



## **Group Award Specification for:**

**National Certificate in Computer Games  
Development at SCQF level 5**

**Group Award Code: GP0L 45**

**National Certificate in Computer Games  
Development at SCQF level 6**

**Group Award Code: GP0M 46**

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## Contents

1	Introduction .....	1
2	Qualifications structure .....	2
2.1	Structure.....	2
3	Aims of the qualifications.....	6
3.1	General aims of the qualifications.....	6
3.2	Specific aims of the qualifications.....	7
4	Recommended entry to the qualifications.....	7
4.1	Core Skills entry profile.....	7
5	Additional benefits of the qualification in meeting employer needs .....	9
5.1	Mapping of qualification aims to units .....	10
5.2	Mapping of National Occupational Standards (NOS).....	14
5.3	Mapping of Core Skills development opportunities across the qualifications.....	19
5.4	Assessment strategy for the qualifications.....	20
6	Guidance on approaches to delivery and assessment.....	22
6.1	Sequencing/integration of units .....	22
6.2	Recognition of prior learning.....	26
6.3	Opportunities for e-assessment.....	29
6.4	Support materials .....	29
6.5	Resource requirements .....	29
7	General information for centres .....	29
8	Glossary of terms .....	30
9	General information for learners.....	32

# 1 Introduction

This document was previously known as the arrangements document. The purpose of this document is to:

- ◆ assist centres to implement, deliver and manage the qualification
- ◆ provide a guide for new staff involved in offering the qualification
- ◆ inform course managers, teaching staff, assessors, learners, employers and HEIs of the aims and purpose of the qualification
- ◆ provide details of the range of learners the qualification is suitable for and progression opportunities

The *National Certificate (NC) in Computer Games Development* is available at SCQF levels 5 and 6. This award is a revision of the original *NC Computer Games Development* at SCQF level 5, which was first introduced in 2011. Since its introduction, almost 500 learners have been entered for the award. All of the entries come from the college sector. This award is also a revision of the *NC Computer Games: Creative Development* and *NC Computer Games: Software Development*, at SCQF level 6.

The qualification is specialised and of most interest to colleges that deliver the corresponding Higher National awards in this area (*HNC/D Computer Games Development*).

The computer games industry remains strong in Scotland. Knowledge and skills gained by undertaking this qualification not only (indirectly) leads to employment in this growing sector, but also provides a range of vocational skills and life skills such as computer programming and problem solving skills. The qualification would also improve learners' computational thinking skills, which is gaining recognition as a vital 21st century competence. It is particularly suitable for learners who wish to progress to *HNC/D Computer Games Development*.

The award has not been reviewed since it was introduced in 2011. A scoping exercise was carried out in early 2017 to obtain feedback from educators on how well the award meets its objectives, and to identify potential issues. The feedback allowed us to identify the main areas of concern and any changes that were required. Both qualitative and quantitative research took place to ensure that the changes were appropriate and supported by stakeholders. The qualitative research took place during the scoping exercise; the quantitative research during the formal review.

The main findings of the research follows.

- 1 There was general satisfaction with the title and structure of the award and no demand for fundamental change to the framework or the component units.
- 2 Some new units are needed to modernise the award and keep it up to date with contemporary developments in this field.
- 3 Some existing units require to be updated.
- 4 There is no requirement to distinguish between the two level 6 awards.

As a result, the following changes were made to the original award.

- 1 Eight new units were devised.
- 2 One existing unit was revised.
- 3 The amount of evidence was reduced (in the revised and new units).
- 4 The level 6 awards (*Computer Games: Creative Development* and *Computer Games: Software Development*) were combined into a single award (*Computer Games Development*).

The qualification structure indicates the revised structure, and the new and revised units (see Section 3).

Among the new units is a suite of units on computer programming. These units are non-specialist units designed to introduce learners to coding. The main difference between these units and similar (existing) units in this area is their (sole) focus on coding (as opposed to other aspects of software development). It is hoped that these units are offered in a range of qualifications.

The revised unit (*Gameplay*) was widely acknowledged as needing change.

It is not anticipated that this award will lead directly to employment. It is primarily designed to capture the imagination and interest of learners and facilitate progression to the corresponding HN award. It is hoped that the award will stimulate interest in computer science among young learners.

Notwithstanding this, it is recommended that the importance of soft skills is highlighted throughout the delivery of this award. Especially at level 6, learners should be introduced to soft and transferable skills that will be helpful to them as they progress in their careers. This could be emphasised during the delivery of, for example, the portfolio unit, where learners could explore interview skills that will be required when presenting their portfolio to any potential employer. This could relate to aspects such as timekeeping, professional behaviours and being able to explain and answer detailed questions about their work.

## 2 Qualifications structure

### 2.1 Structure

#### NC in Computer Games Development at SCQF level 5

To achieve the National Certificate in Computer Games Development at SCQF level 5, learners must achieve at least 12 SQA credits (72 SCQ credit points). There are 6 mandatory credits set out in the table below. Learners must also achieve at least 6 credits from the optional units table.

#### Mandatory units (6 SQA credits)

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
HX9V	45	Computer Games: Design <b>(Revised)</b>	1	6	5
HX9X	45	Computer Games: Development <b>(Revised)</b>	1	6	5
HX9W	45	Computer Games: Media Assets <b>(Revised)</b>	1	6	5
HY2D	45	Computer Games: Portfolio <b>(New)</b>	1	6	5
HY2C	45	Computer Programming <b>(New)</b>	1	6	5
HY2F	45	Gameplay <b>(Revised)</b>	1	6	5

**Optional units (A minimum of 6 SQA credits required)**

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
FN91	11	3D Modelling and Animation: An introduction	1	6	5
F5BT	11	Art and Design: Animation Skills	1	6	5
F9X2	11	Art and Design: Drawing Skills — Figure/Life Drawing 1	1	6	5
F5CB	12	Art and Design: Line and Tone Techniques	1	6	6
FN8V	11	Artificial Intelligence for Games	1	6	5
FN8Y	11	Character Creation	1	6	5
F3GB	11	Communication	1	6	5
F1R2	11	Computer Games: Digital Games Design	1	6	5
HY95	45	Computer Games: Mathematics <b>(New)</b>	1	6	5
HY95	46	Computer Games: Mathematics <b>(New)</b>	1	6	6
HY2C	44	Computer Programming <b>(New)</b>	1	6	4
C816	75	Computing Science	4	24	5
H60C	45	Computing: Academic Skills	1	6	5
F1KB	11	Computing: Animation Fundamentals	1	6	5
H6S9	45	Computing: Applications Development	1	6	5
F1KS	11	Computing: Digital Media Elements for Applications	1	6	5
HW4W	45	Digital Media: Audio <b>(Revised)</b>	1	6	5
HW4Y	45	Digital Media: Moving Images <b>(Revised)</b>	1	6	5
HW4X	45	Digital Media: Still Images <b>(Revised)</b>	1	6	5
HY2E	46	Emerging Technologies and Experiences <b>(New)</b>	1	6	6
D36N	11	Enterprise Activity	1	6	5
FN90	11	Games Interface Design	1	6	5
FN8R	11	Games Programming	1	6	5
F3GC	11	Information and Communication Technology	1	6	5

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
D6RC	11	Introduction to Computer Animation	1	6	5
H23W	75	Literacy	1	6	5
C847	75	Mathematics	4	24	5
FN84	11	Mathematics for Interactive Computing	1	6	5
DF16	11	Media Production	1	6	5
FN8T	11	Narrative Design and Development	1	6	5
F3GF	11	Numeracy	1	6	5
H225	75	or Numeracy			
F3GD	11	Problem Solving	1	6	5
FN92	11	Sound Design in Visual Media Applications: An Introduction	1	6	5
F3GE	11	Working with Others	1	6	5

Learners will be awarded the NC in Computer Games Development at SCQF level 5 on successful completion of the 6 mandatory units and 6 optional units. Additionally, learners will be awarded an NPA in Computer Games Development at SCQF level 5 (GP03 45) on successful completion of the three contributing mandatory units (HX9V 45, HX9X 45 and HX9W 45).

