



Arrangements for:

HNC 3D Computer Animation

Group Award Code: G9EW 15

HND 3D Computer Animation

Group Award Code: G9EX 16

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Acknowledgement

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of Higher National qualifications.

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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 candidates for the Unit which has been revised where they are expected to complete the Unit before its finish date.

Version number	Description	Date
10	HND Framework amended to include additional optional Units: Team Working in Computing H178 34	14/09/18
09	Correction to Credits for Unit: HH58 35: Creating a Showreel and Portfolio. Unit was incorrectly shown to have 16 SCQF credit points and a credit value of 2. This has been corrected to show 8 SCQF Credit points and a credit value of 1.	19/08/18
08	Revision of Unit: F6B6 35 Showreel Portfolio and Curriculum Vitae has been replaced by HH58 35 Creating a Showreel and Portfolio and will finish 31/07/2019	21/12/16
07	Revision of Units: F207 34 Digital Imaging: Bitmap Techniques has been replaced by HF86 34. F208 34 Digital Imaging: Vector Techniques has been replaced by HF87 34 on both HNC/HND frameworks and will finish 31/07/2019	12/07/16
06	Framework amended to include additional optional Units: F207 34 Digital Imaging: Bitmap Techniques and F208 34 Digital Imaging: Vector Techniques	13/03/15
05	Framework amended to include additional optional Units: F1YX 34 Digital Imaging: Bitmap and Vector	07/01/15
04	Revision to Unit: DK2K 34 <i>Getting Started in Business</i> revised by H7V4 34 <i>Preparing to Start a Business</i> finishing 31/07/2016.	11/11/14
03	Revision to Unit: DM0T 35 <i>Audio Post Production: Mixing and Synchronising Audio for Video</i> revised by H6M5 35 <i>Audio Post Production for Video</i> . Finishing 31/07/2015.	04/04/14
02	Revision of Units: DW9K 34 <i>Compositing and Motion Graphics</i> revised by H4JN 34. DM0V 34 <i>Creative Industries: An Introduction</i> revised by H4A1 34. DM22 34 <i>Camera: An Introduction</i> revised by H4A3 34. F45K 35 <i>Editing an Introduction</i> revised by H4A6 34. F5GK 34 <i>3D Animation Lighting</i> revised by H49X 34. F7ET 34 <i>3D Computer Animation: Character Modelling Intermediate</i> revised by H49W 34. F7EV 35 <i>3D Computer Animation: Character Modelling Advanced</i> revised by H49V 35. Finishing 31/07/2015.	17/09/13

1 Introduction

This is the Arrangement Document for the revised Group Awards of HNC/HND 3D Computer Animation, which were validated in October 2008. This document includes background information on the development of the Group Awards, their aims, guidance on access, details of the Group Awards structures, and guidance on delivery.

These revised awards will replace the current HNC and HND in 3D Computer Animation which were introduced in 2001.

The revised awards are designed to equip candidates with the knowledge, understanding and skills required for success in current and future employment or for progression to further academic qualifications.

2 Rationale for the revision of the awards

2.1 Background

The HNC and HND 3D Computer Animation awards, which were comprised of many Units from other awards, were first delivered in 2001 by a single centre. By 2006 another five centres were delivering the awards.

Since 2001 there has been growth in the 3D Animation and gaming industries in the UK and there is a significant job market for candidates who graduate with skills in these areas. The new awards, which build on the strengths of the current awards, will meet the needs of industry by preparing candidates for employment as character modellers, texture artists, character riggers, and lighting and camera experts.

The latest review of the HN 3D Computer Animation awards has taken place to reflect the changes in 3D technology, HN design principles and development of Core Skills.

The awards are based on practical exercises to build up knowledge, understanding and analysis skills for the working environment as well as research and evaluative skills. This means that learning is through actual practical exercises relevant to the work situation.

2.2 Market research and consultation

To ensure that the new qualifications were vocationally relevant and met the needs of both candidates and industry, detailed market research was carried out by the Qualifications Design Team (QDT) set up to oversee the development. A variety of stakeholders were consulted on:

- ◆ the proposed course structure
- ◆ employment needs
- ◆ articulation to degree courses

Consultation details are summarised in the following table:

Stakeholder	Method of Consultation
Employers	◆ Postal/email questionnaire
Higher education institutions	◆ Postal/email questionnaire
Candidates	◆ Postal/email consultation

2.3 Summary of Feedback

The main findings of the market research and consultation were:

- ◆ industry agreed with the skill-centred approach
- ◆ industry agreed with the development of Core Skills — although *Numeracy* was not rated as highly as social/team working skills
- ◆ industry and HEIs regarded fundamental drawing skills as a high priority — this contrasted with the feedback from candidates
- ◆ candidates expressed desire for regularly updated skills — this reflected their involvement with the games they played and animations which they viewed

2.4 Development Process

Taking their cue from the feedback the QDT acknowledged the awards had to be weighted in favour of skills and artisanship. The awards are structured so that candidates have the basic technical skills and knowledge before advancing on to advanced topics such as storytelling and auteurship.

