



**Arrangements for:
Professional Development Award in
Web Development at SCQF level 7**

Group Award Code: G903 47

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Acknowledgement

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

Contents

| | | |
|-----|---|----|
| 1 | Introduction..... | 1 |
| 2 | Rationale for the development of the award..... | 1 |
| 3 | Aims of the award..... | 2 |
| 3.1 | General aims of the award..... | 2 |
| 3.2 | Specific aims of the award..... | 2 |
| 3.3 | Target groups..... | 2 |
| 3.4 | Employment opportunities..... | 3 |
| 4 | Access to awards..... | 3 |
| 5 | Award structure..... | 4 |
| 5.1 | Framework..... | 4 |
| 5.2 | Mapping information..... | 4 |
| 5.3 | Articulation, professional recognition and credit transfer..... | 4 |
| 6 | Approaches to delivery and assessment..... | 5 |
| 7 | General information for centres..... | 6 |
| 8 | General information for candidates..... | 7 |
| 9 | Glossary of terms..... | 8 |
| 10 | Appendices..... | 9 |
| | Appendix 1: National Occupational Standards Mapping..... | 10 |

1 Introduction

This is the Arrangement Document for the new Professional Development Award in Web Development at SCQF level 7, which was validated in June 2008. This document includes: background information on the development of the Group Award, its aims, guidance on access, details of the Group Award structure, and guidance on delivery.

2 Rationale for the development of the award

The Professional Development Award (PDA) in Web Development at SCQF level 7 is a new award and it consists of two (2 credit) Units at SCQF level 7.

The Professional Development Award in Web Development at SCQF level 7 is included within the HN Interactive Media which is replacing the current HN Multimedia Computing: Web Development, HN Multimedia Computing and HN Interactive Multimedia Creation.

SQA currently offers a number of professional development awards in Computing and IT and this is one of the first that fall within the interactive media area. This Professional Development Award in Web Development at SCQF level 7 is included within the new HNC Interactive Media framework to enable an HN candidate to gain this additional SQA qualification. The Professional Development Award in Web Development at SCQF level 7 is mapped to Adobe Certified curriculum (current May 2008) which will prepare an HN candidate to the level required to undertake the associated vendor certified examination(s), however, a centre can deliver this in a generic way working outwith vendor mapping. The Professional Development Award in Web Development at SCQF level 7 will also allow a part-time, in-fill or day release candidate to gain a separate SQA qualification studying this subset of the HNC Interactive Media.

Employees looking to enhance their skills and gain a qualification find it difficult to commit to a part-time HNC over a 2 year period in the evening or even longer on a day-release basis. They often want to gain a qualification in a specialist area often found within an HNC. This Professional Development Award in Web Development at SCQF level 7 will offer an opportunity for a candidate to study a small focused course in web development and this would also count towards an HNC in Interactive Media.

This Professional Development Award in Web Development at SCQF level 7 offers a progression route for articulation for the holders of the National Certificate in Digital Media Computing suite of awards.

This Professional Development Award in Web Development at SCQF level 7 consists of Higher National Units that have been written in as generic a way as possible, thus allowing the centre to select the delivery software, languages and hardware platforms although the content of the Professional Development Award is mapped to Adobe Certified curriculum (current May 2008).

3 Aims of the award

3.1 General aims of the award

This Professional Development Award in Web Development at SCQF level 7 has a range of broad aims which are generally applicable to all equivalent Higher National or associated qualifications. The general aims are to:

- ◆ develop the candidate's knowledge and skills such as planning and analysing
- ◆ develop employment skills and enhance candidates' employment prospects, by offering the opportunity to develop skills in industry standard software
- ◆ enable progression within the Scottish Credit and Qualifications Framework
- ◆ develop study and research skills
- ◆ develop the transferable skill of problem solving
- ◆ provide academic stimulus and challenge, and foster an enjoyment of the subject

3.2 Specific aims of the award

The specific aims of this Professional Development Award in Web Development at SCQF level 7 are to:

