



National Unit specification: general information

Unit title: Mobile Technology and Personal Computer Applications (SCQF level 5)

Unit code: H2P2 11

Superclass: CC

Publication date: October 2012

Source: Scottish Qualifications Authority

Version: 01

Summary

This Unit enables candidates to make effective use of software applications on mobile devices for personal and business use. It also provides practical experience in using complex features of three types of software application packages associated with office and personal use on personal computers and mobile devices — word processing, spreadsheet and presentation. File management structures for personal computers and mobile devices are also covered.

Additionally, candidates will learn about the importance of data security, including backups and virus protection and the current legislation that affects the use of application packages.

This is a mandatory Unit in the National Progression Award (NPA) in Mobile Technology (SCQF level 6) and National Certificate (NC) in Mobile Technology (SCQF level 5), but is also available as a freestanding Unit.

Outcomes

- 1 Identify relevant legislation that affects the use of software applications.
- 2 Perform data security backups and precautions on a mobile device and a personal computer.
- 3 Use system and application software to perform routine tasks on a mobile device and a personal computer.

Recommended entry

While entry is at the discretion of the centre, it would be beneficial if candidates possessed basic IT skills. This could be evidenced by achievement of the Unit *Mobile Technologies: Mobile Applications* (H1SY 10), or equivalent.

General information (cont)

Unit title: Mobile Technology and Personal Computer Applications
(SCQF level 5)

Credit points and level

1 National Unit credit at SCQF level 5: (6 SCQF credit points at SCQF level 5*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Core Skills

Achievement of this Unit gives automatic certification of the following:

- ◆ Complete Core Skills *Information and Communication Technology at SCQF level 5*
- ◆ Core Skills components None

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

National Unit specification: statement of standards

Unit title: Mobile Technology and Personal Computer Applications
(SCQF level 5)

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 relevant legislation that affects the use of software applications.

Performance Criteria

- (a) Identify health and safety legislation that applies to the use of display screen equipment.
- (b) Identify copyright legislation that applies to software applications use.
- (c) Identify data protection legislation that applies to software applications use.

Outcome 2

Perform data security backups and precautions on a mobile device and a personal computer.

Performance Criteria

- (a) Create folder structures on a personal computer and mobile device.
- (b) Backup a personal computer and mobile device folder with associated files to an online storage location.
- (c) Set file attributes.
- (d) Perform routine virus protection scans on a personal computer and mobile device.

Outcome 3

Use system and application software to perform routine tasks on a mobile device and a personal computer.

Performance Criteria

- (a) Use the personal computer and mobile operating systems effectively to access application software.
- (b) Produce a word processed document to a given specification.
- (c) Produce a spreadsheet to a given specification.
- (d) Produce a presentation to a given specification.
- (e) Create and save documents on a personal computer and mobile device and save in online storage.
- (f) Download the created personal computer documents from online storage to view, edit and save the documents on a mobile device.
- (g) Search for information from a range of online sources to support your work and view, edit and save these on a mobile device.
- (h) Evaluate the results of the search for information using given criteria.

National Unit specification: statement of standards (cont)

Unit title: Mobile Technology and Personal Computer Applications
(SCQF level 5)

Evidence Requirements for this Unit

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

Candidates must use the internet for research purposes, and evaluate how they carried out research (using a range of sources or one sustained search) and its results. However, the evidence produced must be candidates' own work. Assessors should assure themselves of the authenticity of the evidence.

For Outcome 1, written or oral evidence is required which must include identification of:

- ◆ Two items of Health and Safety legislation that apply to the use of display screen equipment.
- ◆ Two health and safety issues that relate to mobile devices.
- ◆ Three items of copyright legislation that apply to application software use.
- ◆ Three items of data protection legislation that apply to application software use.

The assessment will be supervised, controlled and under closed-book conditions and should last no more than 45 minutes.

Performance evidence for Outcome 2 will consist of an activity log of candidates performing the required tasks, which must be authenticated by the assessor. The evidence will also consist of an assessor observation checklist which shows that candidates can:

- ◆ Create an appropriate folder structure for documents in a personal computer and a mobile device.
- ◆ Backup a folder and associated files from a personal computer and a mobile device to an online storage location.
- ◆ Change the file attributes for a file created on a personal computer and a file created on a mobile device.
- ◆ Perform a virus scan on a personal computer and a mobile device.

Product evidence for Outcome 3 will consist of a portfolio of candidates' work. An assessor observation checklist will be included in the portfolio to provide evidence of the ability to use the operating system and the three software packages in a safe and efficient manner. The portfolio will include:

- ◆ A word processed document produced to a given specification.
- ◆ A spreadsheet produced to a given specification.
- ◆ A presentation produced to a given specification.

National Unit specification: statement of standards (cont)

Unit title: Mobile Technology and Personal Computer Applications
(SCQF level 5)

The word processing assignment must include all of the following:

- ◆ paragraph formatting
- ◆ bullets
- ◆ graphics
- ◆ table
- ◆ columns

A printed output is required for the whole document.

The spreadsheet assignment must include all of the following:

- ◆ Creation of a spreadsheet to a given specification, including the use of number, text and system date.
- ◆ Use of selected data to create one chart which includes labels and a title.
- ◆ Use of formulae to:
 - test for a pre-determined condition
 - perform calculations using relative addresses
 - perform calculations using absolute addresses
 - perform calculations using at least three operators
- ◆ Use of functions to:
 - add a list of numbers together
 - determine the maximum and minimum values from a range of cells
 - count the number of entries less than zero

A printed output is required for the whole spreadsheet and an individual chart with associated data.