### NC in Computer Games Development at SCQF level 6

To achieve the National Certificate in Computer Games Development at SCQF level 6, learners must achieve at least 12 SQA credits (72 SCQF credit points). There are 4 mandatory credits set out in the table below. Learners must also achieve 2 credits from the project units table. However, they should not achieve all 4 credits from this table; learners should be entered for one of the two project units, not both. Learners must also achieve at least 6 credits from the optional units table.

#### Mandatory units (4 SQA credits)

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
HX9V	46	Computer Games: Design <b>(Revised)</b>	1	6	6
HX9X	46	Computer Games: Development <b>(Revised)</b>	1	6	6
HX9W	46	Computer Games: Media Assets <b>(Revised)</b>	1	6	6
HY2C	46	Computer Programming <b>(New)</b>	1	6	6

### Project units (2 SQA credits)

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
H2WW	12	Computer Games: Creative Development Project	2	12	6
H2WX	12	Computer Games: Software Development Project	2	12	6

### Optional units (A minimum of 6 SQA credits required)

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
X704	76	Art and Design	1	6	6
F5CC	12	Art and Design: 3D Skills Development	2	12	6
F5C6	12	Art and Design: Animation Project	1	6	6
F5CH	12	Art and Design: Digital Media	1	6	6
H1ND	12	Artificial Intelligence for Games	1	6	6
F3GB	12	Communication	1	6	6
H2X1	12	Computer Gameplay	1	6	6
H2CE	12	Computer Games: 2D Animation Skills	1	6	6
H2CF	12	Computer Games: 3D Modelling and Animation Skills	1	6	6
H2X0	12	Computer Games: Character Creation	1	6	6
HY95	46	Computer Games: Mathematics <b>(New)</b>	1	6	6
HY2D	46	Computer Games: Portfolio <b>(New)</b>	1	6	6
H2CD	12	Computer Games: Programming	1	6	6
H1KR	12	Computer Games: User Centred Design	1	6	6
H238	76	Creating Media Content	1	6	6
DV91	11	Creative Thinking and Goal Setting	1	6	5
F3T7	12	Digital Acquisition and Editing: Audio	1	6	6
F3T6	12	Digital Acquisition and Editing: Video	1	6	6

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
F3T5	12	Digital Media: Still Images	1	6	6
HY2E	46	Emerging Technologies and Experiences <b>(New)</b>	1	6	6
D36N	11	Enterprise Activity	1	6	5
FN90	11	Games Interface Design	1	6	5
F3GC	12	Information and Communication Technology	1	6	6
H1NC	12	Mathematics for Computer Games	1	6	6
F3GF	12	Numeracy	1	6	6
H225	76	Or Numeracy			
F3GD	12	Problem Solving	1	6	6
F3GE	12	Working with Others	1	6	6

Learners will be awarded the NC in Computer Games Development at SCQF level 6 on successful completion of the 4 mandatory units, 2 project units and 6 optional units. Additionally, learners will be awarded an NPA in Computer Games Development at SCQF level 6 (GP04 46) on successful completion of the three contributing mandatory units (HX9V 46, HX9W 46 and HX9X 46).

### 3 Aims of the qualifications

#### 3.1 General aims of the qualifications

The general aims of the qualification are to:

- 1 Provide an up-to-date curriculum, reflecting contemporary knowledge and skills in the subject domain of Computer Games Development.
- 2 Provide an understanding of the design and development process for Computer Games Development.
- 3 Develop skills in computer programming.
- 4 Develop skills in content creation.
- 5 Develop computational thinking skills.
- 6 Develop problem solving skills.
- 7 Develop collaboration and team working skills.
- 8 Develop employment skills.
- 9 Stimulate interest in Science, Technology, Engineering and Mathematics (STEM) among learners.
- 10 Encourage learners to consider careers in computer science.
- 11 Provide a stimulating and enjoyable learning experience.



## 3.2 Specific aims of the qualifications

The following specific aims are additional to the general aims or contextualize the general aims in terms of computer games development.

- 1 Update the contents of the unit specifications to reflect contemporary technologies and techniques in computer games development.
- 2 Develop skills in writing computer games software.
- 3 Develop vocational skills relevant to careers in software development in a games context.
- 4 Facilitate progression to further study in computer games development or related fields.
- 5 Attract more learners to qualifications in computer science.

## 4 Recommended entry to the qualifications

Entry to this qualification is at the discretion of the centre. The following information on prior knowledge, skills, experience or qualifications that provide suitable preparation for this qualification has been provided by the Qualification Design Team as guidance only.

Learners would benefit from having attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

- ◆ basic computing knowledge and skills (level 4 entry)
- ◆ corresponding NPA award in Computer Games Development
- ◆ Computing Science at National 4, National 5 or Higher
- ◆ any appropriate grouping of vocational units

The National Certificate at SCQF level 5 can be undertaken without previous experience of computer games development. However, it is recommended that learners have some prior knowledge and experience of computer games development before attempting the National Certificate at SCQF level 6. The ideal entry to level 6 would be the corresponding level 5 award.

### 4.1 Core Skills entry profile

The Core Skills entry profile provides a summary of the associated assessment activities that exemplify why a particular level has been recommended for this qualification. The information should be used to identify if additional learning support needs to be put in place for learners whose Core Skills profile is below the recommended entry level or whether learners should be encouraged to do an alternative level or learning programme.

It is recognised that some learners, particularly adult returners, may not possess a specific Core Skills profile on entry, hence entry level is only recommended. In this case, it is recommended that centres carry out an appropriate evaluation of their Core Skills to ensure that they have the necessary prerequisites to provide them with a realistic opportunity of achieving on this award.

### NC Computer Games Development at SCQF level 5

Core Skill	Recommended SCQF entry profile	Associated assessment activities
Communication	4	Read, understand and create a straightforward document. Produce a document that conveys several pieces of information.
Numeracy	4	Carry out a variety of straightforward number tasks. Extract and interpret information from a table.
Information and Communication Technology (ICT)	4	Carry out ICT activities including using hardware responsibly and presenting information in an appropriate mode. Carry out a range of routine ICT activities using application software. Use ICT to locate information from a range of sources. Demonstrate safe practice in using ICT for storing data.
Problem Solving	4	Plan and carry out a straightforward activity to deal with a problem, work out an action plan, choose and obtain resources needed, carry out an action plan.
Working with Others	4	Work co-operatively with at least one other person to identify a role. Carry out a role, adapting actions and behaviour.

