



## **National Unit specification: general information**

**Unit title:** Mobile Technologies: Mobile Applications (SCQF level 4)

**Unit code:** H1SY 10

**Superclass:** CB

**Publication date:** February 2013

**Source:** Scottish Qualifications Authority

**Version:** 02

## **Summary**

The purpose of this Unit is to give candidates practical experience of the use of applications on a mobile platform. Candidates will develop an understanding of the variety and role of applications on mobile platforms. This includes applications that are preinstalled on the device as well as third party applications which the candidate will learn to install and configure.

The Unit is aimed at those who are interested in learning to use mobile technology. 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.

## **Outcomes**

- 1 Identify a number of preinstalled and third party applications, their categories and key features for a specific mobile device.
- 2 Customise the settings of preinstalled applications on a mobile device and use those applications to store and retrieve data on the device.
- 3 Download, install and customise a number of applications onto a mobile device.

## **Recommended entry**

While entry is at the discretion of the centre, candidates would normally be expected to have attained one of the following, or equivalent:

*Mobile Technology Systems SCQF level 4*

Basic familiarity with standard desktop or laptop computers and some basic practical experience of using a mobile device would also be an advantage.

## 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

Achievement of this Unit gives automatic certification of the following Core Skills component:

Complete Core Skill                      None

Core Skill component                      Critical Thinking at SCQF level 4

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 Technologies: Mobile Applications (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**

- 1 Identify a number of preinstalled and third party applications, their categories and key features for a specific mobile device.

#### **Performance Criteria**

- (a) Identify a number of applications preinstalled on a mobile device and the category of each.
- (b) Identify a number of categories of third party applications available for a device from a marketplace, and applications in each category.
- (c) Identify key features of applications.

### **Outcome 2**

Customise the settings of preinstalled applications on a mobile device and use those applications to store and retrieve data on the device.

#### **Performance Criteria**

- (a) Locate the options or configuration settings for a preinstalled application.
- (b) Make changes to the options or configuration settings for a preinstalled application.
- (c) Use a preinstalled application to store information.
- (d) Use the application to retrieve the information again at a later time.

### **Outcome 3**

Download, install and customise a number of applications onto a mobile device.

#### **Performance Criteria**

- (a) Use the approved method for a specific device to install applications.
- (b) Locate the options or configuration settings for a downloaded application.
- (c) Customise the options or configuration settings for a downloaded application.

## National Unit specification: statement of standards (cont)

**Unit title:** Mobile Technologies: Mobile Applications (SCQF level 4)

### Evidence Requirements for this Unit

Written and/or oral recorded evidence and performance evidence is required to demonstrate the candidate has achieved all Outcomes and Performance Criteria.

#### Outcome 1

This assessment for this Outcome should be performed under open-book conditions  
Evidence must include:

For a given device, the candidate should:

- ◆ name four pre-installed applications on the mobile device
- ◆ name the categories of which each pre-installed application is an example
- ◆ identify key features in the functions of each pre-installed application
- ◆ name four categories of downloadable applications
- ◆ name an application for each of the downloadable application categories
- ◆ Identify key features in the functions of each downloadable application, including:
  - the application's main purpose and functions that it performs
  - whether the application is free to download or must be paid for
  - system resources and security permissions the application requires

#### Outcome 2

The assessment for this Outcome should be performed under open-book conditions.

For PCs (a) and (b), evidence must include:

- ◆ A candidate log detailing the relevant configuration settings for the application prior to any changes being made and should also detail the exact parameters and values that have been changed for the assessment.

For PCs (c) and (d) evidence must include:

- ◆ A candidate log recording the information that they stored in the application. In addition, the assessor must confirm that the information was not present on the device before the candidate performed the operation and that the information was still present when the device was later checked.

The assessor should assure that all logs are accurate.

## **National Unit specification: statement of standards (cont)**

**Unit title:** Mobile Technologies: Mobile Applications (SCQF level 4)

### **Outcome 3**

The assessment for this Outcome should be performed under open-book conditions.

The evidence for Outcome 3 should be in the form of a log kept by the candidate. The assessor should assure themselves that the applications to be downloaded are not installed on the device prior to the performance of the Outcome and that they are correctly installed after the Outcome. Candidates must download a minimum of three applications. Candidates should demonstrate the applications working to the assessor. The log should also detail the relevant default configuration settings for the application prior to any changes being made and should also detail the exact parameters and values that have been changed for the assessment. The assessor should assure that the log is accurate.