The HNC award has been designed to raise awareness of creative processes that enable candidates to evolve a visual language and to enhance their problem solving and communication skills. It also connects with the National Occupational Standards (NOS) which provide candidates with organisational and research skills to supplement essential software skills.

The second year of the HND builds on the skills learned in the HNC/1st year HND and will broaden the candidates' knowledge of the industry. The award has been designed to ensure candidates have a comprehensive understanding of the workflow and production process involved in 3D Computer Animation.

The QDT recognised that there is a continuing need for a qualification in 3D Computer Animation at HNC/HND level, which offers an alternative route for progression to HEIs, whilst simultaneously providing a national qualification which can be used in its own right.

3 Aims of the awards

3.1 HNC 3D Computer Animation

The general aims of the HNC 3D Computer Animation are to:

- 1 develop candidates' knowledge and skills in planning, developing and evaluating
- 2 enable progression within the SCQF
- 3 develop study and research skills
- 4 develop awareness of creative process and visual language
- 5 develop problem solving skills

The specific aims of the HNC are to:

- 6 prepare candidates for progression to HND Computer Animation second year
- 7 prepare candidates for employment in the 3D computer animation industry
- 8 develop skills in vocationally relevant software and hardware
- 9 develop current employment skills and expertise
- 10 provide knowledge and understanding of the role of computer technology within TV and also filmmaking, games industry and animation subject areas

3.2 HND 3D Computer Animation

The general aims of the HND 3D Computer Animation are to:

- 1 develop candidates' knowledge and skills in planning, developing and evaluating
- 2 enable progression within the SCQF
- 3 develop study and research skills
- 4 develop awareness of creative process
- 5 develop a visual language
- 6 develop critical and evaluative thinking
- 7 develop problem solving skills

The specific aims of the HND are to:

- 8 prepare candidates for progression to further study
- 9 prepare candidates for employment in the 3D Computer Animation industry
- 10 enable candidates to evaluate, research, develop and contextualise concepts and design
- 11 develop understanding of 3D animation techniques and their applications in a broad based media context
- 12 develop critical and evaluative approaches to study
- 13 provide a greater knowledge and understanding of 3D Computer Animation and the implications of pre and post-production techniques
- 14 enable candidates to gain a high degree of technical knowledge of proprietary software and its implications in the production of animation and special effects
- 15 enable candidates to gain greater knowledge and experience in the application of animations skills in relation to pace, timing, and characterisation
- 16 enable candidates to gain greater knowledge and understanding of the animation industry, including issues of copyright, intellectual property, working freelance, and opportunities for group work
- 17 develop communication skills and presentation techniques

3.3 Additional skills

The following additional skills may also be developed - some of these are transferable or soft skills, including:

- 1 creativity and imagination
- 2 an understanding of how group dynamics operate
- 3 investigation and research skills
- 4 software skills
- 5 promotion of visualisation skills
- 6 ability to work to timelines
- 7 ability to interpret a brief

The specific aims and development of skills are attained through achievement of all mandatory Units, reinforced by the Graded Units, with contribution from selected optional Units.

3.4 Target groups

There should be no unnecessary barriers to entry. These awards are particularly suited to the following groups:

- ◆ School leavers
- ◆ NC qualified candidates
- ◆ Adult returners

Further details of recommended entry requirements are given in Section 4 — *Access to Awards*.

3.5 Employment opportunities

Achievement of the HNC or HND 3D Computer Animation may enhance job opportunities in the areas of pre-production and production stages of animation production. Candidates may gain employment as a:

- ◆ Concept Artist/Character Designer
- ◆ R&D Artist/Look Dev Artist/Pre-Vis Artist
- ◆ Storyboard Assistant
- ◆ Junior Animator/Modeller/Rigger/Shader/Texture Artist
- ◆ Compositor/Wire Remover
- ◆ Scanner/Recorder
- ◆ Production Assistant
- ◆ Editing Assistant

4 Access to awards

As with all SQA qualifications, access to the awards will be at the discretion of the centre and is possible by various routes. Access to the Group Awards is designed to encourage and support the social inclusion agenda by providing entry for both traditional and non-traditional entry profiles. Centres are encouraged to consider experience, life skills and ability of potential candidates when assessing individual applications.