### NC Computer Games Development at SCQF Level 6

Core Skill	Recommended SCQF entry profile	Associated assessment activities
Communication	5	Read, understand and create a complex document. Produce a complex document that conveys several pieces of information.
Numeracy	5	Carry out a variety of non-routine numerical tasks. Extract and interpret information from a table.

<b>Core Skill</b>	<b>Recommended SCQF entry profile</b>	<b>Associated assessment activities</b>
Information and Communication Technology (ICT)	5	Carry out ICT activities including using hardware responsibly and presenting information in an appropriate mode. Carry out a range of non-routine ICT activities that involve application software. Use ICT to locate information in different formats from a range of local or remote data sources, applying a search strategy, evaluating information found. Demonstrate safe practice in using ICT to handle information by keeping data secure.
Problem Solving	5	Plan, organise and carry out an activity to deal with the problem, working out an action plan, choosing and obtaining the resources needed, and carrying out the action plan. Check how well the problem-solving activity worked in practice. Gather evidence to help you decide how well the problem-solving activity worked, deciding how effective each stage has been.
Working with Others	5	Work co-operatively with at least one other person, who may be a colleague, client, or customer, to achieve a common goal. Check how well you and others involved contributed to the co-operative activity and/or activities.

## **5 Additional benefits of the qualification in meeting employer needs**

This qualification was designed to meet a specific purpose and what follows are details on how that purpose has been met through mapping of the units to the aims of the qualification. Through meeting the aims, additional value has been achieved by linking the unit standards with those defined in National Occupational Standards and/or trade/professional body requirements. In addition, significant opportunities exist for learners to develop the more generic skill, known as Core Skills through doing this qualification.

## 5.1 Mapping of qualification aims to units

Code	Unit title	Aims															
		GA1	GA2	GA3	GA4	GA5	GA6	GA7	GA8	GA9	GA10	GA11	SA1	SA2	SA3	SA4	SA5
HX9V 45	Computer Games: Design	X	X				X		X	X	X	X	X		X	X	X
HX9W 45	Computer Games: Media Assets	X	X		X		X		X	X	X	X	X		X	X	X
HX9X 45	Computer Games: Development	X	X	X		X	X		X	X	X	X	X	X	X	X	X
HX9V 46	Computer Games: Design	X	X				X		X	X	X	X	X		X	X	X
HX9W 46	Computer Games: Media Assets	X	X		X		X		X	X	X	X	X		X	X	X
HX9X 46	Computer Games: Development	X	X	X		X	X		X	X	X	X	X	X	X	X	X
HY2F 45	Gameplay	X	X		X		X		X	X	X	X	X		X	X	X
HY2D 45	Computer Games: Portfolio	X	X						X	X	X	X	X		X	X	X
HY2D 46	Computer Games: Portfolio	X	X						X	X	X	X	X		X	X	X
HY2C 44	Computer Programming	X	X	X		X	X		X	X	X	X	X	X	X	X	X
HY2C 45	Computer Programming	X	X	X		X	X		X	X	X	X	X	X	X	X	X
HY2C 46	Computer Programming	X	X	X		X	X		X	X	X	X	X	X	X	X	X
DF16 11	Media Production	X	X		X		X	X	X	X	X	X	X		X	X	X
F5BT 11	Art and Design: Animation Skills	X	X		X		X		X	X	X	X	X		X	X	X
HY95 45	Computer Games: Mathematics	X	X	X		X	X		X	X	X	X	X	X	X	X	X
HY95 46	Computer Games: Mathematics	X	X	X		X	X		X	X	X	X	X	X	X	X	X

Code	Unit title	Aims															
		GA1	GA2	GA3	GA4	GA5	GA6	GA7	GA8	GA9	GA10	GA11	SA1	SA2	SA3	SA4	SA5
FN84 11	Mathematics for Interactive Computing	X				X	X		X	X		X			X	X	
H1NC 12	Mathematics for Computer Games	X	X			X	X		X	X	X	X	X		X	X	X
HY2E 46	Emerging Technologies and Experiences	X							X	X	X	X	X		X	X	X
F9X2 11	Art and Design: Drawing Skills — Figure/Life Drawing 1	X	X		X		X		X	X	X	X	X		X	X	X
F1KB 11	Computing: Animation Fundamentals	X	X		X		X		X	X	X	X	X		X	X	X
D6RC 11	Introduction to Computer Animation	X	X		X		X		X	X	X	X	X		X	X	X
H2CE 12	Computer Games: 2D Animation Skills	X	X		X		X		X	X	X	X	X		X	X	X
FN91 11	3D Modelling and Animation: An introduction	X	X		X		X		X	X	X	X	X		X	X	X
H2CF 12	Computer Games: 3D Modelling and Animation Skills	X	X		X		X		X	X	X	X	X		X	X	X
FN8T 11	Narrative Design and Development	X	X						X	X	X	X	X		X	X	X
FN92 11	Sound Design in Visual Media Applications: An Introduction	X	X		X				X	X	X	X	X		X	X	X
FN8Y 11	Character Creation	X	X		X				X	X	X	X	X		X	X	X
FN8R 11	Games Programming	X	X	X		X	X		X	X	X	X	X	X	X	X	X
FN8V 11	Artificial Intelligence for Games	X	X			X	X		X	X	X	X	X		X	X	X

Code	Unit title	Aims															
		GA1	GA2	GA3	GA4	GA5	GA6	GA7	GA8	GA9	GA10	GA11	SA1	SA2	SA3	SA4	SA5
FN90 11	Games Interface Design	X	X						X	X	X	X	X		X	X	X
H60C 45	Computing: Academic Skills	X						X	X	X		X			X	X	
H6S9 45	Computing: Applications Development	X	X	X		X	X		X	X	X	X	X	X	X	X	X
D36N 11	Enterprise Activity	X	X				X	X	X	X	X	X	X		X	X	
HW4X 45	Digital Media: Still Images	X	X		X		X		X	X	X	X	X		X	X	X
HW4Y 45	Digital Media: Moving Images	X	X		X		X		X	X	X	X	X		X	X	X
HW4W 45	Digital Media: Audio	X	X		X		X		X	X	X	X	X		X	X	X
F1KS 11	Computing: Digital Media Elements for Applications	X	X		X		X		X	X	X	X	X		X	X	X
F3GD 10	Problem Solving	X					X		X			X			X	X	
F3GD 11	Problem Solving	X					X		X			X			X	X	
F1R2 11	Computer Games: Digital Games Design	X	X				X		X	X	X	X	X		X	X	X
F5CB 12	Art and Design: Line and Tone Techniques	X	X		X				X	X	X	X	X		X	X	X
F3GB 11	Communication	X						X	X	X		X			X	X	
F3GB 12	Communication	X						X	X	X		X			X	X	
H23W 75	Literacy	X						X	X	X		X			X	X	
F3GF 11	Numeracy	X					X	X	X	X		X			X	X	