The presentation assignment must include all of the following:

- ◆ at least five slides
- ◆ text
- ◆ number
- ◆ table
- ◆ bullets
- ◆ drawing shape
- ◆ graphic

A printed output is required for the whole presentation.

Each assignment must be:

- ◆ saved to a personal computer or network drive and online storage
- ◆ viewed on a mobile device
- ◆ edited for a minor change on a mobile device and saved on the mobile device

An assessor observation checklist is required which authenticates that candidates have completed the above tasks. An assessor must endorse each candidate checklist with their signature and date.

National Unit specification: support notes

Unit title: Mobile Technology and Personal Computer Applications
(SCQF level 5)

This part of the Unit specification is offered as guidance. The support notes 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 overall aim of this Unit is to provide candidates with practical experience that will enable them to perform complex tasks using word processing, spreadsheet and presentation application software.

The Unit also aims to provide candidates with the ability to take precautions to safeguard data and to provide an understanding of the legislation that affects software application use.

The precise content of this Unit will change over time, as technology develops and new devices are introduced. The ethos of this Unit is to use a personal computer and a mobile device such as a mobile phone or tablet pc with a different operating system. The web addresses listed below were correct at the time of publication, but may change over time.

Outcome 1

This Outcome relates to the current legislation that affects the use of application packages. The information below relates to current legislation at the time of writing and any new legislation must be covered.

Performance Criterion (a) relates to the health and safety legislation that applies to application software use. Candidates should be introduced to the latest health and safety regulations (eg display screen equipment) and the implications of this legislation to users and employers. The legislation can be viewed at the Office of Public Sector Information website (<http://www.opsi.gov.uk>). For mobile devices, some information can be found at (<http://www.rospa.com/roadsafety/info/workmobiles.pdf>).

Performance Criterion (b) relates to copyright legislation that applies to application software use. Candidates should be introduced to The Copyright (Computer Programs) Regulations 1992 and the implications for this legislation to users and employers. The legislation can be viewed at the Office of Public Sector Information website (<http://www.opsi.gov.uk>). The Federation Against Software Theft (FAST) website (<http://fast.org.uk>) is also a useful resource.

Performance Criterion (c) relates to The Data Protection Act 1998 and the Computer Misuse Act 1990. The legislation can be viewed at the Office of Public Sector Information website (<http://www.opsi.gov.uk>). The Information Commissioner's Office website may provide useful information (<http://www.dataprotection.gov.uk>).

Please note that candidates should be introduced to the most current legislation, some of which may supersede that given above.

National Unit specification: support notes (cont)

Unit title: Mobile Technology and Personal Computer Applications
(SCQF level 5)

Outcome 2

This Outcome relates to data security precautions that should be taken.

Candidates are required to create folder structures with associated files on a personal computer and a mobile device such as a mobile phone or tablet pc with a different operating system. Candidates should also be aware of different types of backup routines — full, differential, incremental and partial backups.

A folder and associated files are to be backed up from a personal computer and a mobile device to an online storage location. A number of free storage locations are currently available online. Candidates should be aware of hidden and read-only attributes and apply one of them to some files, for protection.

To emphasise the importance of virus protection, candidates are required to perform a scan on files stored on a personal computer and a mobile device. Candidates should understand the importance of virus protection and how these threats are transmitted.

Outcome 3

This Outcome provides candidates with practical experience in the use of word processing, spreadsheet and presentation application packages for personal computers and mobile devices.

Although most of the practical experience using the application packages will be on a personal computer, candidates should be encouraged to use different mobile apps which can read and allow some editing of their personal computer files.

Guidance on learning and teaching approaches for this Unit

This Unit has been designed to provide practical experience of three types of application software — word processing, spreadsheet and presentation. However, these practical activities should be underpinned with knowledge regarding current legislation that affects both users and employers, data security and practical steps that can be taken to ensure data integrity.

While teaching may necessarily focus on a particular product, candidates should be aware that alternative packages are available and should be encouraged to explore these alternatives.

Most of the practical activity will be carried out on a personal computer and a mobile device such as a mobile phone or tablet pc with a different operating system. These should be used routinely with an online storage facility to give access to data.

National Unit specification: support notes (cont)

Unit title: Mobile Technology and Personal Computer Applications
(SCQF level 5)

Guidance on approaches to assessment for this Unit

A suitable assessment for Outcome 1 would be an objective test. This could be multiple choice, multiple response, drag and drop or a combination of these.

The performance evidence for Outcome 2 will consist of an activity log of candidates' activities in performing the tasks required to satisfy the Performance Criteria.

The performance evidence for Outcome 3 will consist of a folio of candidates' work which will provide evidence that they have satisfied the Performance Criteria. A minimum of one task is required for each application package. The tasks for each application could involve a common theme which relates to a vocational subject area.

An observation checklist which has been completed by the assessor should be included in the folio with candidate names, signatures and dates.

Opportunities for the use of 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 e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

Opportunities for developing Core Skills

In this Unit, candidates are required to use a range of features provided by software application packages and search for information which provides opportunities to develop candidates' *Information and Communication Technology* skills. Achievement of the Unit gives automatic certification of the Core Skill of *Information and Communication Technology* at SCQF level 5.

Additionally, candidates have the opportunities to develop *Communication*, through written and/or verbal reporting throughout all assessments and practical exercises and *Problem Solving* through Outcomes 2 and 3 where tasks will require a certain level of planning, evaluating and critical thinking and *Numeracy* skills through the nature of the practical work with specific applications and achievement.

National Unit specification: support notes (cont)

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Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

History of changes to Unit

Version	Description of change	Date

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