Applicants should demonstrate enthusiasm and an awareness of the creative industry. This may be evidenced by the presentation of a portfolio at pre-entry interview stage.

The following access recommendations are for guidance only.

4.1 Formal Qualifications

Some examples of appropriate formal entry qualifications are specified below. They are not exhaustive or mutually exclusive and may be offered in a variety of combinations.

Normally, one, or more of the following would be desirable:

- ◆ two Higher Grades (SCQF level 6) at a minimum grade C or equivalent
- ◆ a National Qualification at SCQF level 5 or 6 in a related subject area, eg Art and Design, Interactive Media, Digital Media Computing
- ◆ specialisms appropriate to HNC/HND 3D Computer Animation or in a related discipline, evidenced by appropriate qualifications, eg SVQ level 3 in Art and Design, Graphical Communication, etc

Qualifications from other bodies are acceptable where equivalent to the above.

Candidates may present examples of art, design, computer skills, film making skills, or other materials deemed appropriate to support their application.

4.2 Entry to Year 2 HND

In order to achieve the HND 3D Computer Animation candidates must gain 30 SQA credits. Ideally full-time candidates should be encouraged to achieve 15 credits in each year of the award. Wider access should be provided to cater for the needs of those, for example, who have achieved the HNC at day release or evening classes or in other colleges. Candidates would therefore be expected to have a minimum of 12 credits on entry to year 2 and these would include the HNC 3D Computer Animation mandatory Units.

4.3 Recommended Core Skills Entry Profile

The recommended Core Skills entry profile for the awards is given in the table below:

Core Skill	SCQF level
Communication	5
Numeracy	5
ICT	5
Problem Solving	5
Working with Others	4

4.4 Work Experience

Candidates with suitable relevant work experience may be accepted for entry provided the centre believes that they are likely to benefit from undertaking the award.

4.5 English as an additional language

For candidates where English is not their first language it is recommended that they possess English for Speakers of Other Languages (ESOL) level 5 or a score of 5.5 in International English Language Testing System (IELTS).

5 Awards structure

Both awards have been designed in accordance with SQA's design principles for HN Awards.

- ◆ HNCs shall be designed to be at SCQF level 7 and shall comprise 96 SCQF credit points with at least 48 credit points at SCQF level 7. This should include a mandatory section of at least 48 SCQF credit points and include one Graded Unit of 8 SCQF credit points at SCQF level 7.
- ◆ HNDs shall be designed to be at SCQF level 8 and shall comprise 240 SCQF credit points with at least 64 SCQF credit points at SCQF level 8. This should include a mandatory section of at least 96 SCQF credit points and include one Graded Unit of 8 SCQF credit points at SCQF level 7, plus 16 SCQF credit points of Graded Unit(s) at SCQF level 8.

5.1 Frameworks

HNC 3D Computer Animation

12 credits required — 11 mandatory credits plus one optional credit

Unit Title	Code	SCQF Credit points	SCQF level	SQA Credit value
<i>Mandatory Units – 11 credits required</i>				
3D Computer Modelling and Animation: an Introduction	F5GC 34	16	7	2
3D Computer Animation: Character Modelling Intermediate*	H49W 34	16	7	2
3D Computer Animation: Movement Studies Intermediate	F565 34	16	7	2
3D Animation: Lighting*	H49X 34	8	7	1
Creative Industries: An Introduction	H4A1 34	8	7	1
3D Animation: Environmental Modelling	F7BY 34	16	7	2
3D Computer Animation Graded Unit 1	F7FD 34	8	7	1
Total				11
<i>Optional Units – 1 credit required</i>				
3D Animation: Drawing Skills	F5GD 34	8	7	1
Editing: An Introduction*	H4A6 34	8	7	1
Animation for the Audio Visual Industries	F1TG 34	8	7	1
Developmental Drawing	DV96 34	8	7	1
Photography: An Introduction	DW6C 34	8	7	1
Preparing to Start a Business	H7V4 34*	8	7	1
Graphic Design	DV62 34	16	7	2
Working within a Project Team	DH21 34	8	7	1
Digital Imaging: Bitmap and Vector	F1YX 34	8	7	1
Digital Imaging: Bitmap Techniques	HF86 34*	8	7	1
Digital Imaging: Vector Techniques	HG87 34*	8	7	1

*Refer to History of Changes for revision changes.

As drawing skills are required in HND programme candidates should be advised to select the HN Unit *3D Animation: Drawing Skills* as an optional Unit should they wish to progress to Year 2.