Code	Unit title	Aims															
		GA1	GA2	GA3	GA4	GA5	GA6	GA7	GA8	GA9	GA10	GA11	SA1	SA2	SA3	SA4	SA5
H225 75	Numeracy	X					X	X	X	X		X			X	X	
H2WX 12	Computer Games: Software Development Project	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
H2WW 12	Computer Games: Creative Development Project	X	X			X	X	X	X	X	X	X	X	X	X	X	X
H1KR 12	Computer Games: User Centred Design	X	X						X	X	X	X	X		X	X	X
H2X1 12	Computer Gameplay	X	X		X				X	X	X	X	X		X	X	X
H2X0 12	Computer Games: Character Creation	X	X		X				X	X	X	X	X		X	X	X
H1ND 12	Artificial Intelligence for Games	X	X	X		X	X		X	X	X	X	X	X	X	X	X
F5C6 12	Art and Design: Animation Project	X	X		X		X	X	X	X	X	X	X		X	X	X
F5CC 12	Art and Design: 3D Skills Development	X	X		X		X		X	X	X	X	X		X	X	X
F5CH 12	Art and Design: Digital Media	X	X		X				X	X	X	X	X		X	X	X
DV91 11	Creative Thinking and Goal Setting	X					X	X	X			X			X	X	
F3T5 12	Digital Media: Still Images	X	X		X		X		X	X	X	X	X		X	X	X
F3T6 12	Digital Acquisition and Editing: Video	X	X		X		X		X	X	X	X	X		X	X	X
F3T7 12	Digital Acquisition and Editing: Audio	X	X		X		X		X	X	X	X	X		X	X	X
X704 76	Art and Design	X	X		X				X	X	X	X	X		X	X	X
F3GC 11	Information and Communication Technology														X		

Code	Unit title	Aims															
		GA1	GA2	GA3	GA4	GA5	GA6	GA7	GA8	GA9	GA10	GA11	SA1	SA2	SA3	SA4	SA5
F3GC 12	Information and Communication Technology														X		
F3GE 11	Working with Others														X		
F3GE 12	Working with Others														X		
C847 75	Mathematics	X				X	X		X	X		X			X	X	
C816 75	Computing Science	X	X	X		X	X		X	X	X	X	X	X	X	X	X

## 5.2 Mapping of National Occupational Standards (NOS)

The relevant elements of the National Occupational Standards (NOS) produced by Skillset, are listed below.

- IM1 Work Effectively in Interactive Media
- IM2 Obtain Assets for Use in Interactive Media Products
- IM3 Prepare Assets for Use in Interactive Media Products
- IM5 Design User Interfaces for Interactive Media Products
- IM6 Use Authoring Tools to Create Interactive Media Products
- IM7 Code Scripts to Provide Functionality for Interactive Media Products
- IM8 Determine the Implementation of Designs for Interactive Media Products
- IM9 Provide Creative and Strategic Direction for Interactive Media Projects
- IM12 Devise and Evaluate User Testing of Interactive Media Products
- IM13 Conduct User Testing Of Interactive Media Products
- IM15 Write and Edit Copy for Interactive Media Products
- IM16 Plan Content for Web and Multimedia Products
- IM20 Design Electronic Games
- IM21 Program Electronic Games to Develop Functionality
- IM22 Test Electronic Games
- IM23 Create Narrative Scripts for Interactive Media Products
- IM24 Create 2D Animations for Interactive Media Products
- IM27 Create Sound Effects for Interactive Media Products
- IM28 Create Music for Interactive Media Products



Code	Unit title	National Occupational Standard																		
		IM 1	IM 2	IM 3	IM 5	IM 6	IM 7	IM 8	IM 9	IM 12	IM 13	IM 15	IM 16	IM 20	IM 21	IM 22	IM 23	IM 24	IM 27	IM 28
HX9V 45	Computer Games: Design	X			X									X			X			
HX9W 45	Computer Games: Media Assets	X	X	X				X											X	
HX9X 45	Computer Games: Development	X	X	X		X	X	X		X	X		X		X	X				
HX9V 46	Computer Games: Design	X			X									X			X			
HX9W 46	Computer Games: Media Assets	X	X	X				X											X	
HX9X 46	Computer Games: Development	X	X	X		X	X	X		X	X		X		X	X				
HY2F 45	Gameplay	X	X			X		X					X	X		X				
HY2D 45	Computer Games: Portfolio	X																		
HY2D 46	Computer Games: Portfolio	X																		
HY2C 44	Computer Programming							X								X	X			
HY2C 45	Computer Programming							X								X	X			
HY2C 46	Computer Programming							X								X	X			
DF16 11	Media Production	X	X	X	X	X		X		X		X	X				X		X	X
F5BT 11	Art and Design: Animation Skills	X		X		X												X		
HY95 45	Computer Games: Mathematics	n/a																		
HY95 46	Computer Games: Mathematics	n/a																		

Code	Unit title	National Occupational Standard																			
		IM 1	IM 2	IM 3	IM 5	IM 6	IM 7	IM 8	IM 9	IM 12	IM 13	IM 15	IM 16	IM 20	IM 21	IM 22	IM 23	IM 24	IM 27	IM 28	
FN84 11	Mathematics for Interactive Computing	n/a																			
H1NC 12	Mathematics for Computer Games	n/a																			
HY2E 46	Emerging Technologies and Experiences	n/a																			
F9X2 11	Art and Design: Drawing Skills — Figure/Life Drawing 1	X		X		X													X		
F1KB 11	Computing: Animation Fundamentals	X		X		X						X							X		
D6RC 11	Introduction to Computer Animation	X		X		X													X		
H2CE 12	Computer Games: 2D Animation Skills	X		X		X						X							X		
FN91 11	3D Modelling and Animation: An introduction	X		X		X						X							X		
H2CF 12	Computer Games: 3D Modelling and Animation Skills	X		X		X						X							X		
FN8T 11	Narrative Design and Development	X			X			X				X						X			
FN92 11	Sound Design in Visual Media Applications: An Introduction	X	X			X														X	X
FN8Y 11	Character Creation	X										X						X			
FN8R 11	Games Programming	X						X								X	X				
FN8V 11	Artificial Intelligence for Games	X																			

Code	Unit title	National Occupational Standard																			
		IM 1	IM 2	IM 3	IM 5	IM 6	IM 7	IM 8	IM 9	IM 12	IM 13	IM 15	IM 16	IM 20	IM 21	IM 22	IM 23	IM 24	IM 27	IM 28	
FN90 11	Games Interface Design	X							X	X							X				
H60C 45	Computing: Academic Skills																				
H6S9 45	Computing: Applications Development	X	X	X	X	X	X	X	X	X	X		X	X	X	X					
D36N 11	Enterprise Activity																				
HW4X 45	Digital Media: Still Images	X	X	X		X			X				X								
HW4Y 45	Digital Media: Moving Images	X	X	X		X			X				X								
HW4W 45	Digital Media: Audio	X	X	X		X			X				X						X		
F1KS 11	Computing: Digital Media Elements for Applications	X	X	X	X	X		X		X		X	X				X		X		
F3GD 11	Problem Solving	n/a																			
F3GD 12	Problem Solving	n/a																			
F1R2 11	Computer Games: Digital Games Design	X			X								X								
F5CB 12	Art and Design: Line and Tone Techniques	X		X		X												X			
F3GB 11	Communication	n/a																			
F3GB 12	Communication	n/a																			
H23W 75	Literacy	n/a																			
F3GF 11	Numeracy	n/a																			
H225 75	Numeracy	n/a																			
H2WX 12	Computer Games: Software Development Project	X					X	X	X	X	X		X	X	X	X					

