sections on:
- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.

Providing City & Guilds qualifications – a guide to centre and qualification approval contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification. Specifically, the document includes sections on:
- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.

Ensuring quality contains updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document contains information on:
- Management systems
- Maintaining records
- Assessment
- Internal verification and quality assurance
- External verification.

Appendix 3   Sources of general information

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

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

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

Useful contacts

Type	Contact	Query
UK learners	T: +44 (0) 844 543 0033 E: learnersupport@cityandguilds.com	• General qualification information
International learners	T: +44 (0)20 7294 2885 F: +44 (0)20 7294 2413 E: intcg@cityandguilds.com	• General qualification information
Centres	T: +44 (0) 844 543 0000 F: +44 (0)20 7294 2413 E: centresupport@cityandguilds.com	• Exam entries • Registrations/enrolment • Certificates • Invoices • Missing or late exam materials • Nominal roll reports • Results
Single subject qualifications	T: +44 (0)20 7294 8080 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: singlesubjects@cityandguilds.com	• Exam entries • Results • Certification • Missing or late exam materials • Incorrect exam papers • Forms request (BB, results entry) • Exam date and time change
International awards	T: +44 (0)20 7294 2885 F: +44 (0)20 7294 2413 E: intops@cityandguilds.com	• Results • Entries • Enrolments • Invoices • Missing or late exam materials • Nominal roll reports

Appendix 3   Sources of general information

Useful contacts

Type	Contact	Query
Walled Garden	T: +44 (0)20 7294 2840 F: +44 (0)20 7294 2405 E: walledgarden@cityandguilds.com	• Re-issue of password or username • Technical problems • Entries • Results • GOLA • Navigation • User/menu option problems
Employer	T: +44 (0)121 503 8993 E: business_unit@cityandguilds.com	• Employer solutions • Mapping • Accreditation • Development Skills • Consultancy
Publications	T: +44 (0)20 7294 2850 F: +44 (0)20 7294 3387	• Logbooks • Centre documents • Forms • Free literature

If you have a complaint, or any suggestions for improvement about any of the services that City & Guilds provides, email: **feedbackandcomplaints@cityandguilds.com**

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