



National Unit specification: general information

Unit title: Mobile Technology Systems (SCQF level 4)

Unit code: H1T0 10

Superclass: CB

Publication date: July 2012

Source: Scottish Qualifications Authority

Version: 01

Summary

The purpose of this Unit is to provide candidates with an opportunity to develop basic knowledge and understanding of mobile technology devices and the associated peripherals and operating systems that are used on a variety of these devices.

Candidates will also be given the opportunity to develop practical skills using mobile systems.

This Unit is a mandatory Unit in the National Progression Award in Mobile Technology (SCQF level 4), but is also available for candidates wishing to study the Unit on its own.

This Unit is suitable for candidates who have no previous experience of mobile technology systems

Outcomes

- 1 Identify different mobile devices, associated peripherals and operating systems.
- 2 Carry out a range of tasks using mobile devices.

Recommended entry

While entry is at the discretion of the centre, some basic IT skills would be beneficial.

General information (cont)

Credit points and level

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

**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

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

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

National Unit specification: statement of standards

Unit title: Mobile Technology Systems (SCQF level 4)

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 different mobile devices, associated peripherals and operating systems.

Performance Criteria

- (a) Identify different types of mobile devices and related key features and functions.
- (b) Identify different mobile operating systems and related key features and functions.
- (c) Identify different mobile peripherals and related key features and functions.

Outcome 2

Carry out a range of tasks using mobile devices.

Performance Criteria

- (a) Configure and customise features on a mobile device.
- (b) Use a mobile device to carry out routine tasks.
- (c) Connect and transfer data between mobile devices.

Evidence Requirements for this Unit

Written and/or oral recorded evidence and performance evidence is required which demonstrates that the candidate has achieved the requirements of all of the Outcomes and Performance Criteria to show that the candidate has appropriate knowledge and understanding of the content of this Unit.

Outcome 1

For Outcome 1 written and/or oral recorded evidence is required which demonstrates that the candidate has achieved the standard specified in the Outcome and Performance Criteria. The assessment will be supervised, controlled and under closed-book conditions.

Evidence must include:

- ◆ identification of four types of mobile device and the key features and functions of each
- ◆ identification of three operating systems and the key features and functions of each
- ◆ identification of two different types of peripherals and the key features and functions of each

National Unit specification: statement of standards (cont)

Unit title: Mobile Technology Systems (SCQF level 4)

Outcome 2

The assessment will be supervised, controlled and under closed-book conditions.

Performance evidence is required that demonstrates that candidates can:

- ◆ configure and customise a minimum of two features on a mobile device
- ◆ use a mobile device to carry out a minimum of two routine tasks
- ◆ connect and transfer data between at least two different types of mobile devices

National Unit specification: support notes

Unit title: Mobile Technology Systems (SCQF level 4)

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 enable candidates to understand the operation of a range of mobile devices. The Unit will provide candidates with information about hardware and software components with respect to mobile devices. The candidate will also gain a basic knowledge of how different mobile devices work.

Outcome 1 introduces candidates to a range of different mobile devices and associated peripherals. Candidates are then introduced to the different types of backing storage and operating systems used by these devices.

Outcome 1 uses a variety of different descriptions for mobile devices, peripherals and operating systems. The candidate will be introduced to the following areas:

- ◆ Mobile Device (Mobile Phone, Smartphone, PDA, Ebook reader, MP3 player, MP4 player, GPS navigation device, Tablet PC, Handheld gaming consoles, Netbook PC).
- ◆ Operating Systems (Blackberry OS, Symbian, Android, webOS, iOS, WindowsPhone).
- ◆ Peripherals (SIM cards, Bluetooth headsets, wired headsets, FM transmitters, flash memory such as SD cards, MMC cards, CF cards, micro SD cards).

Outcome 2

This Outcome relates to candidates carrying out a range of common tasks using mobile devices and introduces candidates to the approaches involved when setting up mobile devices for first time use and their day to day applications. Candidates will be given the opportunity to use mobile devices to carry out routine tasks. Candidates will be introduced to the steps involved in connecting a mobile device to a desktop computer system and how to transfer files and data between each system.

