

**Scottish Group Award Specifications**

SGA in:	<b>Computing and Information Technology</b>		
Level:	<b>Intermediate 2</b>	Code:	<b>G5A6 11</b>



## Summary of requirements

### SGA in Computing and Information Technology at Intermediate 2

#### National Courses and Units required\*

*2 mandatory National Courses (8 credits) at Intermediate 2:*  
Computing  
Information Systems

*Details in specific section*

**plus**

*8 credits at minimum of Intermediate 1*

*Details in open section*

**Total 16 credits**

#### Core skills required\*

*The above must include or cover:*  
2 core skills at Intermediate 2  
3 core skills at Intermediate 1

*Details in specific section*

\*See Important Note on page 4.

# Rules for credit contribution for specific and open sections

## Important Note\*      Achievement above the minimum requirements

The specification shows the **minimum** requirements for this SGA. Where possible, centres may wish to encourage candidates to exceed this minimum. Candidates achieving above the minimum specification will have this achievement recorded on their Scottish Qualifications Certificate. For example the following can be achieved above the minimum requirement:

- Core Skills at levels above those specified
- more National Courses and Units at Intermediate 2 instead of the credits at Intermediate 1
- National Course grades, eg grade A or B instead of grade C
- more than the required two National Courses, in which case each additional course completed counts as four credits in the open section of the specification

## Hierarchies

- courses and units can be substituted by those with the same title at a higher level, eg Computer Systems (Int 2) can be substituted by Computer Systems (H) (See Section E)

## Double counting

- courses and units with the same title at different levels cannot both contribute credits to the SGA, eg **either** Computer Systems (Int 2) **or** Computer Systems (H)
- courses at the same level in the same subject cannot both contribute credits to the SGA, eg **either** the National Course in Computing at Intermediate 2 **or** Standard Grade Computing Studies at Credit Level (See Section F)
- same course with different grades cannot both contribute credits to the SGA, eg **either** Information Systems (Int 2) at grade A **or** Information Systems (Int 2) at grade C
- same course or unit cannot contribute credit to both the specific and open sections of an SGA

## Specific section

A

This section specifies: mandatory courses, mandatory units, mandatory combinations of courses and/or units, mandatory core skill requirements and optional courses and units.

Course/unit no	Course/unit title	Credits
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### Two mandatory National Courses:

C017 11	Computing (Int 2)	4
C054 11	Information Systems (Int 2)	4

**Total credits required: 8**

### \*\* Core skills requirement

Communication at Intermediate 1  
Numeracy at Intermediate 1  
Information Technology at Intermediate 2  
Problem Solving at Intermediate 2  
Working with Others at Intermediate 1

\*\* See Section D for core skills details.

Note: Candidates may substitute designated Standard Grades at Credit Level for National Courses at Intermediate 2 in this section. (See Section F)



## Open section

**B**

**8 credits at minimum of Intermediate 1** are required to complete this SGA. These can be chosen from either one or both of the following sections:

- Open section (any qualification listed below)
- Specific section (units and courses not already chosen)

The 8 credits may be made up from any of the following. Each has a fixed credit value for the purposes of this SGA.

Qualifications	Credit
National Units at Intermediate 1 or above	each typically 1
National Courses at Intermediate 1 or above	each 4
Standard Grades at General Level contribute credits at <i>Intermediate 1</i> *	each 4
Standard Grades at Credit Level contribute credits at <i>Intermediate 2</i> *	each 4
Free-standing core skills units (if required to complete the core skills requirement)	each 1
Relevant SVQs at Level 1 in the following occupational areas contribute credits at <i>Intermediate 1</i> :	max 8
009 (Providing Business Services)	
010 (Communicating and Entertaining)	
Relevant SVQs at Level 2 in the following occupational areas contribute credits at <i>Intermediate 2</i> :	max 8
009 (Providing Business Services)	
010 (Communicating and Entertaining)	

\*If achieved prior to 1994 please contact SQA Helpdesk ☎ 0141 242 2214.

Note: There are many ways in which the 8 credits at Intermediate 1 can be achieved and the following sections are provided for your information.

*Open section:* Qualifications which can contribute credits to this group award.

*Programme advice:* Guidance on possible combinations of units and courses which candidates might choose in order to gain the required credits.

Centres and candidates should agree the most appropriate way of gaining the required credits to meet each candidate's individual needs.

# Rules for credit contribution for specific and open sections

## Important Note\*      Achievement above the minimum requirements

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- Core Skills at levels above those specified
- more National Courses and Units at Intermediate 2 instead of the credits at Intermediate 1
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## Hierarchies

- courses and units can be substituted by those with the same title at a higher level, eg Computer Systems (Int 2) can be substituted by Computer Systems (H) (See Section E)

## Double counting

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Note: Advice on making up programmes of credit from the open section follows in Section C.



