



## National Unit Specification: general information

**UNIT** PC Passport: Working with IT Security for Users  
(SCQF level 6)

**CODE** F1FH 12

### SUMMARY

This Unit is a mandatory Unit of PC Passport: Advanced but can also be undertaken as a free-standing Unit.

This Unit is designed to develop knowledge and understanding of strategies to protect hardware, software and the data within an IT system. It also develops knowledge and understanding of ways to keep security risks to a minimum and identify potential security risks. It provides an opportunity to develop practical skills in the implementation and communication of laws and guidelines relating to IT systems, including health and safety regulations. It gives the opportunity to develop knowledge and understanding of the implementation of contingency and recovery strategies in a variety of contexts.

This Unit is suitable for anyone wishing to develop an understanding of IT security issues in a variety of contexts.

### OUTCOMES

- 1 Describe potential security risks related to computer use and methods of reducing these risks.
- 2 Explain key features of the laws and guidelines which apply to computer use.
- 3 Present research findings on a security solution which meet a specified security risk.

### RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates would normally be expected to have prior experience of operating an IT system.

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#### Administrative Information

**Superclass:** CC

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## **National Unit Specification: general information (cont)**

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### **CREDIT VALUE**

0.5 credit at Higher (3 SCQF credit points at SCQF level 6\*)

*\*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**

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

The Unit provides opportunities for candidates to develop aspects of the following Core Skills:

- ◆ Information Technology (SCQF level 6)
- ◆ Problem Solving (SCQF level 6)
- ◆ Communication (SCQF level 6)

These opportunities are highlighted in the Support Notes of this Unit Specification.

## **National Unit Specification: statement of standards**

### **UNIT**      PC Passport: Working with IT Security for Users (SCQF level 6)

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**

Describe potential security risks related to computer use and methods of reducing these risks.

##### **Performance Criteria**

- (a) Describe potential security risks related to computer use.
- (b) Describe the importance of controlling access to IT systems.
- (c) Describe methods of enhancing control of access to IT systems.
- (d) Describe the main functional characteristics of a contingency and recovery strategy.

#### **OUTCOME 2**

Explain key features of the laws and guidelines which apply to computer use.

##### **Performance Criteria**

- (a) Identify the laws and guidelines which apply to computer use.
- (b) Explain how the key features of laws and guidelines affect IT use.

#### **OUTCOME 3**

Present research findings on a security solution which meet a specified security risk.

##### **Performance Criteria**

- (a) Research a solution for the specified security risk.
- (b) Research laws and guidelines related to the specified security risk.
- (c) Present a solution, including a contingency and recovery strategy, for the specified security risk.

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

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### EVIDENCE REQUIREMENTS FOR THIS UNIT

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

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

Written and/or oral recorded and product evidence is required which demonstrates that the candidate has achieved the requirements of all of the Outcomes and Performance Criteria.

Written and/or oral recorded evidence is required which demonstrates that the candidate has achieved Outcomes 1 and 2 to the standard specified in the Outcomes and Performance Criteria. The evidence for these Outcomes should be obtained under controlled, supervised conditions. The assessment SHOULD be closed-book and last no more than 45 minutes.

The instrument of assessment will provide opportunities for each of the Outcomes to be fulfilled by means of sampling across the range of the content of Outcomes 1 and 2. Where re-assessment is required, it should contain a different sample from the range of mandatory content. Achievement could be decided using a cut-off score. Each sample must include the following:

- ◆ Two potential security risks related to computer use.
- ◆ Two reasons to control access to IT systems.
- ◆ Two methods of enhancing access control to IT systems.
- ◆ Two main functional characteristics of a contingency and recovery strategy.
- ◆ Two laws and guidelines which apply to computer use from: Data Protection Act, Copyright, Designs and Patents Act, Computer Misuse Act, Freedom of Information (Scotland) Act, health and safety regulations, disability provision, equal opportunities legislation, other current relevant legislation.
- ◆ Two ways in which IT activities are affected by these laws and guidelines from: data protection principles; rights of data subject; responsibilities of data controller; role of Information Commissioner; coverage of data in electronic transmission; prior consent of data subject; harmonisation of EU legislation; export of data; application of copyright to computer software, web content and digital media; employers' responsibilities including seating, lighting, RSI, eye strain, radiation.

Product evidence is also required to demonstrate that the candidate:

- ◆ Researched a solution for the specified security risk.
- ◆ Researched laws and guidelines related to the specified security risk.
- ◆ Presented a solution, including a contingency and recovery strategy, for the specified security risk.

The above evidence can be produced over an extended period of time under controlled, supervised conditions.

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

### **UNIT**      PC Passport: Working with IT Security for Users (SCQF level 6)

The Assessment Support Pack (ASP) for this Unit provides sample assessment materials including assessor checklists, practical tasks and an instrument of assessment for the knowledge and understanding of Outcomes 1 and 2. Centres wishing to develop their own assessments should refer to the Assessment Support Pack to ensure a comparable standard.