Code	Unit title	National Occupational Standard																		
		IM 1	IM 2	IM 3	IM 5	IM 6	IM 7	IM 8	IM 9	IM 12	IM 13	IM 15	IM 16	IM 20	IM 21	IM 22	IM 23	IM 24	IM 27	IM 28
H2WW 12	Computer Games: Creative Development Project	X	X	X	X	X		X	X	X	X		X			X				
H1KR 12	Computer Games: User Centred Design	X			X									X			X			
H2X1 12	Computer Gameplay	X												X						
H2X0 12	Computer Games: Character Creation	X										X					X			
H1ND 12	Artificial Intelligence for Games	X					X			X	X				X	X				
F5C6 12	Art and Design: Animation Project	X	X	X		X												X		
F5CC 12	Art and Design: 3D Skills Development	X		X		X							X					X		
F5CH 12	Art and Design: Digital Media	X		X		X														
DV91 11	Creative Thinking and Goal Setting	n/a																		
F3T5 12	Digital Media: Still Images	X	X	X		X														
F3T6 12	Digital Acquisition and Editing: Video	X	X	X		X														
F3T7 12	Digital Acquisition and Editing: Audio	X	X	X		X													X	X
X704 76	Art and Design	X		X		X														
F3GC 11	Information and Communication Technology	n/a																		

Code	Unit title	National Occupational Standard																			
		IM 1	IM 2	IM 3	IM 5	IM 6	IM 7	IM 8	IM 9	IM 12	IM 13	IM 15	IM 16	IM 20	IM 21	IM 22	IM 23	IM 24	IM 27	IM 28	
F3GC 12	Information and Communication Technology	n/a																			
F3GE 11	Working with Others	n/a																			
F3GE 12	Working with Others	n/a																			
C847 75	Mathematics	n/a																			
C816 75	Computing Science						X								X	X					

### 5.3 Mapping of Core Skills development opportunities across the qualifications

S = Signposted

E = Embedded

Unit code	Unit title	Communication			Numeracy		ICT		Problem Solving			Working with Others	
		Written (Reading)	Written (Writing)	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HX9V 45	Computer Games: Design	S(5)	S(5)				S(5)	S(5)	E(5)	S(5)			
HX9W 45	Computer Games: Media Assets						S(5)	E(5)	E(5)	S(5)			
HX9X 45	Computer Games: Development						S(5)	E(5)	E(5)	S(5)	S(5)		
HX9V 46	Computer Games: Design	S(6)	S(6)				S(6)	E(6)	E(6)	S(6)			
HX9W 46	Computer Games: Media Assets						S(6)	E(6)	E(6)	S(6)			

Unit code	Unit title	Communication			Numeracy		ICT		Problem Solving			Working with Others	
		Written (Reading)	Written (Writing)	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/Creating Information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
HX9X 46	Computer Games: Development						S(6)	E(6)	E(6)	S(6)	S(6)		
HY2F 45	Gameplay		S(4)	S(4)			S(5)	E(5)	E(4)	E(4)	E(4)		
HY2D 45	Computer Games: Portfolio						E(4)	E(4)	E(4)	E(4)	E(4)		
H2WX 12	Computer Games: Software Development Project											E(5)	
H2WW12	Computer Games: Creative Development Project											E(5)	
HY2C 45	Computer Programming							S(5)	E(5)	E(5)	S(5)		
HY2C 46	Computer Programming							S(6)	E(5)	E(5)	S(6)		

## 5.4 Assessment strategy for the qualifications

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
HX9V 45 Computer Games: Design	Open-book report or short answer questions	Open-book report /proposal	Open-book creation of a design document	N/A	N/A
HX9W 45 Computer Games: Media Assets	Open-book report or short answer questions	Open-book report (plan the production of assets)	Open-book practical (produce media assets)	N/A	N/A
HX9X 45 Computer Games: Development	Open-book practical (create a working computer game)	Open-book practical (test a computer game)	Open-book report (evaluate a computer game)	N/A	N/A

Unit	Assessment				
	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
HX9V 46 Computer Games: Design	Open-book report or short answer questions	Open-book report/proposal	Open-book creation of a design document	N/A	N/A
HX9W 46 Computer Games: Media Assets	Open-book report or short answer questions	Open-book report (plan the production of assets)	Open-book practical (produce media assets)	N/A	N/A
HX9X 46 Computer Games: Development	Open-book practical (create a working computer game)	Open-book practical (test a computer game)	Open-book report (evaluate a computer game)	N/A	N/A
HY2F 45 Gameplay	Open-book report	Open-book report (plan the creation of content)	Open-book practical (create game content)	N/A	N/A
HY2D 45 Computer Games: Portfolio	Open-book report	Open-book practical (select and prepare a range of work)	Open-book practical (create a computer games portfolio)	N/A	N/A
H2WX 12 Computer Games: Software Development Project	Create a report as part of a team	Create a plan in collaboration with team members	Practical (contribute to the creation of a design document)	Practical (contribute to the creation of a computer game)	Open-book report (review and evaluate)
H2WW 12 Computer Games: Creative Development Project	Create a report as part of a team	Create a plan in collaboration with team members	Practical (contribute to the creation of a design document and/or concept art)	Practical (contribute to the creation of a computer game)	Open-book report (review and evaluate)
HY2C 45 Computer Programming	Open-book practical (write algorithms). Knowledge evidence assessed by closed-book multiple choice test	Closed-book multiple choice test or short answer questions	Open-book practical (Write a computer program)	N/A	N/A
HY2C 46 Computer Programming	Open-book practical (write algorithms). Knowledge evidence assessed by closed-book multiple choice test	Closed-book multiple choice test or short answer questions	Open-book practical (Write a computer program)	N/A	N/A

## 6 Guidance on approaches to delivery and assessment

### 6.1 Sequencing/integration of units

Delivery of this award at SCQF levels 5 and 6 should allow learners to produce a portfolio of work containing designs for a working game, the assets for the working game, a thorough test plan of the game and the game itself. This is assessed through the core units *Computer Games: Design*; *Computer Games: Media Assets*; *Computer Games: Development*; and *Computer Games: Portfolio*.

Depending on the optional units selected, the award(s) can be given a bias towards coding, design, digital art and computer animation. The qualification can also be given a software development focus or a more creative focus. The selection of the optional units should provide the learner with a wide range of complementary skills.

