SQA Advanced Unit specification

General information

Unit title: Digital Skills (SCQF level 7)

Unit code: HR9W 47

Superclass: CC

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Version: 01

Unit purpose

This Unit is designed for **non-specialists** who wish to develop their digital skills for personal, educational or vocational purposes.

The Unit covers essential **hardware** knowledge and skills and essential **software** knowledge and skills required for learners to become effective learners, citizens and employees. It also covers cyber security and online safety.

The 'hard' skills include: handling digital devices, using the operating system, and customising digital devices. The 'soft' skills include: using software applications, creating digital content, and information skills. The Unit also covers the use of social media.

The Unit covers a wide range of contemporary digital devices including desktop and laptop computers, tablets and smartphones.

The Unit is suitable for a wide range of learners who wish to use digital devices for learning, leisure or employment. On completion of this Unit, learner will be confident users of a wide range of digital devices for educational and vocational purposes, and be able to participate as digital citizens in contemporary society.

Outcomes

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

1   Use digital devices for personal, educational and vocational purposes.
2   Manage information for educational and vocational purposes.
3   Create digital content for a vocational purpose.

Credit points and level

1 SQA Credit at SCQF level 7: (8 SCQF credit points at SCQF level 7)

Recommended entry to the Unit

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

Core Skills

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill   Information and Communication Technology at SCQF level 6

Core Skill component   None

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

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.

The Assessment Support Pack (ASP) for this Unit provides assessment and marking guidelines that exemplify the national standard for achievement. It is a valid, reliable and practicable assessment. Centres wishing to develop their own assessments should refer to the ASP to ensure a comparable standard. A list of existing ASPs is available to download from SQA's website **(http://www.sqa.org.uk/sqa/46233.2769.html)**.

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**.

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.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Learners should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Use digital devices for personal, educational and vocational purposes.

Knowledge and skills

♦ Types of digital devices and their typical personal, educational and vocational uses
♦ Hardware features of digital devices (including Units of storage)
♦ Software features of digital devices (including operating system)
♦ Operating requirements of digital devices (including handling requirements and safe use)
♦ Security considerations for digital devices (including online safety)
♦ Troubleshooting basic problems for hardware or software features
♦ Health and safety considerations (including ergonomics).

Outcome 2

Manage information for educational and vocational purposes.

Knowledge and skills

♦ Sources of digital information (including social media)
♦ Search methods (including search query construction)
♦ Information capture and curation
♦ Information storage (including cloud storage)
♦ Information security (including cyber security implications for business)
♦ Information tools (types and use)
♦ Evaluate digital information (including critical thinking)
♦ Rights and responsibilities when using digital information

Outcome 3

Create digital content for a vocational purpose.

Knowledge and skills

♦ Types of digital media (text, audio, video, graphic)
♦ Types of social media
♦ Digital content creation tools
♦ Design and presentation of digital data
♦ Sharing (digital content) skills

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 digitally or oral or a mix of these. Evidence may be stored in a range of media, including audio and video.

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

Evidence of practical competence may not be sampled, and must span **more than one digital device**.

Evidence of cognitive competence must encompass **all of the knowledge and skills statements** in **Outcome 1 and Outcome 2.** This may be sampled across this domain so long as the sample is unknown to the learner.

Evidence of practical competence must encompass all of the knowledge and skills in Outcome 3. It must span **more than one digital device, including a personal computer**. At least three digital artefacts must be created (one each relating to personal, educational and vocational uses of digital devices). The size and complexity of these artefacts is not critical but should not be trivial (such as a single social media update). The artefects (collectively) must include all of the defined types of digital media. At least one of the artefacts must relate to social media. The artefacts must be appropriately designed and presented.

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 *Guidelines on Approaches to Assessment* (see the Support Notes section of this specification) provides specific examples of instruments of assessment.

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. The suggested time distribution is as follows:

Outcome 1 — 8 hours
Outcome 2: — 12 hours
Outcome 3: — 20 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 and other computing devices such as smartphones, tablets and specialised devices.

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 Intellectual Property Rights (IPR). 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

This Unit covers the personal, educational and vocational uses of traditional desktop and laptop computers along with other devices such as smartphones, tablets and specialised devices (eg e-book readers, music players, video players and games consoles). Learners should appreciate that these are all variations on the general theme of computing devices and that they have many features in common.

Hardware components should include processor, memory, backing storage, displays (including touchscreens), input /output devices (such as keyboards, mice and printers) and communications facilities (Wired Ethernet, Wi-Fi, Bluetooth).

Software components should include the operating system, applications software (both online and offline) and utility programs such as backup and security software. Application areas covered may include e-commerce (both selling and buying), e-banking, e-marketing and crowd funding.

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Operating requirements should include handling requirements and safe use. Learners 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 Computer Misuse Act) and local restrictions like Acceptable Use Policies. They should also be aware of ethical considerations such as copyright/intellectual property rights, behaving in an acceptable manner online (netiquette) and respecting the privacy of others.

They should be able to manage online identities, protect themselves from scams and use the right security settings (including parental controls).

Learners should understand how to troubleshoot basic hardware or software problems such as updating browser software, scan for malware/viruses, reconnecting to internet after dropped connection, rebooting computer or digital device.

Health and safety considerations should include ergonomics.

Outcome 2

This Outcome focuses on using digital devices to locate, communicate and manage 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.

Learners should be able to find, manage, capture and curate digital content. Information storage facilities should include cloud storage. They should be able to purchase and sell goods and services, organise their finances and use digital Government services. They should also 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).

Learners should be aware of the different types of information tools available. They should 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.

They should be able to understand and use marketplaces to buy and sell, order shopping, book travel, manage bank accounts and set up and manage Government benefit accounts.

Learners should be aware of their rights and responsibilities when using digital information.

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 locate and 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. They should also be able to share information using facilities such as e-mail, social media and blogs and be aware of the different types of social media available, including social networks.

Learners should be able to create basic digital content in order to engage with digital communities and organisations. For example, they should be able to create social media posts, create a text document such as a CV, create and share a photo album and create and share feedback about products and services.

Learners should be able to present and share digital content.

Guidance on approaches to delivery of this Unit

This Unit should be delivered using a learner-centred, participative and practical approach.

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 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/multiple response test consisting of 30 questions with a pass mark of 60% (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.

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 6. 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. The Unit also provides opportunities to develop *Problem Solving* skills.

This Unit has the Core Skill of Information and Communication Technology embedded in it, so when candidates achieve this Unit their Core Skills profile will be updated to show that they have achieved Information and Communication Technology at SCQF Level 6.

History of changes to Unit

Version	Description of change	Date

FURTHER INFORMATION: Call SQA's Customer Contact Centre on 44 (0) 141 500 5030 or 0345 279 1000. Alternatively, complete our **Centre Feedback Form.**

General information for learners

Unit title: Digital Skills (SCQF level 7)

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 and troubleshoot any issues with hardware or software features.

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 manage information and share it with others.

The Unit also covers the safe and ethical use of computers and will cover a number of topics such as legal requirements and protecting your privacy.

The Unit can be used for personal, educational or vocational 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 an online diary of your work. Assessment will be straightforward and will not take much time.