The candidate will gain knowledge in the following areas:

- ◆ Setting up and configuring a mobile device, such as setting up date and time, location settings, language settings and other preferences.
- ◆ Carrying out common tasks such as adding contacts to the device, sending text messages, setting up security passwords, setting ringtones and other handset tones, making video calls, downloading content to the device such as eBooks and Apps, creating calendar events and alerts.
- ◆ Connecting mobile device to a desktop computer system and synchronising data.
- ◆ Connecting and transferring data between mobile devices on at least two different types of devices such as phone to laptop or laptop to MP3 player and vice versa.

National Unit specification: support notes (cont)

Unit title: Mobile Technology Systems (SCQF level 4)

The context for this Unit would be the increased understanding of the mobile devices that are available for use in the current market, and their everyday application. This will provide a candidate with the basic knowledge of various mobile devices and the operating systems used within these devices.

The precise content of this Unit will change over time, as mobile technology is a rapidly developing area and new devices are introduced constantly. The following guidance exemplifies the standards in terms of contemporary technology.

Guidance on learning and teaching approaches for 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 a candidate commence these activities.

It is recommended that candidates gain hands-on use of a variety of mobile devices as this will allow a greater understanding of the working of a mobile device system.

An important part of this Unit is candidates developing an appropriate technical vocabulary relating to mobile devices. Terminology and underpinning knowledge should be introduced in a practical context.

The actual time distribution between Outcomes is at the discretion of the centre. However, one possible distribution is:

Outcome 1: nominal 15 hours

Outcome 2: nominal 25 hours

This Unit will introduce candidates to the world of mobile technology. Candidates should be encouraged to research and visit the many websites that contain animations and videos of the mobile world in action.

The use of computing magazines, technical reference manuals and Internet research is recommended.

This Unit may be delivered stand-alone or in conjunction with other Units. Where it is delivered alongside other related Units, there is an opportunity to reinforce and deepen the candidates' knowledge.

National Unit specification: support notes (cont)

Unit title: Mobile Technology Systems (SCQF level 4)

Opportunities for developing Core Skills

In this Unit candidates are required to set up and configure a mobile device, carry out common tasks on the device and connect the device to a desktop or laptop computer and transfer files, which can provide opportunities to gather evidence towards aspects of *Information and Communication Technology (ICT)* and *Problem Solving* at SCQF level 4.

Guidance on approaches to assessment for this Unit

Outcome 1 assessment will be carried out towards the end of the Unit once candidates have had an opportunity to acquire the essential knowledge and understanding required to give them a realistic prospect to pass the assessment. Whilst the choice of Instrument of Assessment is at the centres discretion the following are recommended:

- ◆ multiple choice
- ◆ drag and drop
- ◆ multiple response
- ◆ mix and match
- ◆ or a combination of the above

The assessment for Outcome 2 is a practical assessment consisting of observation of the candidate over an extended period of time during which the candidate is required to maintain a log of activity. It is recommended that this assessment is started at the earliest opportunity, as soon as the candidate has acquired the necessary knowledge and skills to permit him/her to commence the appropriate tasks. The activity log will show that the candidate has completed all the tasks above, with due regard to health and safety. An assessor observation checklist could be used to record that all the tasks have been undertaken correctly by the candidate. An assessor must endorse each checklist with the candidate's name, assessor signature and date.

Candidates are encouraged to use the internet in any research however, the evidence produced must be the candidate's own words. Assessors should ensure themselves of the authenticity of candidate's evidence.

Opportunities for the use of e-assessment

If a centre is presenting Outcome 1 of these assessments on-line the following assessment methods, where appropriate, may be selected:

- ◆ multiple choice
- ◆ drag and drop
- ◆ multiple response
- ◆ mix and match
- ◆ or a combination of the above

National Unit specification: support notes (cont)

Unit title: Mobile Technology Systems (SCQF level 4)

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)*.

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

© Scottish Qualifications Authority 2012

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Business Development and Customer Support team, telephone 0303 333 0330.