- ◆ prepare a candidate for entry level employment in a Web designer/developer related role
- ◆ enhance the career prospects of candidates already in employment
- ◆ develop a range of skills in web development to the standard recognised by the World Wide Web Consortium (w3C.org)
- ◆ develop specialist skills in web development
- ◆ prepare a candidate for the Adobe Certified Exam in Dreamweaver
- ◆ prepare a candidate for progression to further study in the interactive media, multimedia, web development or a related area

3.3 Target groups

The Professional Development Award in Web Development at SCQF level 7 is designed to offer academic, technical and professional training leading to the skills necessary to plan, design, develop, test and deploy complex websites to vendor and w3c recognised standards. This award is targeted at candidates who satisfy the entry requirement and who are:

- ◆ employed or unemployed and wish to study on a part-time (day or evening) or day release mode
- ◆ already studying HNC Interactive Media and wish to gain additional specialised qualifications
- ◆ already studying HNC Interactive Media and wish to prepare for the relevant Adobe certified examination(s) in Dreamweaver
- ◆ unemployed and wish to study to assist them in gaining employment
- ◆ employed and wish to further their career options
- ◆ generally interested in web development and wish to learn more and at the same time gain a qualification

Where an employee need to update their skills, or possibly undertake CPD (Continual Professional Development) for their occupation, then this Professional Development Award in Web Development at SCQF level 7 is a perfectly suited qualification for this target sector. It is also possible that a centre could deliver this Professional Development Award as evening or part-time provision.

3.4 Employment opportunities

There are a selection of job vacancies (sourced from www.s1jobs.com on Friday 11 May 2008) looking for the knowledge and skills offered by this Professional Development Award in Web Development at SCQF level 7, eg:

- ◆ Creative Production Assistant
- ◆ Data Technician
- ◆ Graphics Administrator
- ◆ IT Support Engineer & Web Developer
- ◆ Typesetter
- ◆ Data Technician
- ◆ Graphic Designer
- ◆ Web Designer
- ◆ Senior Web Developer
- ◆ Web Designer/Developer
- ◆ Promotions Developer
- ◆ Junior Web Designer
- ◆ Promotions Developer

4 Access to awards

As with all SQA qualifications, access will be at the discretion of the Centre and the following recommendations are for guidance only:

- ◆ different combinations of relevant National Certificate, National Qualifications, Vocational Qualifications and equivalent qualifications from other awarding bodies may also be acceptable, as would suitable vendor qualifications at an appropriate level
- ◆ mature candidates with suitable work experience may be accepted for entry provided the enrolling Centre believes that the candidate is likely to benefit from undertaking the award
- ◆ it would be advisable for all candidates to have some prior knowledge of computing or information technology although formal qualifications may not be necessary if suitable experience had been gained informally or through work experience
- ◆ such work experience may provide inferred or actual evidence of a candidate's skills and knowledge as they apply either to particular Units

5 Award structure

All Units are mandatory within the Professional Development Award in Web Development at SCQF level 7.

5.1 Framework

The framework for the award is as follows:

| Unit title | Code | SCQF credit points | SCQF level | SQA credit value |
|------------------------------------|---------|--------------------|------------|------------------|
| Web Development: Essential Content | F1YY 34 | 16 | 7 | 2 |
| Web Development: Complex Content | F200 34 | 16 | 7 | 2 |

5.2 Mapping information

A mapping exercise was carried out between the Units within the HNC Interactive Media and SkillSet's NOS during the validation process. This mapping can be found in Appendix 1 (National Occupational Standards Mapping).

5.3 Articulation, professional recognition and credit transfer

There are opportunities to articulate to other Profession Development Awards which are contained within the HN Interactive Media award.

There are also opportunities to use the Units gained in this award to continue study of the HNC Interactive Media at SCQF level 7.

There is no professional recognition mapped to this award apart from the opportunity to undertake the Adobe vendor syllabus (current May 2008).

There is no credit transfer mapping to these Units as these are new and previous Units didn't exist in this area.

