

National Unit Specification

General information

Unit title: Computer Basics

Unit code: H3LJ 09

Superclass: CC

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Unit purpose

This introductory Unit is designed to provide foundation knowledge and basic skills in using a variety of contemporary computing devices, such as personal computers, tablets and smartphones. The Unit also covers the safe and responsible use of these devices. The Unit is suitable for a wide range of learners who wish to use computers for learning or employment. It is designed to improve their knowledge, skills and confidence in the safe and responsible use of Information and Communication Technology (ICT). On completion of this Unit the learner will understand the basic operation of a computer and be able to make use of common applications, both online and offline. As it introduces candidates to digital literacy skills, it is a suitable foundation Unit for a wide range of qualifications.

Outcomes

On successful completion of the Unit the learner will be able to:

- 1 Identify the hardware and software components of computing devices.
- 2 Find and share simple information using computing devices.
- 3 Create and manipulate simple information using computing devices.
- 4 Use computing devices safely, legally and ethically.

Credit points and level

1 National Unit credit at SCQF level 3: (6 SCQF credit points at SCQF level 3)

National Unit Specification: General information (cont)

Unit title: Computer Basics

Recommended entry to the Unit

Entry is at the discretion of the centre. No previous knowledge or experience of computers or the internet is required.

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes for this Unit specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

Context for delivery

If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

Equality and inclusion

This Unit Specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

National Unit Specification: Statement of standards

Unit title: Computer Basics

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Identify the hardware and software components of computing devices.

Performance Criteria

- (a) Identify the main types of common computing device.
- (b) Identify the hardware components of common computing devices.
- (c) Identify the software components of computing devices.
- (d) Use the correct names for hardware and software components.

Outcome 2

Find and share simple information using computing devices.

Performance Criteria

- (a) Identify the search facilities available on each type of computing device.
- (b) Find basic information using the search facilities.
- (c) Identify the main sharing facilities on each type of computing device.
- (d) Share information using the communication facilities of a computing device.

Outcome 3

Create and manipulate simple information using computing devices.

Performance Criteria

- (a) Identify different types of media that can be used to present information.
- (b) Select the most appropriate media for different purposes and audiences.
- (c) Create basic information that includes at least two types of media.
- (d) Manipulate information using editing facilities including cut, copy and paste.
- (e) Present the information in an appropriate and attractive way.

National Unit Specification: Statement of standards (cont)

Unit title: Computer Basics

Outcome 4

Use computing devices safely, legally and ethically.

Performance Criteria

- (a) Hardware is handled correctly.
- (b) Software is used to perform basic customisations.
- (c) Identify and adhere to safe-use procedures.
- (d) Identify and adhere to legal requirements and local restrictions.
- (e) Identify and adhere to ethical considerations.

Evidence Requirements for this Unit

Evidence is required to demonstrate that learners have achieved all Outcomes and Performance Criteria.

The evidence for this Unit may be written or oral or a mix of these. Evidence may be stored in a range of media, including audio and video.

The evidence must span a range of computing devices, which must include, but is not limited to, a standard personal computer, ie a desktop or laptop computer. Learners are expected to produce evidence of competence on other contemporary computing devices. At the time of writing, these other devices would include smartphones, tablets and network devices (such as ChromebooksTM). Learners are required to produce evidence that they are competent in the use of **at least three** such devices (one of which must be a standard PC).

Evidence is required for two types of competence: evidence of cognitive competence (knowledge and understanding) and evidence of practical competence (practical abilities).

Evidence of cognitive competence may be sampled across the knowledge domain defined by this Unit specification, so long as the sample is unknown, and unpredictable, to the learner. Evidence of practical competence may not be sampled, and must span more than one computing device as previously stated. Where sampling is used to assess the learner's knowledge and understanding, an appropriate pass mark should be set.

Evidence must be produced under controlled conditions. Evidence of cognitive competence should be produced, without reference to material, under supervision. Evidence of practical competence may be produced over an extended period of time; but where it is generated without supervision some means of authentication must be carried out (such as oral questioning).

At this level, the time taken to produce the evidence (both knowledge and practical) is not significant. So, for example, if a traditional test is used to assess the learner's knowledge and understanding, this test should not be timed. However, it should be produced in a single assessment occasion ('sitting').

National Unit Specification: Statement of standards (cont)

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The evidence (of both cognitive and practical competences) may be produced on any appropriate medium (text, audio or video or a combination of these). It is permissible to record successful demonstration of practical competences using a checklist (signed by the assessor).

Given the level of this Unit, the amount of evidence, and corresponding time spent on assessment, should be minimised but sufficient to satisfy the above requirements.



National Unit Support Notes

Unit title: Computer Basics

Unit Support Notes are offered as guidance and are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

The purpose of this Unit is to provide foundation knowledge and basic skills in the use of computing devices such as PCs, smartphones and tablets.

An important aim of the Unit is to provide the learner with experience of a range of contemporary devices. At the time of writing, this would include desktop PCs, laptop computers, netbook devices, tablets, smartphones and Raspberry Pis. For example, a centre could give learners access to a Windows desktop PC, a Google ChromebookTM, an Apple iPadTM and an Android smartphoneTM.

A key objective of this Unit is to ensure that learners see all of these devices as computing devices with essentially the same basic components (hardware and software) and design considerations (speed, size, aesthetics, etc), but varying capabilities and uses.