At SCQF level 5, learners must also complete the mandatory *Computer Programming* unit as well as the *Gameplay* unit. The programming unit will help prepare learners for the coding they will do in the other units, such as *Computer Games: Development*. Moreover, coding is now such a vital skill in all areas of computing, along with computational thinking, that this unit will help learners develop skills in it. The *Gameplay* unit is also about creating games, but with a greater focus on design and creative skills, as it doesn't require the use of coding as such.

At SCQF level 6, learners must complete either a 2-credit Computer Games project around *Software Development* or *Creative Development*, as well as the mandatory *Computer Programming*. The choice of the project unit will strongly suggest the bias of the award at level 6, and it is anticipated that centres will choose the optional units to back up that selection.

Although the units can be delivered on a standalone basis, it is recommended that a holistic delivery approach is adopted. Each of the units should provide complementary information to the knowledge and skills of the other units in the framework. This approach will enable a coherent and valuable experience for learners and enable them to understand the links between different subject areas. There are opportunities to integrate learning and assessment across the NC framework.

The order in which units are delivered within the group award is at the discretion of centres. The delivery sequence given below is offered as guidance only. Where the group award is delivered on a part-time basis, subjects recommended for first semester/block delivery within the full-time model could be delivered in the first academic session of the part-time delivery model. Subjects recommended for second semester/block delivery in the full-time model could be delivered in the second academic session of the part-time model.

Where schools are offering the NPA part of the group award, it would be possible to deliver the other units to make up the National Certificate through the school links programme, at the discretion of centres.



**Example delivery pattern at SCQF level 5 with a Coding focus:**

Code	Unit Title	Mandatory (M) or Optional (O)	Block
HX9V 45	Computer Games: Design	M	1
HY2F 45	Gameplay	M	1
HY2C 45	Computer Programming	M	1
F3GF 11	Numeracy	O	1
HX9W 45	Computer Games: Media Assets	M	2
FN8R 11	Games Programming	O	2
HW4Y 45	Digital Media: Moving Images	O	2
H60C 45	Computing: Academic Skills	O	2
HX9X 45	Computer Games: Development	M	3
HY2D 45	Computer Games: Portfolio	M	3
HY95 45	Computer Games: Mathematics	O	3
DF16 11	Media Production	O	3

The three NPA units *Computer Games: Design*; *Computer Games: Media Assets* and *Computer Games: Development* follow each other, so doing one per block in the order laid out is ideal, as learners can design the game in block 1, create the media in block 2 and then code the game in block 3. The *Computer Programming* unit and the *Games Programming* unit can be used to help prepare the learners for the final part of the NPA, as learners should have acquired the skills to code the game before going into that unit, as there is not sufficient time in it to learn to create a game if they have never programmed before. The *Computer Games: Portfolio* unit in block 3 will be a showcase for everything the learners have created throughout the year. Also, the other units in blocks 1 and 2 should provide plenty of materials for it.

Media production in the final block will give learners the opportunity to work on a group production, which will allow them to build core skills in *Problem Solving* and *Working with Others*.

**Example delivery pattern at SCQF level 5 with a Design/Art focus:**

Code	Unit Title	Mandatory (M) or Optional (O)	Block
HX9V 45	Computer Games: Design	M	1
HY2F 45	Gameplay	M	1
HW4X 45	Digital Media: Still Images	O	1
HW4W 45	Digital Media: Audio	O	1
F5BT 11	Art and Design: Animation Skills	O	2
HX9W 45	Computer Games: Media Assets	M	2
HW4Y 45	Digital Media: Moving Images	O	2
HY2C 45	Computer Programming	M	2
FN8Y 11	Character Creation	O	3
DF16 11	Media Production	O	3
HX9X 45	Computer Games: Development	M	3
HY2D 45	Computer Games: Portfolio	M	3

This collection of units provides a good broad coverage of the various digital art and design skills required in games development. It also incorporates not just the NPA in Computer Games Development, but also the NPA in Digital Media at SCQF level 5. The portfolio unit in block 3 will be a showcase for everything that the learners have created throughout the year and the other units in blocks 1 and 2 should provide plenty of materials for it.

Media production in the final block will give learners the opportunity to work on a group production, which build core skills in *Problem Solving* and *Working with Others*.

If a centre is doing more than the minimum 12 credits, it is recommended that they add in an extra programming unit, such as HY2C 45 or FN8R 11 to better prepare learners for the game creation part of the National Progression Award. It is also recommended that centres add in FN91 11 *3D Modelling and Animation: An Introduction* unit, so that learners experience the full range of digital art media. The FN91 11 unit could replace FN90 11 *Game Interface Design*, if the centre wanted to focus more on digital art than design.

#### Example delivery pattern at SCQF level 5 with an animation focus:

Code	Unit Title	Mandatory (M) or Optional (O)	Block
HX9V 45	Computer Games: Design	M	1
HY2F 45	Gameplay	M	1
F5BT 11	Art and Design: Animation Skills	O	1
HY2C 45	Computer Programming	M	1
F1KB 11	Computing: Animation Fundamentals	O	2
HX9W 45	Computer Games: Media Assets	M	2
HW4Y 45	Digital Media: Moving Images	O	2
FN8Y 11	Character Creation	O	2
FN91 11	3D Modelling and Animation: An Introduction	O	3
DF16 11	Media Production	O	3
HX9X 45	Computer Games: Development	M	3
HY2D 45	Computer Games: Portfolio	M	3

This collection of units would provide learners with an overview of the main aspects of computer animation, including both 2D and 3D. It also incorporates not just the NPA in Computer Games Development, but the NPA in Digital Media at SCQF level 5. The portfolio unit in block 3 will be a showcase for everything the learners have created throughout the year and the other units in blocks 1 and 2 should provide plenty of materials for it.

Media production in the final block will give learners the opportunity to work on a group production, which build Core Skills in *Problem Solving* and *Working with Others*.

**Example delivery pattern at SCQF level 6 with a Software Development focus:**

Code	Unit title	Mandatory (M) or Optional (O)	Block
HX9V 46	Computer Games: Design	M	1
HY2C 46	Computer Programming	M	1
H2X1 12	Computer Gameplay	O	1
HY2E 46	Emerging Technologies and Experiences	O	1
HX9W 46	Computer Games: Media Assets	M	2
HY95 46	Computer Games: Mathematics	O	2
H2CD 12	Computer Games: Programming	O	2
H1ND 12	Artificial Intelligence for Games	O	2
HX9X 46	Computer Games: Development	M	3
HY2D 46	Computer Games: Portfolio	O	3
H2WX 12	Computer Games: Software Development Project (2 credits)	MO	3

The three NPA units *Computer Games: Design*, *Computer Games: Media Assets* and *Computer Games: Development* follow each other, so doing one per block in the order laid out is ideal, as learners can design the game in block 1, create the media in block 2 and then code the game in block 3. The *Computer Programming* and *Computer Games Programming* units can be used to help prepare the learners for the final part of the NPA, as learners should have acquired the skills to code the game before going into that unit, as there is not sufficient time in it to learn to create a game if they have never programmed before.

The *Computer Games: Portfolio* unit in block 3 will be a showcase for everything the learners have created throughout the year. The other units in blocks 1 and 2 should provide plenty of materials for it. Learners will also work together in the final block on a group software development project, where they can utilise all the skills they have acquired, while developing Core Skills, such as *Working with Others*, *Communication* and *Problem Solving*.