6 Approaches to delivery and assessment

This Professional Development Award in Web Development at SCQF level 7 has been designed in conjunction with the development of the new HNC Interactive Media. Within the interactive media field, there are various specialised subject areas, one of which is web development. This Professional Development Award in Web Development at SCQF Level 7 has been derived from two web development Units within the HNC Interactive Media framework. In turn, this Professional Development Award in Web Development at SCQF level 7 may be delivered as part of the HNC Interactive Media, or it could be delivered as an individual Professional Development Award qualification.

It is recommended that the HN Unit F1YY 34 *Web Development: Essential Content* should be delivered first, followed by the HN Unit F200 34 *Web Development: Complex Content*.

The HN Unit F1YY 34 *Web Development: Essential Content* is designed to enable a candidate to gain knowledge and understanding of website development and apply that knowledge when planning, designing and developing a website with static content to recognised standards. It will give a candidate the opportunity to gain practical skills in planning and designing a website, developing the layout and content of a web site using a markup language, applying visual consistency to a website using stylesheets and publishing a valid, accessible website. The candidate will also have the opportunity to learn about current, basic web site development fundamentals.

The HN Unit F200 34 *Web Development: Complex Content* is designed to enable the candidate to gain knowledge and understanding of designing, implementing and coding, testing and deploying complex web solutions which include interactive, rich media and external data components. It will give a candidate the opportunity to gain practical skills in designing, implementing and coding, testing and deploying a complex web solution that includes rich media and interactive content. The candidate will also have the opportunity to learn about current web development technologies.

Although these Units have been developed to map to Adobe curriculum (current May 2008) conditions will vary between centres in terms of staff and software and/or hardware resources, the Units have been written in a generic way which means that the delivery does not require particular hardware or software.

All the Units within the Professional Development Award in Web Development at SCQF level 7 are mandatory. It is recommended that the HN Unit F1YY 34 *Web Development: Essential Content* is taught and assessed before the HN Unit F200 34 *Web Development: Complex Content*.

F1YY 34 Web Development: Essential Content

The most appropriate approach to delivery of the HN Unit F1YY 34 *Web Development: Essential Content* is that Outcome 1 is taught and assessed first so that the candidate has been introduced to the underpinning knowledge required for the remainder of the Unit. The remaining Outcomes of the Unit are practical. Outcomes 3 and 4 may be taught in parallel so the candidate relates the structuring with the styling of websites. Outcome 2 would be best delivered when the candidate has gained enough understanding of the development of a website. Outcome 5 would be best delivered when the candidate has the skills to build a complete website.

F200 34 Web Development: Complex Content

It is not necessary to deliver the Outcomes in sequence as it may be better for the candidates to have some knowledge and skills of the tools and techniques required to build a website before attempting Outcome 1 assessment.

The curriculum content of the Professional Development Award in Web Development at SCQF level 7 has been mapped to Adobe curriculum in Dreamweaver (current May 2008). This means that by successfully completing the Units using Adobe Dreamweaver software you will have covered the content preparing for the Adobe examination.

NOTE: Completion of the Professional Development Award in Web Development at SCQF level 7 does NOT guarantee an Adobe Certified Expert examination pass in Dreamweaver.

7 General information for centres

Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (www.sqa.org.uk).

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

This Professional Development Award in Web Development at SCQF level 7 is a new award and it is intended for a variety of candidates from differing backgrounds who would like to gain a qualification in the specialised area of web development.

It is an appropriate qualification, if you are looking to enhance your skills or gain a qualification in web development whether in employment, or not. This Professional Development Award in Web Development at SCQF level 7 can also be achieved during the study of the HNC Interactive Media. An aim of the Professional Development Award in Web Development at SCQF level 7 is to further develop employment skills and enhance a candidate's employment prospects, by offering the opportunity to develop skills in industry standard software, mark-up languages and stylesheets all to a standard recognised by w3c.org.

The Professional Development Award in Web Development at SCQF level 7 comprises 2 double credit HN Units at SCQF level 7. These are the HN Unit F1YY 34 *Web Development: Essential Content* and the HN Unit F200 34 *Web Development: Complex Content*. The Units may be taught as part of HNC Interactive Media, or they may be taught as individual Units that form the Professional Development Award.