Candidates having met the requirements of the specific section need to achieve a further 8 credits at a minimum of Intermediate 1. The general rules are defined in Section B.

A wide choice is available to meet the 8 credits. Centres should consider individual candidate needs, eg for further specialist work within the title area of the SGA or for broadening beyond the SGA title area.

Advice has been developed in the following section on possible groupings of units and courses. This might be useful in the selection of programmes to meet individual candidates' career and progression needs in computing and information technology. The groupings are not exhaustive. Centres and candidates can choose other provision from SQA's range of qualifications to build up a coherent programme.

Candidates can make up the 8 credits by selecting courses and/or units from a range of these groupings or by selecting courses and/or units from an individual grouping according to their needs.

Please note the rules on hierarchical substitution and double-counting listed in Section B when finalising individual candidate SGA programmes.

\*Mandatory unit of a course. †Optional unit of a course. All other units are free-standing National Units.  
[ ]Bracketed numbers indicate the former coding for these unrevised National Units.

Course/unit no	Course/unit title	Credits
<b>General Computing and Information Systems</b>		
Course:		
C016 10	Computing Studies (Int 1)	4
Component units of course:		
D094 10	*Computer Application Software (Int 1)	1
D093 10	*Computer Systems (Int 1)	1
D097 10	†Information Systems (Int 1)	1
D095 10	†Software Development (Int 1)	1
D096 10	†The Internet (Int 1)	1
Free-standing National Units:		
D16E 11	Computer Application Package (Spreadsheet): Practitioners (Int 2) [8110147]	1
D16F 11	Computer Application Package (Word Processing): Practitioners (Int 2) [8110157]	1
D968 11	Computer Applications Software – Text (Int 2)	1
D966 11	Computer Applications Software – Graphics (Int 2)	1
D967 11	Computer Applications Software – Number (Int 2)	1
D973 11	Computer Networks (Int 2)	1
D976 11	Desk-top Publishing (Int 2)	1
D980 11	Programmable Systems (Int 2)	1
D970 10	Computer Control Systems (Int 1)	1
D974 10	Computer Operating Procedures (Int 1)	1
D978 10	Multimedia (Int 1)	1

Course/unit no	Course/unit title	Credits
<b>Other</b>		
Course:		
C002 11	Administration (Int 2)	4
Component units of course:		
D007 11	*Administrative Support (Int 2)	1
D008 11	*Information Technology: Office Applications (Int 2)	1
D010 11	*Word Processing 2 (Int 2)	1
Course:		
C025 11	Electronic and Electrical Fundamentals (Int 2)	4
Component units of course:		
D134 11	*Combinational Logic (Int 2)	1
D132 11	*Electrical Fundamentals (Int 2)	1
D133 11	*Semiconductor Applications: An Introduction (Int 2)	1
Course:		
C033 11	Graphic Communication (Int 2)	4
Component units of course:		
D173 11	*Computer Graphics (Int 2)	1
D171 11	*Technical Graphics 1 (Int 2)	1
D172 11	*Technical Graphics 2 (Int 2)	1
Course:		
C058 11	Media Studies (Int 2)	4
Component units of course:		
D332 11	*Media Analysis (Int 2)	2
D334 11	*Media Production (Int 2)	1
Component unit of Mathematics course:		
D324 11	*Applications of Mathematics (Int 2)	1
Component unit of Physics course:		
D380 11	*Electricity and Electronics (Int 2)	1
Component units of Technological Studies course:		
D186 11	*Applied Electronics (Int 2)	1
D187 11	*Systems and Control (Int 2)	0.5

#### Core Skills

Free-standing National Units:

D01B 10	Communication (Int 1)	1
D01C 10	Numeracy (Int 1)	1
D01D 11	Information Technology (Int 2)	1
D01E 11	Problem Solving (Int 2)	1
D01F 10	Working with Others (Int 1)	1

Candidates who have not achieved these core skills in other ways must select the required core skills units. See Section D for further information.

One or more core skills in this SGA may be automatically certificated through courses and units in the specific section. Where this is the case, the corresponding core skill unit in the open section cannot be counted towards the SGA.