**Example delivery pattern at SCQF level 6 with a Creative Development focus:**

Code	Unit Title	Mandatory (M) or Optional (O)	Block
HX9V 46	Computer Games: Design	M	1
H2X0 12	Computer Games: Character Creation	O	1
H2X1 12	Computer Gameplay	O	1
H2CE 12	Computer Games: 2D Animation Skills	O	1
HX9W 46	Computer Games: Media Assets	M	2
DV91 11	Creative Thinking and Goal Setting	O	2
HY2C 46	Computer Programming	M	1
H2CF 12	Computer Games: 3D Modelling and Animation Skills	O	2
HX9X 46	Computer Games: Development	M	3
HY2D 46	Computer Games: Portfolio	O	3
H2WW 12	Computer Games: Creative Development Project (2 credits)	MO	3

The three NPA units *Computer Games: Design*, *Computer Games: Media Assets* and *Computer Games: Development* follow each other, so doing one per block in the order laid out is ideal, as learners can design the game in block 1, create the media in block 2 and then code the game in block 3. With this collection of units, learners will experience and acquire a wide range of skills in creative digital art in relation to games development.

The *Computer Games: Portfolio* unit in block 3 will be a showcase for everything that learners have created throughout the year. The other units in blocks 1 and 2 should provide plenty of materials for it. Learners will also work together in the final block on a group Creative Development Project, where they can utilise all the skills they have acquired, while developing Core Skills, such as *Working with Others*, *Communication* and *Problem Solving*.

## 6.2 Recognition of prior learning

SQA recognises that learners gain knowledge and skills acquired through formal, non-formal and informal learning contexts.

In some instances, a full group award may be achieved through the recognition of prior learning. However, it is unlikely that a learner would have the appropriate prior learning and experience to meet all the requirements of a full group award.

The recognition of prior learning may **not** be used as a method of assessing in the following types of units and assessments:

- ◆ HN Graded Units
- ◆ Course and/or external assessments
- ◆ Other integrative assessment units (which may or not be graded)
- ◆ Certain types of assessment instruments where the standard may be compromised by not using the same assessment method outlined in the unit
- ◆ Where there is an existing requirement for a licence to practice
- ◆ Where there are specific health and safety requirements
- ◆ Where there are regulatory, professional or other statutory requirements
- ◆ Where otherwise specified in an assessment strategy

More information and guidance on the *Recognition of Prior Learning* (RPL) may be found on our website [www.sqa.org.uk](http://www.sqa.org.uk).

The following sub-sections outline how existing SQA unit(s) may contribute to this group award. Additionally, they also outline how this group award may be recognised for professional and articulation purposes.

### 6.2.1 Articulation and/or progression

This qualification is particularly suitable for learners who wish to progress to *HNC/D Computer Games Development*. A natural progression would be for learners to complete the SCQF level 5 NC award, then progress to the level 6 NC award, before moving onto the HNC Computer Games Development award at level 7. However, it is anticipated that many centres will progress learners directly from the level 5 award up to the level 7 HNC Computer Games Development award.

Alternatively, learners may wish to explore the option of progressing to a Modern Apprenticeship (MA) in IT and Telecommunications at SCQF 6/7, where they could gain hands-on experience as a computer games developer.

## 6.2.2 Transitional arrangements

### NC in Computer Games Development at SCQF level 5 (transitional framework)

#### Mandatory units (6 SQA credits)

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
HX9V F915	45 or 11	Computer Games: Design <b>(Revised)</b> or Computer Games: Design	1	6	5
HX9W F916	45 or 11	Computer Games: Media Assets <b>(Revised)</b> or Computer Games: Media Assets	1	6	5
HX9X F917	45 or 11	Computer Games: Development <b>(Revised)</b> or Computer Games: Development	1	6	5
HY2D	45	Computer Games: Portfolio <b>(New)</b>	1	6	5
HY2C	45	Computer Programming <b>(New)</b>	1	6	5
HY2F FN8P	45 or 11	Gameplay <b>(Revised)</b> Or Gameplay	1	6	5

### NC in Computer Games Development at SCQF level 6 (transitional framework)

#### Mandatory units (4 SQA credits)

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
HX9V F915	46 or 12	Computer Games: Design <b>(Revised)</b> or Computer Games: Design	1	6	6
HX9W F916	46 or 12	Computer Games: Media Assets <b>(Revised)</b> or Computer Games: Media Assets	1	6	6
HX9X F917	46 or 12	Computer Games: Development <b>(Revised)</b> or Computer Games: Development	1	6	6
HY2C	46	Computer Programming <b>(New)</b>	1	6	6

## Project units (2 SQA credits)

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
H2WW	12	Computer Games: Creative Development Project	2	12	6
H2WX	12	Computer Games: Software Development Project	2	12	6

This transitional framework is based on the credit transfer arrangements detailed in the following section.

### 6.2.3 Credit transfer

The table below covers full credit transfer from units in the 2011 group award (GC8R 45 NC Computer Games Development at SCQF level 5) to units in the new level 5 group award.

Units in NC Computer Games Development at SCQF level 5		Units in the revised NC Computer Games Development at SCQF level 5	
Code	Unit title	Code	Unit title
F915 11	Computer Games: Design	HX9V 45	Computer Games: Design
F916 11	Computer Games: Media Assets	HX9W 45	Computer Games: Media Assets
F917 11	Computer Games: Development	HX9X 45	Computer Games: Development
FN8P 11	Gameplay	HY2F 45	Gameplay
F1KW 11	Digital Media: Still Images Editing	HW4X 45	Digital Media: Still Images
F1KV 11	Digital Media: Video Editing	HW4Y 45	Digital Media: Moving Images
F1KT 11	Digital Media: Audio Editing	HW4W 45	Digital Media: Audio

The table below covers full credit transfer from units in the 2012 group awards (GG45 46 NC Computer Games: Software Development at SCQF level 6 and GG44 46 NC Computer Games: Creative Development at SCQF level 6) to units in the new level 6 group award.

Units in NC Computer Games: Software Development and NC Computer Games: Creative Development at SCQF level 6		Units in the revised NC Computer Games Development at SCQF level 6	
Code	Unit title	Code	Unit title
F915 12	Computer Games: Design	HX9V 46	Computer Games: Design
F916 12	Computer Games: Media Assets	HX9W 46	Computer Games: Media Assets
F917 12	Computer Games: Development	HX9X 46	Computer Games: Development

## 6.3 Opportunities for e-assessment

This qualification is particularly suitable to be assessed by e-assessment. Most of the units involve creating media of some sort as well as computer games, as well as design and test documents. These could all be submitted via a VLE such as Moodle, or via a tool such as OneNote. It is recommended that very little assessment (or none at all) is carried out via paper based assessment.

## 6.4 Support materials

A **list of existing ASPs** is available to view on SQA's website.