HND 3D Computer Animation

30 credits required — 25 to 26 mandatory credits plus four to five optional credits

Unit Title	Code	SCQF Credit points	SCQF level	SQA Credit value
<i>Mandatory Units — 26 credits required</i>				
3D Computer Modelling and Animation: an Introduction	F5GC 34	16	7	2
3D Computer Animation: Character Modelling Intermediate*	H49W 34	16	7	2
3D Computer Animation: Movement Studies Intermediate	F565 34	16	7	2
3D Animation: Lighting*	H49X 34	8	7	1

Creative Industries: An Introduction*	H4A1 34	8	7	1
3D Animation: Environmental Modelling	F7BY 34	16	7	2
3D Animation: Drawing Skills	F5GD 34	8	7	1
Editing: An Introduction*	H4A6 34	8	7	1
3D Computer Animation: Character Modelling Advanced	H49V 35	16	8	2
3D Animation: Movement Studies Advanced	F564 35	16	8	2
Surface Texturing and Shading	F562 34	16	7	2
3D Animation: Special Effects	F563 34	16	7	2
Compositing and Motion Graphics*	H4JN 34	8	7	1
Showreel Portfolio and Curriculum Vitae	HH58 35*	8	8	1
3D Computer Animation: Graded Unit 1	F7FD 34	8	7	1
3D Computer Animation: Graded Unit 2	F7FE 35	16	8	2
Total				25
<i>Optional Units – 4 credits required</i>				
Animation for the Audio Visual Industries	F1TG 34	8	7	1
Developmental Drawing	DV96 34	8	7	1
Photography: An Introduction	DW6C 34	8	7	1
Preparing to Start a Business	H7V4 34*	8	7	1
Graphic Design	DV62 34	16	7	2
Working within a Project Team	DH21 34	8	7	1
Audio Post Production for Video	H6M5 35*	16	8	2
Editing: Own Programme	F45L 35	16	8	2
2D Digital Imaging and Animation	DE35 35	16	8	2
Advanced Bitmap Graphics for Creative Multimedia Design	DE2P 35	16	8	2
Web Design	DV6C 35	16	8	2
Compositing and Motion Graphics Advanced	F1TF 35	8	8	1
Advanced Vector Graphics for Creative Multimedia Design	DE2R 35	16	8	2
Game Design	F1GW 35	16	8	2
Life Drawing	DV98 34	8	7	1
Digital Imaging: Bitmap and Vector	F1YX 34	8	7	1
Camera: an Introduction*	H4A3 34	8	7	1
Digital Imaging: Bitmap Techniques	HF86 34*	8	7	1
Digital Imaging: Vector Techniques	F208 34	8	7	1
Team Working in Computing	H178 34	8	7	1

*Refer to History of Changes for revision changes.

5.1.1 Graded Units

The purpose of the Graded Units is to assess the candidate's ability to integrate and apply the knowledge and/or skills gained in the individual Units to demonstrate that they have achieved the principal aims of the group award and to grade the candidate's achievement. The Graded Units will be assessed and a grade of A, B or C will be awarded to each of the Graded Units.

Candidates will undertake a one credit HN Graded Unit (8 SCQF credit points) at level 7 in the HNC award. In the HND award candidates will undertake a one credit HN Graded Unit (8 SCQF credit points) at level 7 in the first year and a two credit HN Graded Unit (16 SCQF credit points) at level 8 in the second year.

Both Graded Units are project based Graded Units reflecting the highly practical nature of the 3D Computer Animation industry. Assessment will be by practical assignments which will enable candidates to showcase their skills by applying and integrating these skills in a significant piece of work.

5.1.2 Recommended Core Skills Entry and Exit Levels

The recommended Core Skills entry and exit profiles for the HNC 3D Computer Animation are:

Core Skill	Entry SCQF level	Exit SCQF level
Communication	5	6
Numeracy	5	5
IT	5	5
Problem Solving	5	5
Working with Others	4	5

The recommended Core Skills entry and exit profiles for the HND 3D Computer Animation are:

Core Skill	Entry SCQF level	Exit SCQF level
Communication	5	6
Numeracy	5	6
IT	5	6
Problem Solving	5	5
Working with Others	5	5

There are opportunities to develop all Core Skills throughout the awards. Working with Others is an important aspect of working in the 3D industries and the Core Skill of *Working with Others* is embedded within the optional Unit *Working within a Project Team (DH21 34)*. *See Appendix 1

5.2 Mapping information

The programme of Units, within the awards, allows a progressive attainment of knowledge and practical application in the area of 3D Computer Animation. Appendix 2 shows how the aims of the awards are mapped to the individual Units.

