National Unit Specification: General Information

UNIT Information Technology (Access 3)

NUMBER D01D 09

COURSE

SUMMARY

This core skills Unit is about using a computer system to carry out some simple processing tasks.

OUTCOMES

1 Operate a computer with limited assistance.
2 Use software with limited assistance.
3 Find information.

RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates would normally be expected to have attained Information Technology (Access 2).

CREDIT VALUE

1 Credit at Access 3 (6 SCQF credit points at SCQF level 3*)

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

Information on the automatic certification of any core skills in this Unit is published in *Automatic Certification of Core Skills in National Qualifications* (SQA, publication code BA0906).

The attainment of this Unit will lead to the automatic award of:

• Information Technology at Access 3.

Administrative Information

Superclass: CD

Publication date: March 2004

Source: Scottish Qualifications Authority

Version: 02

National unit specification: statement of standards

UNIT Information Technology (Access 3)

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 the Scottish Qualifications Authority.

OUTCOME 1
Operate a computer with limited assistance.

Performance Criteria
a)   Basic operations are carried out with limited assistance.
b)   Display and selection from menus is accurate.
c)   Loading and saving of an existing file is efficient and effective.

Evidence Requirements
Performance evidence that the candidate can start up the computer and open up a package, open an existing file, change it, save it and close the file, repeat this for a different package, select from a menu, close the package and shut down the computer. The candidate may have limited assistance in carrying out these operations.

Candidates must use a keyboard, and one other input device, eg. a mouse.

OUTCOME 2
Use software with limited assistance.

Performance Criteria
a)   Processing of familiar data is carried out effectively.
b)   Data is output accurately in a given format.

Evidence Requirements
Performance evidence that the candidate can perform the following simple processes on familiar data, produce a new file and output in a given format, edit an existing file and output in a given format. The candidate may have limited assistance in carrying out these processes.

Candidates must use at least two types of package, eg. word processing, spreadsheet, database, simulation, sound generation, drawing, painting, educational packages.

National unit specification: statement of standards (cont)

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OUTCOME 3
Find information.

Performance Criteria
a)   Data is correctly extracted.
b)   Information is presented effectively.

Evidence Requirements
Performance evidence that the candidate can extract and clearly present simple, familiar data and search for data by keyword, field or filename. The data can be text, numerical, pictures, video or audio. The search should be carried out on one electronic source of information.

A paper or electronic copy of the presented information should be retained.

National unit specification: support notes

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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 CONTENT AND CONTEXT
The content and context for this core skills Unit should be appropriate to the personal and vocational needs of the candidate.

Core skills Units are stated at five levels of attainment, with activities becoming progressively more demanding in breadth and depth, and in the extent of individual autonomy required. The appendix to this Unit shows the relationship between the levels in *Information Technology*.

Outcome 1

This outcome relates to the basic operation of a computer system. A typical computer system is a personal computer system which may be stand-alone or networked. Candidates are required to perform a limited number of basic operations. These are defined in the Evidence Requirements.

Teachers/lecturers should advise candidates on the correct handling and operation of one or more appropriate interface device(s). Only the basic use of each device is expected. So, for example, candidates might use a keyboard for simple text entry, a mouse for basic interactions with software and a monitor for output purposes. Devices used should be appropriate to the operation being performed and the candidate's individual needs.

Performance criterion (a) relates to basic operations. The range of operations is defined in the Evidence Requirements and includes starting up and closing down a system, displaying menus and loading files. Candidates at this level may require several attempts at carrying out these operations. Teachers/lecturers can provide candidates with limited assistance. So, for example, it is acceptable to give candidates occasional help in their routine use of either keyboard or mouse. Candidates are not required to deal with non-standard conditions at this level. All that is expected is basic system start up and close down, simple display of a menu, basic selection of a menu option, and simple loading and saving of a standard file.

Candidates are required to use menu systems accurately (performance criterion b). This simply requires them to invoke and select from a menu system. Most contemporary operating systems and application packages incorporate menu systems (such as Windows start button or Word pull-down menus). The actual function used via the menus is not important; what is important is that the candidate can interact with a menu interface.

Candidates are also required to load and save a file (performance criterion c). This can be done using any appropriate software package and any suitable storage device (such as hard disk, floppy disk or CD-ROM). For example, candidates could load a document into a word processing program or save their position within a computer game. Loading and saving should be efficient and effective. In this context, efficiency relates to the time taken to perform a load or save operation – candidates do not have to get it right first time every time but repeated attempts at loading and saving are not acceptable. Loading and saving are effective if the loaded program appears on screen and the saved program can be retrieved from backing storage.