## 6.5 Resource requirements

Where possible centres should provide learners with access to Windows PCs or macOS based computers capable of running games development environments such as Unreal, Unity, 3DS, Maya, Blender, Adobe Creative Cloud, etc. These PCs should have dedicated 3D graphics cards, fast modern CPUs and plenty of RAM. Most of the software required on games development courses are free to education, at the time of writing the only main software suite useful for games development, which is not free to education is Adobe Creative Cloud. Unity, Unreal, AutoDesk, Visual Studio all offer free versions for education, although centres may need to request licences.

# 7 General information for centres

## Equality and inclusion

The unit specifications making up this group award have been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners will be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

## Internal and external verification

All instruments of assessment used within this/these qualification(s) should be internally verified, using the appropriate policy within the centre and the guidelines set by SQA.

External verification will be carried out by SQA to ensure that internal assessment is within the national guidelines for these qualifications.

Further information on internal and external verification can be found in *SQA's Guide to Assessment* ([www.sqa.org.uk/GuideToAssessment](http://www.sqa.org.uk/GuideToAssessment)).

## 8 Glossary of terms

**Embedded Core Skills:** is where the assessment evidence for the unit also includes full evidence for complete Core Skill or Core Skill components. A learner successfully completing the unit will be automatically certificated for the Core Skill. (This depends on the unit having been successfully audited and validated for Core Skills certification)

**Finish date:** The end of a group award's lapsing period is known as the finish date. After the finish date, the group award will no longer be live and the following applies:

- ◆ learners may not be entered for the group award
- ◆ the Group Award will continue to exist only as an archive record on the Awards Processing System (APS)

**Graded unit:** Graded units assess learners' ability to integrate what they have learned while working towards the units of the group award. Their purpose is to add value to the group award, making it more than the sum of its parts, and to encourage learners to retain and adapt their skills and knowledge.

**Lapsing date:** When a group award is entered into its lapsing period, the following will apply:

- ◆ the group award will be deleted from the relevant catalogue
- ◆ the group award specification will remain until the qualification reaches its finish date at which point it will be removed from SQA's website and archived
- ◆ no new centres may be approved to offer the group award
- ◆ centres should only enter learners whom they expect to complete the group award during the defined lapsing period

**SQA credit value:** The credit value allocated to a unit gives an indication of the contribution the unit makes to an SQA group award. An SQA credit value of 1 given to an SQA unit represents approximately 40 hours of programmed learning, teaching and assessment.

**SCQF:** The Scottish Credit and Qualification Framework (SCQF) provides the national common framework for describing all relevant programmes of learning and qualifications in Scotland. SCQF terminology is used throughout this guide to refer to credits and levels. For further information on the SCQF visit the SCQF website at [www.scqf.org.uk](http://www.scqf.org.uk).

**SCQF credit points:** SCQF credit points provide a means of describing and comparing the amount of learning that is required to complete a qualification at a given level of the framework. One National Unit credit is equivalent to 6 SCQF credit points. One National Unit credit at Advanced Higher and one Higher National Unit credit (irrespective of level) is equivalent to 8 SCQF credit points.

**SCQF levels:** The level a qualification is assigned within the framework is an indication of how hard it is to achieve. The SCQF covers 12 levels of learning. HNCs and HNDs are available at SCQF levels 7 and 8 respectively. Higher National Units will normally be at levels 6–9 and graded units will be at level 7 and 8. National Qualification Group Awards are available at SCQF levels 2–6 and will normally be made up of National Units which are available from SCQF levels 2–7.

**Subject unit:** Subject units contain vocational/subject content and are designed to test a specific set of knowledge and skills.

**Signposted Core Skills:** refers to opportunities to develop Core Skills arise in learning and teaching but are not automatically certificated.



## History of changes

It is anticipated that changes will take place during the life of the qualification and this section will record these changes. This document is the latest version and incorporates the changes summarised below. Centres are advised to check SQA's APS Navigator to confirm they are using the up to date qualification structure.

**NOTE:** Where a unit is revised by another unit:

- ◆ No new centres may be approved to offer the unit which has been revised.
- ◆ Centres should only enter learners for the unit which has been revised where they are expected to complete the unit before its finish date.

Version Number	Description	Date
02	Unit <b>DV96 34</b> Developmental Drawing removed from framework of <b>GP0M 46</b> NC Computer games Development	01/08/18

## Acknowledgement

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of this qualification.

## 9 General information for learners

The National Certificate in Computer Games Development at SCQF level 5 and level 6 provide an introduction to games development and will give you the opportunity to progress onto further study. You could progress onto the NC Computer Games Development award at SCQF level 6 from the level 5 award or onto the HNC Computer Games Development award at SCQF level 7.

The National Certificate in Computer Games Development at SCQF level 5 incorporates the National Progression Award (NPA) in Computer Games Development at SCQF level 5. The level 6 award incorporates the level 6 NPA Computer Games Development award. The National Certificate will engage you by using a hands-on, practical approach to learning the skills for this sector. A range of unit options are available from which you will become competent in designing a brief for a game. You will plan and design a game to a given brief, plan and produce media assets for use in a game; develop a game through programming and animation techniques; explore artificial intelligence in games, character creation, sound effect creation, games interface design and 3D modelling and animation. You will also evaluate games, test them, and plan and create a promotional activity. Finally, you will create a portfolio showcasing all the content you have created.

Each of the frameworks is made up of a set of mandatory units that you must achieve and a range of optional units so that the course can be tailored to suit your own needs. The options have been chosen carefully so that on gaining either of the awards, you can be confident you have a solid foundation to progress further in your chosen area. Twelve credits, including all six of the core units, must be achieved to gain this qualification.

At SCQF level 5, the mandatory units are:

HX9V	45	<i>Computer Games: Design (Revised)</i>
HX9X	45	<i>Computer Games: Development (Revised)</i>
HX9W	45	<i>Computer Games: Media Assets (Revised)</i>
HY2D	45	<i>Computer Games: Portfolio (New)</i>
HY2C	45	<i>Computer Programming (New)</i>
HY2F	45	<i>Gameplay (Revised)</i>

At SCQF level 6, the mandatory units are:

HX9V	46	<i>Computer Games: Design (Revised)</i>
HX9X	46	<i>Computer Games: Development (Revised)</i>
HX9W	46	<i>Computer Games: Media Assets (Revised)</i>
HY2C	46	<i>Computer Programming (New)</i>

And

H2WW	12	<i>Computer Games: Creative Development Project</i>
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Or

H2WX	12	<i>Computer Games: Software Development Project</i>
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The awards will help you gain an understanding of the different job roles and their functions in the computer games industry, and the practical skills and principles used in designing, animating, programming and testing computer games. The awards will help you gain skills that are currently in demand by employers.

Moreover, throughout the delivery of this award, you will have the opportunity to develop aspects of core and other transferable skills in *Problem Solving, Communication, Information and Communication Technology* and *Working with Others*, which will be very helpful when progressing into employment. Should you decide to take the optional unit in *Computer Games: Mathematics*, you will also be developing aspects of the *Numeracy Core Skill*.

The awards are assessed through a mix of theory and practical assessments. You will create and maintain a portfolio of your work throughout the course, which will include the best examples of your work. The emphasis of both awards is the acquisition of practical skills, and an important part of each qualification is a practical project that you will undertake at the end of the programme.