5.2.1 National Occupation Standards

Skillset is the Sector Skills Council responsible for the National Occupational Standards (NOS) in this vocational area. The HN Units have been mapped to the NOS to ensure that the occupational training requirements are met and further developed within the awards. Details of this mapping exercise are given in Appendix 3.

5.3 Articulation, professional recognition and credit transfer

5.3.1 Articulation

Currently there are no formal articulation arrangements for the HND 3D Computer Animation. However, former graduates of the HND 3D Animation have articulated onto the second or third year degree courses in Animation or Computer Animation at a variety of Higher Educational Institutes, including:

BA Computer Arts	Dundee University (Duncan of Jordanstone)
BSc Computer Animation and Digital Art	Paisley University
BSc Computer Animation and Multimedia	Paisley University
BA Media Studies	Napier University
BA Animation	Abertay University

At the discretion of the individual universities, an HNC may lead onto first or second year of a degree programme. Offers of places may be dependent on the applicant's showreel and portfolio of work.

Currently, Edinburgh College of Art offers a Degree in Visual Communication with specialism in Animation. The University of Abertay, Dundee, the University of the West of Scotland and Robert Gordon Universities all offer degree courses in Computer Animation or Computer Arts.

As degree level places are often dependent on a suitable showreel or portfolio of work, the 3D Computer Animation HNC/HND allow candidates the opportunity to develop these prior to application. Candidates are advised to liaise directly with the HE establishments prior to each year's intake of candidates as Unit credits that count towards entry requirements can vary.

5.3.2 Credit Transfer

Credit transfer is at the discretion of the centre. Centres considering credit transfer should:

- ◆ consider the currency of the candidate's qualification
 - Specific credit transfer will be given where the subject related content of Units has not changed significantly. However, due to the development of these courses from a number of previously existing related courses this must be a specific negotiation on the part of the delivering college. It should be borne in mind that some Units have been specifically written for this area, in order to focus areas of expertise. These may contain quite specific Evidence Requirements, though credit transfer is possible if these can be met from a single or combination of achieved earlier Units.
- ◆ negotiate personal learning plans with candidates accepted for credit transfer to ensure that they have a clear understanding of what is required to complete the qualification and an indication of predicted timescales.

6 Approaches to delivery and assessment

6.1 Mode of delivery

These group awards are likely to be offered as full time programmes. Centres may provide opportunities for other forms of study, eg part-time, evening, distance/open learning. However, it is unlikely that candidates could study the complete awards without attending the delivery centre for some of the practical aspects of the Units and the specialist software required.

6.2 Sequence of delivery

Any required prior knowledge guidelines will be given in individual Units.

In general the ethos underpinning the course is one which encourages the candidate to work from a basic skill level and build upon those which, for example *Movement Studies Intermediate* where candidates use only simple models and rigging systems, clearly differ from the more complex and sophisticated systems used in *Movement Studies Advanced*. It should be obvious too that the mandatory Unit *Computer Modelling and Animation* is designed to cover all components (modeling, camera, lighting, surfacing, and animation) at an introductory level.

There are many opportunities for integration, especially for Graded Units where Editing and Showreel and CV Creation can integrate seamlessly with many other Units.

6.3 Assessment

The overall strategy for assessment is that, wherever possible and where permissible, assessments should be integrated across Outcomes within Units and across Units, to reduce the overall assessment burden on candidates and centres. This strategy reflects ‘real work’ scenarios through the integration of knowledge and skills. The practical assessments within both HNC and HND Units will reflect a ‘hands on’ approach wherever possible.

During the delivery and assessment of these awards candidates will be given opportunities to develop/enhance all Core Skills, particularly *Working with Others*.

6.4 Reassessment

Guidelines for reassessment should be included in course documentation such as course handbooks and instruments of assessment. Candidates should be allowed reassessment opportunities in line with centre/SQA policy. Guidance should be provided to candidates by delivery staff and course team members.

6.5 Graded Units

As the Graded Units integrate the competencies gained by candidates in the individual Units, this will influence the scheduling of the Graded Units. As they introduce no new skills but draw upon and combine the earlier skills gained, it is recommended that Graded Unit delivery begins after some or most of the contributing/supporting Units have been completed. It is anticipated that delivery will therefore be during the second half of each academic year, although centres should ensure sufficient time is given for the planning of the projects.

6.6 Guidance on Open Learning

Full details on the suitability of individual Units for Open Learning are contained in each individual Unit specification. It is recognised that some aspects of many of the Units could be delivered on an Open Learning basis but that special arrangements would be required to ensure that any assessments evidence was the candidate's own work.