Although the focus for the Unit is on practical competencies, the Unit also seeks to provide basic knowledge and understanding of some key operating principles and safe working practices, so that learners can transfer their knowledge and skills to future platforms. For example, learners should be encouraged to become familiar with the concept of a user interface (UI) and appreciate that UI is a key (and variable) feature of every computing device.

An important aspect of this Unit is online safety. Safe practices should be emphasised and learners should be introduced to the basic legal constraints on their use of computing devices including introduction to Intellectual Property Rights (IPR). At this level it is important that this is presented appropriately eg downloading music. The ethics of computer devices provides scope to discuss a number of contemporary issues including cyber bullying and privacy concerns.

Guidance on approaches to delivery of this Unit

A practical hands-on approach to learning should be adopted to engage learners and exemplify key concepts. However, all practical activities should be underpinned with appropriate knowledge before learners commence these activities.

It is recommended that learners gain hands-on experience of at least one example of each type of software mentioned in these support notes. While teaching will necessarily focus on a specific product, the generic features of the class of software should be emphasised.

National Unit Support Notes (cont)

Unit title: Computer Basics

An important Outcome for this Unit is that learners develop an appropriate technical vocabulary. Terminology and underpinning knowledge should be introduced in a practical context.

The actual distribution of time between Outcomes is at the discretion of the centre. However, one possible approach is to distribute the available time as follows:

Outcome 1: 5 hours
Outcome 2: 10 hours
Outcome 3: 15 hours
Outcome 4: 10 hours

Throughout this Unit, learner activities should relate to their personal or vocational interests. For example learners should visit websites and chat rooms, and download content relating to their academic work, hobbies and pastimes, recreational and entertainment preferences or other topics that can genuinely hope to stimulate their interest. Teaching should be exemplified in terms of services and technologies that are appropriate for the learner, that they can relate to and are likely to use, such as community sites or online travel sites.

The use of case studies is recommended.

This Unit may be delivered stand-alone or in conjunction with other Units. Where it is delivered alongside other Units, there is an opportunity to contextualise this Unit in terms of the contents of the other Unit(s) since this Unit's contents are generic.

Guidance on approaches to assessment of this Unit

Evidence can be generated using different types of instruments of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

A range of assessment approaches may be taken. The simplest approach would be to assess the two types of competence separately: one assessment of knowledge and understanding, and one assessment of practical abilities.

National Unit Support Notes (cont)

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The assessment of knowledge and understanding would sample from all of the knowledge contained within the Unit. In this scenario, the assessment could be a restricted response test, such as a multiple-choice test consisting of 20 questions with a pass mark of 12 (assuming each question had four possible answers (A–D)). The practical assessment could consist of observation of the learner over an extended period of time. In this scenario, the assessor would complete an observation checklist over an extended period of time, completing the checklist as s/he observed the learner perform specific tasks (such as copying information using a smartphone). Some of the observations would have to be conducted over an extended period of time (such as safe use) to ensure that the learner consistently demonstrates the skill. Using this approach, two pieces of evidence (only) would be produced: a completed test and a completed observation checklist. No further evidence would be necessary.

A more integrated approach to assessment could be taken. For example, the learner could create and maintain a portfolio of evidence, comprising their identifications and descriptions, along with the products of their practical work. In this scenario, it would not be appropriate to sample the evidence of cognitive competencies since the assessment would take place over an extended period and would be generated 'naturally', as the learner produced the work. The portfolio could be paper (in which case it would contain written work and printouts of practical work) or electronic (in which case it would contain digital artefacts or links to them).

The e-portfolio could be in the form of a web log (blog), which could be a diary of their activities throughout the Unit. This would record, in writing and via embedded objects (or links to them), learner's daily activities, which would provide the necessary demonstrations of cognitive and practical competencies.

Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment.

Opportunities for developing Core and other essential skills

There are opportunities within this Unit to develop learners' Core Skills in *Information and Communication Technology (ICT)* at SCQF level 3. For example, their use of computing devices in Outcomes 2 and 3 will contribute towards some of the *Information and Communication Technology (ICT)* skills defined within the Core Skill specification.

History of changes to Unit

Version	Description of change	Date

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General information for learners

Unit title: Computer Basics

This section will help you decide whether this is the Unit for you by explaining what the Unit is about, what you should know or be able to do before you start, what you will need to do during the Unit and opportunities for further learning and employment.

This Unit is about basic knowledge and skills to help you use a range of computing devices such as personal computers and tablet computers and smartphones. A key goal is to improve your confidence in using a range of modern computer devices such as a tablet computer.

The Unit covers practical skills and key knowledge about computers. You will learn the basic organisation of all computing devices and gain hands-on experience of using a number of devices. You will learn the correct names for the various parts of a computer and you will also learn how to use them safely.

The key skills that you will learn include: how to handle computer devices, how to use the software that comes with them, how to set-up computer devices, how to search for information using computers, and how to share information with others.

The Unit also covers the safe and ethical use of computers and will include discussions about a number of topics such as cyber bullying and protecting your privacy.

The Unit can be used for personal or business purposes. You could use your knowledge and skills to help you use modern devices for personal purposes such as social networking or learning, or you could use the Unit to improve your workplace skills.

The assessment of this Unit may take different forms. You might, for example, sit a short test and carry out some practical tasks. Alternatively, you might keep a diary of your work. The assessment will be straight forward and will not take much time.