The curriculum content of the Professional Development Award in Web Development at SCQF level 7 has been mapped to Adobe curriculum in Dreamweaver (current May 2008). This means that by successfully completing the Units using Adobe Dreamweaver software you will have covered the content preparing for the Adobe examination.

F1YY 34 Web Development: Essential Content

This Unit is designed to enable a candidate to gain the knowledge and skills to undertake website development and apply the knowledge and skills gained when planning, designing and developing a website with static content to recognised standards.

On completion of the Unit you should be able to:

- ◆ describe current, basic web site development fundamentals
- ◆ plan and design a website
- ◆ develop the layout and content of a website using a markup language
- ◆ apply visual consistency to a website using stylesheets
- ◆ publish a valid, accessible website

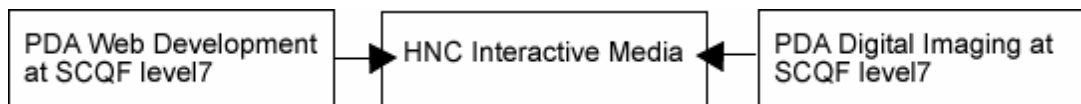
F200 34 Web Development: Complex Content

This Unit is designed to give candidates knowledge and understanding of designing, implementing and coding, testing and deploying complex web solutions which include interactive, rich media and external data components. On completion of the Unit you should be able to:

- ◆ describe current web development technologies
- ◆ design a complex web solution for a given brief
- ◆ implement and code a complex web solution
- ◆ add rich media and interactive content to the complex web solution
- ◆ test and deploy a complex web solution

The Professional Development Award in Web Development at SCQF level 7 is broadly practical based which is designed to allow a candidate adequate time to develop competencies using web development techniques using suitable software. Within each Unit there will be both a theory and a practical element. The practical assessments will be project based and the theory assessments will be closed-book objective tests.

In order to successfully achieve the Professional Development Award in Web Development at SCQF level 7 it is necessary to achieve the mandatory Units of the award.



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 credit points: 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: National Occupational Standards Mapping

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The Performance Statements in Skillset's National Occupational Standards are analogous to the Knowledge and Skills contained in HN Units. The tables below show the mapping of the Knowledge and Skills of ALL of the Units within the SQA's HNC Interactive Media to Performance Statements contained in the Interactive Media elements (IM).

| IM2 Obtain Assets for Use in Interactive Media Products | | |
|--|-------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 1, 2, 3 | Creating Digital Images | 1 |

| IM3 Prepare Assets for Use in Interactive Media Products | | |
|---|--------------------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 1, 2, 3, 4, 8 | Creating Digital Images | 1, 2 |
| 1 | Multimedia Computing Audio & Video 1 | 3 |
| 8 | Multimedia Computing Audio & Video 2 | 3 |

| IM4 Prepare User Interface Assets for Use in Interactive Media Products | | |
|--|---------------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 1, 2, 3 | Creating Digital Images | 1 |
| 2, 3, 4 | Web Development Complex Content | 3 |

| IM5 Design User Interfaces for Interactive Media Products | | |
|--|---------|---------|
| Performance Statement | HN Unit | Outcome |
| 1, 2, 3, 4, 5 | | 1, 3 |

| IM6 Use Authoring Tools to Create Interactive Media Products | | |
|---|-------------------------------------|---------------|
| Performance Statement | HN Unit | Outcome |
| 1, 2, 3, 4, 5, 6, 8 | Interactive Media: Authoring | 1, 2, 3, 4, 5 |
| 1, 3, 4 | DE32 35 Scripting for Interactivity | 1, 2, 4 |

| IM7 Code Scripts to Provide Functionality for Interactive Media Products | | |
|---|------------------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 1, 2, 3, 4, 5 | Client Side Scripting for Web Apps | 2, 3 |

| IM8 Determine the Implementation of Designs for Interactive Media Products | | |
|---|-----------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 1 | Interactive Media: Planning | 1 |