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Outcome 2

This outcome relates to candidates' skills in performing simple processes using application software. Candidates are required to demonstrate basic skills in at least two application areas. Suitable packages include text processing (such as Word), spreadsheet (such as Lotus 1-2-3), database (such as FileMaker), simulation (such as Flight Simulator), sound generation (such as Sound Studio), drawing (such as Autosketch), painting (such as PaintShop Pro) and educational software (such as Britannica Encyclopaedia). For each package candidates are required to enter, edit and output data. The data used should be familiar to the candidate. The actual processes will vary from program to program. For example, in the context of a word processing program, entering data would involve typing text; editing would involve revising or removing text, and output would involve printing text. In the context of an Internet chat program, input would relate to the text that the candidate types; editing would involve changes to that text or removal of some of the text (backspace key), and output would involve sending the message to the chat window (i.e. pressing the enter key). The important point is that a wide range of software can be used to demonstrate these basic skills. Processes must be carried out effectively (performance criterion a) and with limited assistance (performance criterion b). So candidates are expected to succeed in carrying out each process without too much help from their teacher/lecturer. Occasional assistance is acceptable. Candidates are required to output the data in a given format. At this level, the given format should be very simple. For example, a word processing program might output text in a continuous format; a spreadsheet program might output text in a tabular format; a paint program would output data in a graphics format. The teacher/lecturer should supply the format for the candidate.

Outcome 3

This outcome relates to candidates' ability to extract and present information. The source of the information could be a simple database (created by the candidate or provided to the candidate) or a CD-ROM based information source (such as an educational program) or the Internet (such as the World Wide Web). Irrespective of the source, candidates are required to select information which satisfies a single criterion (performance criterion a). This criterion should be very simple. For example, in the context of a database of football teams it might relate to all the football teams from Glasgow. In the context of a CD-ROM program (such as an electronic encyclopaedia) it might relate to the national anthem of a specific country. In the context of the WWW it might relate to the home page of a particular pop group. Once the information has been located it must be presented (performance criterion b). This will depend on the nature of the information. For example, the football teams from Glasgow could be printed once they are found (assuming the package supports this feature); the national anthem sound file would simply be played, and the WWW page would be displayed on the screen.

GUIDANCE ON TEACHING AND LEARNING APPROACHES
The learning and teaching approaches should encourage candidates to identify the evidence of their attainment and to transfer the skills acquired to other contexts.

National unit specification: support notes (cont)

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Programmes of work in core skills should be designed to engage candidates in the varied and purposeful use of interrelated skills through a range of tasks. These tasks may reflect the candidates' vocational interest or may be of more general interest. It is recommended that these tasks should be negotiated and planned in such a way that the evidence required for assessment is generated in the course of ongoing work rather than as a discrete exercise.

Learning and teaching in core skills should be active and candidate-centred. Candidates should be encouraged to plan and make decisions for themselves and to show initiative and independence. Activities should provide opportunities to use skills in real situations for real purposes and may be part of projects or practical exercises set within the IT programme or drawn from activities in other vocational and social contexts.

Where the *Information Technology* Unit is being combined with another Unit to create an enhanced learning and teaching programme, care must be taken to ensure that all aspects of each Unit are covered and adequate time must be allowed for the coverage of both Units. Such a programme would create opportunities to consolidate the skills gained in this Unit.

GUIDANCE ON APPROACHES TO ASSESSMENT

The statement of satisfactory performance for each outcome indicates the minimum required for the purpose of summative assessment. However, the number of activities undertaken by the candidate in the course of the Unit should not be limited to those specified for assessment purposes. In awarding the candidate *Information Technology* at Access 3 the teacher/lecturer must be confident that the candidate will be able to demonstrate these skills in any appropriate context and set of circumstances.

Teachers/lecturers must remember to distinguish between their differing roles in formative and summative assessment. In the former, as much help and support as is required by the candidate may legitimately be given by the teacher/lecturer. *Tasks which are used to provide evidence for summative assessment must be completed by the candidate with limited assistance only.*

Evidence of attainment should be gathered, wherever possible, from integrated activities, whether this Unit is being studied as a stand alone Unit or is being used in combination with others.

SPECIAL NEEDS

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for Units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645).

Information Technology Core Skills Units   **Appendix**
Progression chart

Skill	Access 2	Access 3	Intermediate 1	Intermediate 2	Higher
Use a computer System	Perform basic operations using a computer system.	Perform basic operations using a computer system.	Use a computer system effectively.	Use a computer system effectively.	Use a computer system effectively.
Use IT software	Perform simple processes using an application package.	Perform simple processes using a range of application packages.	Perform simple processes using a range of application packages.	Perform processes using a range of application packages.	Use software in an unfamiliar context to produce complex information.
Carry out searches	Extract and present information from an electronic source.	Extract and present information from an electronic source.	Carry out simple searches to extract and present relevant information.	Carry out searches to extract and present relevant information.	Carry out searches to extract and present relevant information.