## National Unit specification: support notes

### Unit title: Mobile Technologies: Mobile Applications (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

This Unit is intended to provide basic familiarity with a range of preinstalled and third party applications on a mobile device. Appropriate devices include, but are not restricted to, smartphones, netbooks and tablets. It is generally assumed that the candidates will be supplying their own devices and the centre delivering the Unit must assure itself that the devices being used offer sufficient capabilities to cover all aspects of the Unit Outcomes.

For Outcome 1 it is suggested that the candidates are made aware of an existing range of categories for applications. These categories may include, but are not restricted to:

- ◆ system utilities:
  - task manager
  - usage logging
  - security
- ◆ social networking:
  - facebook
  - twitter
  - linkedin
- ◆ media apps:
  - record/playback photographs, audio and video
  - edit photographs, audio and video
- ◆ general comms apps:
  - web
  - email
  - sms/mms
- ◆ productivity apps:
  - notepad
  - calendar
  - calculator
- ◆ maps and navigation:
  - google maps
  - google earth
- ◆ games
- ◆ niche areas, for example:
  - astronomy
  - fitness

## National Unit specification: support notes (cont)

### Unit title: Mobile Technologies: Mobile Applications (SCQF level 4)

When considering the categories for downloadable applications, the intention is that the candidate should learn about the categories of applications available for a specific device as they are represented in the marketplace for that device. These categories may differ from those presented above. If the marketplace can be connected to directly through the device, then this is the preferred method of investigation. Alternatively many mobile marketplaces are also accessible through a standard desktop web browser.

Where the marketplace distinguishes between different payment methods for applications the candidate should be made aware of these differences. This may include, for example, freely available applications, advertising supported applications or single payment applications.

Also, where applications explicitly identify their system and security requirements, the candidate should be made aware of this information. For example on Android, an application must indicate what permissions (such as full internet access, modification of storage, etc) that it needs to operate. Candidates should be made aware of the implications of these various permissions. Where the security permissions of the device are being discussed there is a potential opportunity to investigate the social implications of ubiquitous mobile computing.

Outcome 2 and Outcome 3 both require that candidates modify configuration settings for the applications. Any appropriate configuration settings for the application may be used. Options that relate to the visual appearance of the application clearly offer the most immediate feedback on the success of the operation, but any setting that can be verified by the assessor may be used.

As a suggestion, for the second part of Outcome 2 (PCs c and d) the application involved in storing the data could be any of the following:

- ◆ a contacts list, with the data stored being be a new contact
- ◆ a calendar, with the data stored being an appointment
- ◆ a camera, with the data stored being a photograph

This is not intended to be an exhaustive list.

Outcome 3 requires that the candidate downloads applications on to a mobile device. This has potential cost implications. If there is a data plan in place on the mobile device, then this could be used for downloading. Alternatively, the centre delivering the Unit may opt to provide Wi-Fi (or other) connectivity for the mobile devices which could be used to perform the download. In this case, there may be an opportunity for evidence to be gathered to contribute to the satisfaction of Outcomes in the *Mobile Technology: Device Connectivity* Unit.

## **National Unit specification: support notes (cont)**

**Unit title:** Mobile Technologies: Mobile Applications (SCQF level 4)

### **Guidance on learning and teaching approaches for this Unit**

Candidates will require individual access to appropriate computer hardware, mobile technologies and software throughout this Unit.

Outcome 1 provides an opportunity for candidates to reflect on the wide variety of tasks that mobile devices can perform. They should be able to recognise broad categories of task and to identify which category of task an application fulfils.

For Outcomes 2 and 3 learning should be practical and based on the actual performance of tasks by candidates on mobile devices.

### **Opportunities for developing Core Skills**

In this Unit the candidates will gain practical experience of the use of applications on a mobile platform. Candidates will develop an understanding of the variety and role of applications on mobile platforms. This includes applications that are preinstalled on the device as well as third party applications which the candidate will learn to install and configure.

As candidates are doing this Unit they will be developing aspects of the Core Skills in *Communication* and *Information and Communication Technology (ICT)*.

This Unit has the Critical Thinking component of Problem Solving embedded in it. This means that when candidates achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 4.

### **Guidance on approaches to assessment for this Unit**

Assessment for Outcome 1 should be done early in the delivery of the Unit, once the candidates have enough understanding of the basics of mobile applications. This gives them the foundation on which the rest of the Unit is built.

Outcomes 2 and 3 could reasonably be done in either order, depending on how the assessor chooses to order the delivery of the material. For Outcome 3 when the candidate demonstrates the applications working to the assessor, the assessor should keep a checklist of these demonstrations.



## **National Unit specification: support notes (cont)**

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### **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)*.

### **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](http://www.sqa.org.uk/assessmentarrangements)

## History of changes to Unit

Version	Description of change	Date
02	Core Skills Component Critical Thinking at SCQF level 4 embedded.	04/02/2013

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