| IM12 Devise User Testing of Interactive Media Products | | |
|---|-----------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 1, 2, 4 | Interactive Media: Planning | 3 |
| | Interactive Media Authoring | 3 |

| IM16 Plan Content for Web and Multimedia Products | | |
|--|-----------------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 6 | Web Development Essential Content | 3 |

| IM17 Architect Interactive Media Products | | |
|--|-----------------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 1 | Interactive Media: Planning | 1 |
| 3 | Web Development Essential Content | 5 |

| IM18 Use Mark-up in Interactive Media Products | | |
|---|-----------------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 1, 2, 3 | Web Development Essential Content | 3, 4 |

| IM19 Use Stylesheets in Interactive Media Products | | |
|---|---------------------------------|---------|
| Performance Statement | HN Unit | Outcome |
| 1, 2, 3 | Web Development Complex Content | 3, 5 |

| IM24 Create 2D Animations for Interactive Media Products | | |
|---|--------------|---------|
| Performance Statement | HN Unit | Outcome |
| 3, 5 | 2D animation | 2, 3, 4 |



Award ID: G903 47 **Level:** SCQF level 7

Award title: Professional Development Award in Web Development at SCQF¹ level 7

Introduction to the award

This Professional Development Award (PDA) is one of a suite of awards that have been designed to incorporate the knowledge and understanding required by popular vendor awards² into SQA's Higher National frameworks.

It has become increasingly clear that the content of vendor awards needed to be offered in a flexible format with generic Units.

The Units which now make up this Professional Development Award in Web Development at SCQF level 7 include vendor-related topics, but are generic in nature. The Units are already in the HNC Interactive Media framework. Including this Professional Development Award into the HN frameworks allows a candidate to work towards a Higher National qualification via short courses or part-time study.

Target audience

Vendor awards are becoming increasingly popular with both candidates and employers.

As this award covers the knowledge and understanding associated with the web development area it is an award that would be attractive for someone who wishes to study web authoring and design. The award also maps to the Adobe Certified Expert (ACE) Dreamweaver and is, therefore, attractive for anyone who is working in industry and looking for a Continual Professional Development (CPD) opportunity. It would be attractive to a candidate who is looking for employment at an entry level position as a web developer. It would also be suitable for those wanting to prepare for advancement in their organisation.

¹ SCQF (Scottish Credit and Qualifications Framework) helps people to understand and compare different qualifications in Scotland. (visit the website www.scqf.org.uk for more information)

² Vendor awards are those awards designed and certificated by a product manufacturer or trade alliance organisation.

Candidates might also want to use this Professional Development Award to progress to further study in the web development and interactive media areas at Higher National level. On achieving this Professional Development Award a candidate would also have the knowledge and skills required to sit the Abode Certified Expert (ACE) Dreamweaver examination. Successful completion of this Professional Development Award would offer progression to higher levels of study.

Conditions of award

Both mandatory Units must be achieved in order to gain the award.

Content and structure of award

The two Units are mandatory.

| Unit title | Code | SCQF credit value | SCQF * level |
|------------------------------------|---------|-------------------|--------------|
| Web Development: Essential Content | F1YY 34 | 1 | 7 |
| Web Development: Complex Content | F200 34 | 1 | 7 |

*The Scottish Credit and Qualifications Framework (SCQF) is a way of helping people understand and compare Scottish Qualifications, by giving them credit points which shows how much learning has been achieved and a level on a scale of 12, to show how demanding the learning is. Details can be found at www.scqf.org.uk

At the end of the award candidates will be able to:

- ◆ describe basic website development fundamentals
- ◆ plan and design a website
- ◆ develop the layout and content of a website using a markup language
- ◆ apply visual consistency to a website using stylesheets
- ◆ publish a valid, accessible website
- ◆ describe current web development technologies
- ◆ design a complex web solution for a given brief
- ◆ implement and code a complex web solution for a given brief
- ◆ add rich media and interactive content to the complex web solution
- ◆ test and deploy a complex web solution

Centre contact details