National Unit specification

General information

Unit title: Computer Basics (SCQF level 4)

Unit code: H3LJ 44

Superclass: CC

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Source: Scottish Qualifications Authority

Version: 01

Unit purpose

This Unit is designed to provide knowledge and skills in using computers. The main focus is on desktop and laptop computers, but other devices, such as tablets and smartphones are also considered. The Unit also covers the safe and responsible use of computing 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 operation of a computer and be able to make use of common applications, both online and offline.

Outcomes

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

1 Use hardware and software components of computing devices.
2 Use online facilities and services.
3 Use computing devices to create and manipulate information.
4 Use computing devices safely, legally and ethically.

Credit points and level

1 National Unit credit at SCQF level 4: (6 SCQF credit points at SCQF level 4)

Recommended entry to the Unit

Entry is at the discretion of the centre. Learners may find it beneficial to have some previous knowledge or experience of computers or the internet.

National Unit specification: General information (cont)

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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

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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

Use hardware and software components of computing devices.

Performance Criteria

(a) Use the main types of common computers.
(b) Use the hardware components of common computers.
(c) Use the software components of computers.

Outcome 2

Use online facilities and services.

Performance Criteria

(a) Identify the search facilities available on computing devices.
(b) Find information using the search facilities.
(c) Identify the online services available on computers.
(d) Make use of online services.
(e) Share information using online communication facilities.

Outcome 3

Use computing devices to create and manipulate information.

Performance Criteria

(a) Describe different types of media that can be used to present information.
(b) Select the most appropriate media for different purposes and audiences.
(c) Create information that includes at least two types of media.
(d) Manipulate information using editing facilities including cut, copy and paste.
(e) Complete online forms.

Outcome 4

Use computing devices safely, legally and ethically.

Performance Criteria

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

National Unit specification: Statement of standards (cont)

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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 need not be limited to, a standard personal computer, ie a desktop or laptop computer. Learners may produce evidence of competence on other contemporary computing devices.

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. 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.

If a traditional test is used to assess the learner's knowledge and understanding, this test should be timed and should be completed in a single assessment occasion ('sitting').

The evidence (of both cognitive and practical competences) may be produced on any appropriate medium (text, audio or video or a combination of these). Successful demonstration of practical competences must be recorded in an appropriate format.

National Unit Support Notes

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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 learners with knowledge and skills in the use of desktop/laptop PCs. Other devices, such as smartphones and tablets may also be covered.

Although the focus for the Unit is on practical competencies, it also seeks to provide learners with knowledge and understanding of operating principles and safe working practices, so that they can transfer their knowledge and skills to future platforms. For example, learners should be 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, games or videos. The ethics of computer use provides scope to discuss a number of contemporary issues including cyber bullying and privacy concerns.

Outcome 1

The main focus of the Unit is on traditional desktop and laptop computers, but other devices such as smartphones and tablets may also be used.

Hardware components should include displays (including touchscreens) and other input/output devices, such as keyboards, mice and printers.

Software components should include the operating system, applications software (both online and offline) and utility programs, such as backup and security software.

National Unit Support Notes (cont)

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Outcome 2

This Outcome focuses on using of the internet to locate and communicate information. Learners should know how to establish an internet connection and make use of browser software. They should know how to construct effective searches and evaluate the quality and accuracy of the information found.

They should be aware of the range of services available online, including public services (local and central government, NHS), online shopping, online banking and money management, social software (eg Facebook™, Twitter™), photo sharing and skills and careers information (including job hunting).

They should also know how to set up and use an email account and be able to share information using email and other facilities such as social networking sites, cloud-based file storage and blogs.

Outcome 3

Learners should be aware of the different types of media that can be used to present information, including text, graphics, audio and video. They should be able to select the most appropriate media for different purposes and audiences and use online and offline tools to create information create information that includes at least two types of media. They should also be able to manipulate information using editing facilities such as cut, copy and paste and be able to complete online forms accurately.

Outcome 4

Learners should be aware of correct handling of hardware. They should be able to use software to perform customisations, such as browser and social networking site security settings. They should be aware of safe use procedures such as choosing secure passwords and restricting the amount of personal information available online and should know about legal requirements (such as the Compute Misuse Act) and local restrictions like Acceptable Use Policies. They should also be aware of ethical considerations such as intellectual property rights, behaving in an acceptable manner online (netiquette) and respecting the privacy of others.

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.

It is important that learners develop an appropriate technical vocabulary. Terminology and underpinning knowledge should be introduced in a practical context.

National Unit Support Notes (cont)

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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: 8 hours
Outcome 2: 12 hours
Outcome 3: 12 hours
Outcome 4: 8 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, which 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.

Learners should produce evidence using contemporary computing devices including smartphones, tablets and network devices. 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.

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.

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.

National Unit Support Notes (cont)

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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. Where evidence of practical competence is generated without supervision some means of authentication should be carried out, such as oral questioning.

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 4. 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

General information for learners

Unit title: Computer Basics (SCQF level 4)

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 the knowledge and skills required to help you use personal computers and other computing devices such as tablets and smartphones.

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 them. 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 computers, 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 computers for personal purposes such as social networking or learning, or you could use the Unit to improve your workplace ICT 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. Assessment will be straight forward and will not take much time.