## Core skills

D

To achieve this SGA, all candidates **must achieve** the following core skills:

Core skill	Level
Communication	Intermediate 1
Numeracy	Intermediate 1
Information Technology	Intermediate 2
Problem Solving	Intermediate 2
Working with Others	Intermediate 1

Candidates can achieve core skills:

- through Standard Grades or other units which give automatic certification of core skills, eg a candidate who has completed Standard Grade English and Mathematics at General Level is given automatic certification of Communication and Numeracy at Intermediate 1
- by selecting from the group award units and courses which give automatic certification of core skills, eg Intermediate 2 Administration course gives automatic certification of Problem Solving at Intermediate 2 and Information Technology at Intermediate 2
- by selecting dedicated core skills units in the open section of the SGA

Candidates' current level of achievement in core skills is shown on the Scottish Qualifications Certificate in the form of a profile. This shows achievement against each of the core skills *components*. Where a core skill has more than one component, the candidate needs to achieve each component at the level specified for the SGA. For example, if an SGA requires Communication at Intermediate 1, a candidate whose profile shows Written Communication at Intermediate 1 and Oral Communication at Access 3 would not meet the requirement and would have to improve in Oral Communication.

Details of all courses which give automatic certification of core skills is published in *Automatic Certification of Core Skills in National Qualifications* (SQA, 1999).



## Hierarchical sequences

## E

The SQA numbering system for qualifications consists of a 4 + 2 reference code.

The qualifications in a hierarchical sequence have the same title and are available at more than one level. They are identified by their reference code having the same first four digits, eg, D093 in the example below. The last two digits are unique to each level of qualification, eg 12 equates to Higher, 11 equates to Intermediate 2.

### Units

The following is an example of a hierarchical sequence of units:

D093 10	Computer Systems (Int 1)
D093 11	Computer Systems (Int 2)
D093 12	Computer Systems (H)
D093 13	Computer Systems (AH)

Where units which are part of hierarchical sequences are specified, candidates who achieve a unit at a higher level than the one specified can use the upper level unit to count as credit towards the group award. For example, Computer Systems (H) can be counted instead of Computer Systems (Int 2).

Candidates can only use one of these units to count as credit towards the group award.

In the case of unrevised National Certificate Modules, ie units which retain their original number, there are hierarchies where the title is the same and the number is different. Details of these exceptions will be published in a separate document. The pattern for these hierarchies is the same as that previously established for GSVQs.

There are also some hierarchies where the titles and numbers of the units at different levels are different. In this specification, if there are two units at different levels with heavily overlapping content, only one of these units should be used to count as credit towards the group award. Details of these exceptions will be published in a separate document.

### Courses

The following is an example of a hierarchical sequence of courses:

C054 11	Information Systems (Int 2)
C054 12	Information Systems (H)
C054 13	Information Systems (AH)

In the SGA specification, where courses which belong to hierarchical sequences are specified, candidates who achieve a course at a higher level than the one specified can use the upper level course to count as credit towards the group award. For example, Information Systems (H) can be counted instead of Information Systems (Int 2).

Candidates can only use one of these courses to count as credit towards the group award - a maximum of 4 credits.



## Standard Grades

F

Designated Standard Grades at Credit Level can contribute 4 credits each to the SGA in place of corresponding National Courses in the *specific section*.

The designated Standard Grades and their corresponding National Courses, either of which can contribute to this SGA, are as follows:

<b>Standard Grade</b>	<b>National Course</b>
Computing Studies at Credit Level	Computing (Int 2)

Note: Any Standard Grade at General or Credit Level can contribute 4 credits to the *open section*.





## SVQs

## G

Relevant Scottish Vocational Qualifications (SVQs) from occupational areas 009 (Providing Business Services) and 010 (Communicating and Entertaining) can each contribute up to eight credits to the open section of the SGA.

SVQs at Level 2 contribute credits at Intermediate 2.

SVQs at Level 1 contribute credits at Intermediate 1.

The following are **examples** of relevant SVQs.

Code no	Relevant SVQs	Level
<b>009 Providing Business Services</b>		
G5F3 22	Developing IT Programs	2
G3KD 22	Information Systems Analysis	2
G3KB 22	Install Information Technology Products	2
G5F1 22	Installing and Supporting IT Systems	2
G3K9 22	Operating Information Technology	2
G2XY 21	Operating Information Technology	1
G5F1 22	Operating IT Systems	2
G3KL 22	Software Creation	2
G3KA 22	Support Users of Information Technology	2
G3JY 22	Using Information Technology	2
G2XT 21	Using Information Technology	1
G5F4 22	Using Information Technology for Teleworking	2
G5F0 22	Using IT	2
G5F0 21	Using IT	1
<b>010 Communicating and Entertaining</b>		
G3L6 22	Desk Top Publishing	2
G3L8 22	Digital Imaging	2
G3LM 22	Information and Library Services	2

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