6.7 E-learning/e-assessment

By their very nature, the Units on this course lend themselves naturally to e-learning via online tutorials and a wide range of long established routes to supplement lecturer driven delivery. Indeed, as bandwidth speed expands and streaming technology advances apace this element of the course will surely expand.

E-assessment will very much depend on the resources of the individual centre, but even at the most basic level candidates can correspond with lecturers using Blackboard or similar technology, not to mention email. Naturally issues regarding veracity and plagiarism are highly significant and centres remain vigilant by putting watertight structures in place that will oblige candidates to confirm their participation in individual Units.

Perhaps freely available, easy to use screen capture video technology with candidates' commentary over a walkthrough demonstration — of the type used to make online tutorials — could be used by candidates to demonstrate their knowledge and skills.

6.6 Resource requirements

It is suggested that the course should be run on optimal hardware as the calculations required are highly demanding. Graphic cards supporting the generic Open GL format should be a minimum level hardware.

The software for the course, both 2D and 3D, can be purchased with non commercial educational licenses. Alternatively there are many free limited versions of most high end software packages that function fully and are often only limited to minimal render resolution but work in every other respect. In addition there are many open source lesser known 3D and 2D software brands that would work equally well.

7 General information for centres

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

Internal and external verification

All instruments of assessment used within this/these Group Award(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 and Quality Assurance for Colleges of Further Education* (www.sqa.org.uk).

8 General information for candidates

The HNC and HND in 3D Computer Animation are awards which provide a flexible and integrated programme of theoretical and practical skills. They will provide you with the knowledge and skills required to advance your ambitions in the animation field.

As the twelve principles of animation developed by Disney in the 1930s, along with the lighting techniques of Rembrandt in the 17th century, are still in use in modern animation, it emphasises the importance of fundamental skills as well as new technologies. The HNC/HND will provide you with knowledge and experience of these fundamental skills, providing you with an appreciation of aesthetics, in addition to developing your technical ability in the animation field. Once your technical skills are in place, you will address advanced topics such as storytelling and auteurship.

In order to achieve the HNC award you will need to successfully complete 12 HN credits comprising:

- ◆ 11 HN credits from the mandatory section of the award (this includes Graded Unit 1 worth 1 HN credit)
- ◆ 1 HN credit from the optional section

Should you wish to progress to the second year of the HND award you should complete an additional 3 HN credits during your first year of study.

In order to achieve the HND award you will need to successfully complete 30 HN credits comprising:

- ◆ 26 HN credits from the mandatory section of the award (this includes Graded Units comprising 3 HN credits)
- ◆ 4 HN credits from the optional section

The Graded Units are designed to show that you can integrate the knowledge and skills across the different areas of study. Your Graded Unit assessment, which will be project based, will be awarded a grade of A, B or C.

You will be given opportunities to develop Core Skills throughout the award, in particular *Working with Others*, *Problem Solving* and *Information and Communication Technology*.

On successful completion of the HND award you may articulate to the 2nd or 3rd year of a variety of degree courses at a number of Higher Education Institutes. HNC graduates may articulate to the 1st or 2nd year of a degree course. You are advised to liaise directly with the HE establishments prior to each year's intake as Unit credits that count towards entry requirements can vary.

Successful completion of the awards could lead to employment as a:

- ◆ Concept Artist/Character Designer
- ◆ R&D Artist/Look Dev Artist/Pre-Vis Artist
- ◆ Storyboard Assistant
- ◆ Junior Animator/Modeller/Rigger/Shader/Texture Artist
- ◆ Compositor/Wire Remover
- ◆ Scanner/Recorder
- ◆ Production Assistant
- ◆ Editing Assistant

Although it is likely that these awards will be offered on a full-time basis some centres may offer them on a part-time or open learning basis.

9 Glossary of terms

SCQF: This stands for the Scottish Credit and Qualification Framework, which is a new way of speaking about qualifications and how they inter-relate. We use SCQF terminology throughout this guide to refer to credits and levels. For further information on the SCQF visit the SCQF website at www.scqf.org.uk

SCQF credits: One HN credit is equivalent to 8 SCQF credit points. This applies to all HN Units, irrespective of their level.

SCQF levels: The SCQF covers 12 levels of learning. HN Units will normally be at levels 6–9. Graded Units will be at level 7 and 8.

Subject Unit: Subject Units contain vocational/subject content and are designed to test a specific set of knowledge and skills.

Graded Unit: Graded Units assess candidates' 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 candidates to retain and adapt their skills and knowledge.

Dedicated Core Skill Unit: This is a Unit that is written to cover one or more particular Core Skills, eg HN Units in Information Technology or Communications.