## National Unit Specification: support notes

### UNIT PC Passport: Working with IT Security for Users (SCQF level 6)

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 20 hours.

#### GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

This Unit is designed to be delivered as part of the PC Passport: Advanced award but can be delivered as a stand alone Unit.

IT security refers to the ability to protect hardware, software and the data within an IT system against theft, malfunction and unauthorised access. At this level, candidates are expected to possess a wide vocabulary of terms related to hardware, software and IT security. The range of terminology required at this level should be consistent with the vocabulary expected from an expert user.

This Unit maps to the National Occupational Standards (NOS) for IT Users, as specified by the Sector Skills Council (e-Skills UK). This Unit includes full content coverage of level 3 Areas of Competence in the following areas of NOS:

- ◆ IT Security for Users

Full assessment coverage of NOS is detailed in the Assessment Support Pack for this Unit. Further information regarding NOS can be found at [www.e-skills.com](http://www.e-skills.com).

#### Outcome 1

This Outcome relates to ways of keeping security risks to a minimum. The candidate is required to provide descriptions and explanations of security risks such as various type of computer viruses, all types of computer related theft and unauthorised access.

Candidates should be aware of reasons how and why access to IT systems should be controlled. This includes different levels of access for different types of user and how to protect data from unauthorised access, both local access and remote access over the internet or other online methods. Candidates should be aware of control methods such as usernames and passwords for access to system, user access levels, file attributes, file passwords and edit locks, downloading software patches to fix security flaws, remote access protection such as e-mail filters, use of anti-virus and spyware software, firewalls etc.

Candidates should also be able to provide descriptions and explanations of contingency systems to keep the effects of security breaches to a minimum. This includes back-up strategy, archiving, data recovery and storage methods, frequency of back-ups.

## National Unit Specification: support notes (cont)

### UNIT PC Passport: Working with IT Security for Users (SCQF level 6)

#### Outcome 2

Candidates are required to provide descriptions and explanations of the following laws and guidelines:

- ◆ Data Protection Act
- ◆ Copyright, Designs and Patents Act
- ◆ Computer Misuse Act
- ◆ Freedom of Information (Scotland) Act
- ◆ health and safety regulations
  - employers' responsibilities
- ◆ disability provision
- ◆ equal opportunities legislation

#### Outcome 3

This Outcome requires candidates to provide a solution to a specified security risk. Candidates are required to research and recommend a solution including relevant legislation/guidelines. They are required to present this information in an appropriate format.

### GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

A practical hands-on approach to learning should be adopted. Terminology and underpinning knowledge should be introduced in a practical context.

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

Outcome 1	6 hours
Outcome 2	6 hours
Outcome 3	8 hours

The Outcomes can be taught in any order but it is suggested that Outcome 1 should precede Outcome 2.

### OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

This Unit involves candidates:

- ◆ Using a range of IT and carrying out searches to extract and present relevant information which may provide an opportunity to gather evidence towards aspects of the IT Core Skill.
- ◆ Researching a solution to a given problem which may provide an opportunity to gather evidence towards aspects of the Problem Solving Core Skill.
- ◆ Presenting information which may provide an opportunity to gather evidence towards aspects of the Communication Core Skill.

## National Unit Specification: support notes (cont)

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### GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

It may be appropriate for some of the evidence for this Unit to be produced using e-assessment provided the national standard is applied and the conditions of assessment are consistent for all candidates. This may take the form of e-testing (for knowledge and understanding) and/or e-portfolios (for practical abilities).

If a centre is presenting Outcomes 1 and 2 of these assessments online the following assessment methods, where appropriate, may be selected:

- ◆ Multiple choice
- ◆ Drag and drop
- ◆ Multiple response
- ◆ Mix and match
- ◆ a combination of the above

It is expected that the questions will be of the multiple-choice variety. Centres may consider the use of alternative questions types, particularly if using Computer Assisted Assessment approaches. However, care should be taken that the questions are valid and at an appropriate level. The use of simple true/false question responses is unlikely to achieve this.

Evidence is required to demonstrate that candidates meet all the Performance Criteria for Outcome 1 and Outcome 2. It is recommended that centres assess knowledge and understanding as an objective question paper. Achievement can be decided by the use of a cut-off score. The possibility may arise where these questions are taken as an online assessment.

The assessment task for Outcome 3 could be presented as a presentation or as a report posted on an intranet.

There may be an opportunity to combine the research task with other Units that the candidate may be undertaking.

If this Unit is undertaken in the workplace there may be opportunities for candidates to gather evidence in day to day workplace activities.

### 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)*.



## 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 alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* ([www.sqa.org.uk](http://www.sqa.org.uk)).

### **History of changes:**

<b>Version</b>	<b>Description of change</b>	<b>Date</b>
02	Evidence Requirements clarified and/or details of NOS mapping inserted	10/08/2010