Embedded Core Skills: This is where the development of a Core Skill is incorporated into the Unit and where the Unit assessment also covers the requirements of Core Skill assessment at a particular level.

Signposted Core Skills: This refers to the opportunities to develop a particular Core Skill at a specified level that lie outwith automatic certification.

Qualification Design Team: The QDT works in conjunction with a Qualification Manager/Development Manager to steer the development of the HNC/D from its inception/revision through to validation. The group is made up of key stakeholders representing the interests of centres, employers, universities and other relevant organisations.

Consortium-devised HNCs and HNDs are those developments or revisions undertaken by a group of centres in partnership with SQA.

Specialist single centre and specialist collaborative devised HNCs and HNDs are those developments or revisions led by a single centre or small group of centres who provide knowledge and skills in a specialist area. Like consortium-devised HNCs and HNDs, these developments or revisions will also be supported by SQA.

10 Appendices

Appendix 1	Core Skills Signposting
Appendix 2	Mapping of Aims to Units
Appendix 3	Mapping to National Occupational Standards

Appendix 1 Core Skills Mapping

* The numbers given in the tables below refer to SCQF Core Skill indices

Unit code	Unit title	Communication		Numeracy		ICT	Problem Solving			Working with Others
		Oral	Written	Using Graphical Information	Using Number	Using IT	Critical Thinking	Planning & Organising	Reviewing & Evaluating	
HNC										
F5GC 34	3D Computer Modelling and Animation: an Introduction	4	4	4	4	4	4	4	4	*
H49W 34	3D Computer Animation: Character Modelling Intermediate	4	4	4	4	4	4	4	4	*
F565 34	3D Computer Animation: Movement Studies Intermediate	4	4	4	4	4	4	4	4	*
H49X 34	3D Animation: Lighting	4								*
F7BY 34	3D Animation: Environmental Modelling	4		4	4	4	4	4	4	*
F5GD 34	3D Animation: Drawing Skills	4								*
H4A1 34	Creative Industries: An Introduction	4	4			4	4	4	4	*
F7FD 34	3D Computer Animation: Graded Unit 1	4	4	4	4	4	4	4	4	*

Appendix 1 (cont)

Unit code	Unit title	Communication		Numeracy		ICT	Problem Solving			Working with Others
		Oral	Written	Using Graphical Information	Using Number	Using IT	Critical Thinking	Planning & Organising	Reviewing & Evaluating	
HND										
F5GC 34	3D Computer Modelling and Animation: an Introduction	4	4	4	4	4	4	4	4	*
F565 34	3D Computer Animation: Movement Studies Intermediate	4	4	4	4	4	4	4	4	*
F562 34	3D Computer Animation: Surface Texturing and Shading	4	4	4	4	4	4	4	4	*
F563 34	3D Animation: Special Effects	4								*
H4JN 34	Compositing and Motion Graphics	4		4	4	4	4	4	4	*
HH58 35	Showreel Portfolio and Curriculum Vitae Creation	4								*
F7FE 35	3D Computer Animation: Graded Unit 2		4	4	4	4	4	4	4	*
H4A6 34	Editing: An Introduction	4	4	4	4	4	4	4	4	

Appendix 2 Mapping of aims to individual HN Units

Group Award title: HNC 3D Computer Animation — General and Specific aims (refer to section 3 of Arrangements Document)

* The numbers given in the tables below refer to SCQF Core Skill indices

Unit code	Unit title	Aim 1	Aim 2	Aim 3	Aim 4	Aim 5	Aim 6	Aim 7	Aim 8	Aim 9	Aim 10
F5GC 34	3D Computer Modelling and Animation : an Introduction	7	7	7	7	7	7	7	7	7	7
H49W 34	3D Computer Animation: Character Modelling Intermediate	7	7	7	7	7	7	7	7	7	7
H4A1 34	Creative Industries: An Introduction	7	7	7	7	7	7	7	7	7	7
F565 34	3D Computer Animation Movement Studies Intermediate	7	7	7	7	7	7	7	7	7	7
F5GK 34	3D Animation Lighting	7	7	7	7	7	7	7	7	7	7
F7BY 34	3D Animation Environmental Modelling	7	7	7	7	7	7	7	7	7	7
F5GD 34	3D Animation Drawing Skills	7	7	7	7	7	7	7	7	7	7
F7FD 34	3D Computer Animation: Graded Unit 1	7	7	7	7	7	7	7	7	7	7

Group Award title: HND 3D Computer Animation — Specific aims (refer to section 3 of Arrangements Document)

Unit code	Unit title	Aim 1	Aim 2	Aim 3	Aim 4	Aim 5	Aim 6	Aim 7	Aim 8	Aim 9	Aim 10
H49V 35	3D Computer Animation: Character Modelling Advanced	8	8	8	8	8	8	8			
F564 34	3D Computer Animation: Movement Studies Advanced	8	8	8	8	8	8	8	8		
F562 34	3D Computer Animation Surface Texturing and Shading	8	8	8	8	8	8	8			
F563 34	3D Animation: Special Effects	8	8	8	8	8	8	8			
DN9K 34	Compositing and Motion Graphics	8	8	8	8	8	8	8	8		
HH58 35	Showreel Portfolio and Curriculum Vitae Creation	8	8	8	8	8	8	8		8	8
F7FE 35	3D Computer Animation: Graded Unit 2	8	8	8	8	8	8	8	8	8	8

Appendix 3 Mapping to National Occupation Standards

National Occupational Standards Relevant to 3D Computer Animation

- 1 Work Effectively in Animation
- 2 Manage and Store Assets
- 3 Conceptualise and Direct the Product
- 4 Evaluate Proposed Ideas Prior to Production
- 5 Identify and Secure Intellectual Property Rights
- 6 Secure Funding for the Production
- 7 Write a Script
- 8 Create Designs
- 9 Visualise the Script
- 10 Edit Timings
- 11 Create 2D Assets for Production
- 14 Set Up 3D Elements for Animation
- 15 Create 3D Animation
- 16 Render 3D Animation
- 20 Supervise Filming for Visual Effects
- 21 Create Digital Visual Effects
- 22 Composite Animation
- 23 Manage the Production Process

Mapping of National Occupational Standards to Units in 3D Computer Animation

Unit code	Unit title	Reference/Standard																	
		1	2	3	4	5	6	7	8	9	10	11	14	15	16	20	21	22	23
		Work Effectively in Animation	Manage and Store Assets	Conceptualise and Direct the Product	Evaluate Proposed Ideas Prior to Production	Identify and Secure Intellectual Property	Secure Funding for the Production	Write a Script	Create Designs	Visualise the Script	Edit Timings	Create 2D Assets for Production	Set Up 3D Elements for Animation	Create 3D Animation	Render 3D Animation	Supervise Filming for Visual Effects	Create Digital Visual Effects	Composite Animation	Manage the Production Process
F5GC 34	3D Computer Modelling and Animation an Introduction	X	X	X	X			X		X	X		X	X	X				X
H49W 34	3D Computer Animation Character Modelling Intermediate	X	X	X	X			X	X	X	X		X	X	X				X
F565 34	3D Computer Animation: Movement Studies Intermediate	X	X	X	X			X		X	X		X	X	X				X
H49X 34	3D Animation Lighting	X	X	X	X						X		X		X				X
H4A1 34	Creative Industries: An Introduction	X	X	X															
F7BY 34	3D Animation: Environmental Modelling	X	X	X	X				X				X		X				X
F5GD 34	3D Animation Drawing Skills	X	X	X	X				X						X				X
F7FD 34	3D Computer Animation: Graded Unit 1	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X

Unit code	Unit title	Reference/Standard																	
		1	2	3	4	5	6	7	8	9	10	11	14	15	16	20	21	22	23
		Work Effectively in Animation	Manage and Store Assets	Conceptualise and Direct the Product	Evaluate Proposed Ideas Prior to Production	Identify and Secure Intellectual Property	Secure Funding for the Production	Write a Script	Create Designs	Visualise the Script	Edit Timings	Create 2D Assets for Production	Set Up 3D Elements for Animation	Create 3D Animation	Render 3D Animation	Supervise Filming for Visual Effects	Create Digital Visual Effects	Composite Animation	Manage the Production Process
H49V 35	3D Computer Animation: Character Modelling Advanced	X	X	X	X	X		X	X	X		X	X	X	X		X		X
F564 35	3D Computer Animation: Movement Studies Advanced	X	X	X	X	X		X		X			X	X	X		X		X
F562 35	3D Computer Animation: Surface Texturing and Shading	X	X	X	X	X						X	X		X		X		X
F563 34	3D Animation: Special Effects	X	X	X	X	X				X			X		X		X		X
H4JN 34	Compositing and Motion Graphics	X	X	X	X	X				X		X	X	X	X		X	X	X
HH58 35	Showreel Portfolio and Curriculum Vitae Creation	X	X	X	X	X		X		X		X	X	X	X		X		X
H4A6 34	Editing: An Introduction	X	X	X	X	X				X		X	X	X	X		X		X
F7FE 35	Graded Unit 2	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X

NB: The number sequence above refers directly to the Document Core Numbers outlined in Skillset's Occupational Standards Document, July 2007