Group Award Specification for:

National Progression Award (NPA) in Web Design at SCQF level 5

Group Award Code: GN57 45

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Contents

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 Progression Award (NPA) in Web Design Fundamentals was first introduced in 2007 to address a demand for provision of an entry-level qualification in web design, especially one that may be gained through short-course provision. During this time, the award proved popular with learners and education establishments and quickly became an established qualification in centres, with just short of two thousand learners entered since its inception (mostly in schools).

In 2014, the award underwent a minor review, whereby F181 11 *Computing: Web Design Fundamentals* was replaced by H614 45 *Computing: Website Graphics.* However, an in-depth review of the award was overdue and, as such, a scoping exercise was carried out in early 2017 to obtain feedback from teachers on how the award met its objectives and any issues needing to be addressed in a future review.

The feedback from educators was broadly positive. The resulting report recommended the following changes.

1 Revise the award to bring it up to date with contemporary technologies.
2 Revise the award to allow a more integrated approach across the units.
3 Emphasise the importance of industry standards by making units more flexible and open.

This revision focused on two component units of this award: F180 11 *Computing: Interactive Multimedia for Website Development*, and F182 11 *Computing: Website Design and Development*, which have not been revised since their introduction in 2007.

The opportunity was taken to simplify titles. The group award has been retitled *Web Design* (from *Web Design Fundamentals*) and one of the revised units similarly had its title tidied; however, their subject domains were not changed.

The revised award differs from the original (2007) award in the following respects.

1 More up-to-date knowledge and skills in line with contemporary technologies and industry standards.
2 Emphasis on the importance of the web development process.
3 Change to one of the unit titles to provide a more flexible unit.

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 actual review. The research supported the continuation of this award and the retention of its structure. It demonstrated a strong demand for updated content and provided support for the afore-mentioned changes.

It is important to recognise the digital skills gap in Scotland, as highlighted by the Skills Gap Survey undertaken by the Scottish Government, in partnership with Skills Development Scotland, in 2014. Building on the previous award, released in 2007, this revised version aims to bring the units in line with current web design and development standards. Therefore, this award aims to cover the following three topics:

- website design and development
- website graphics
- interactive media

The purpose of the NPA Web Design is to allow learners to develop the technical skills required to create websites and graphics, and add interactivity to websites. There is also a focus on the importance of the website development process.

The qualification will offer learners foundation skills in web design, and provide a suitable qualification to permit progression to a higher level of study, such as a National Certificate in Computing with Digital Media, or similar awards at an appropriate level.

NPA Web Design is suitable for a wide range of learners including school pupils, college students, adult learners and those in the early stages of industry-related employment, such as Junior Web Designers. It is also suitable to broaden the curriculum in the senior phase of school by providing all pupils, not only those with a vocational interest in computer science, to experience a contemporary technological subject and gain skills that can be used in future employment.

It is not anticipated that this award will lead directly to employment. It is primarily designed to prepare learners for Higher National courses or Junior Apprenticeships in web design and development. Throughout this award, learners will develop programming and practical skills using applications. They will also develop a range of Core Skills. Delivering this award will also enhance the learners' employability skills by allowing them to work collaboratively in the *Computing: Interactive Multimedia* unit.

2 Qualification structure

2.1 Structure

This group award is made up of 3 SQA unit credits. It comprises 18 SCQF credit points, all of which are at SCQF level 5.

The awards consists of three mandatory units. There are no optional units.

A mapping of Core Skills development opportunities is available in Section 5.3.

The following table defines this award.

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
H614	45	Computing: Website Graphics	1	6	5
HW52	45	Computing: Website Design and Development	1	6	5
HW51	45	Computing: Interactive Multimedia	1	6	5

All units within the NPA Web Design are mandatory. With a combined 18 SCQF credit point across all three units, a notional 120 hours of learning and teaching will be required to deliver this award.

The size of the award makes it suitable for delivery in schools and colleges over one academic year, and has proven popular with similar awards in the past.

3 Aims of the qualification

The aim of the NPA Web Design is to help fill the digital skills gap that exists in Scotland.

3.1 General aims of the qualification

This award aims to:

1 Provide an up-to-date curriculum, reflecting contemporary knowledge and skills in the subject domain.
2 Prepare learners to fill the digital skills gap identified by the Scottish Government.
3 Develop transferable knowledge and skills that can be applied within a variety of current and future careers.
4 Develop computational thinking skills.
5 Enable progression within SCQF.
6 Educate learners on the usability and legal implications associated with web design.
7 Develop general academic skills particularly ICT, numeracy and problem solving skills.
8 Stimulate interest in Science, Technology, Engineering and Mathematics (STEM) particularly among women.

3.2 Specific aims of the qualification

The specific aims of this award are to:

1 Deliver contemporary knowledge of web design and develop abilities in the application of this knowledge.
2 Provide a recognised core of web design competences while providing centres with choice to customise the award to local needs.
3 Facilitate progression to higher-level studies in web design and related subjects.
4 Develop workplace skills relevant to careers in web design.
5 Develop the ability to apply computer-based solutions to problems.
6 Develop academic rigour with respect to problem solving, analytical thinking and planning in the context of web design.
7 Attract more women to computer science.

4 Recommended entry to the qualification

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:

- Any one of the component units, done on a free-standing basis.
- Computing Science at SCQF level 4.
- NPA Software Development at SCQF level 4.
- Experience of writing HTML, CSS and programming.

4.1 Core Skills entry profile

The Core Skill 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.

Core Skill	Recommended SCQF entry profile	Associated assessment activities
Communication	3	Communication with the assessor in both outcomes of the *Interactive Multimedia* unit and Outcome 1 in *Website Graphics*.
Numeracy	4	Writing CSS throughout all the units. Writing client-side code during Outcome 2 in the *Interactive Multimedia* unit.
Information and Communication Technology (ICT)	5	Use of web authoring throughout all the units and graphics packages in the *Website Graphics* unit.
Problem Solving	5	Writing HTML and CSS coding throughout all the units. Programming in Outcome 2 in the *Interactive Multimedia* unit.
Working with Others	3	Collaborative working opportunity for Outcome 2 in the *Interactive Multimedia* unit.

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														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HW52 45	Computing: Website Design and Development	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
H614 45	Computing: Website Graphics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HW51 45	Computing: Interactive Multimedia	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

5.2 Mapping of National Occupational Standards (NOS) and/or trade body standards

Code	Unit title	National Occupational Standard													
		SKSIM19	SKSIM21	SKSIM22	ESKIDIS1	ESKIDIS2	ESKIDIS3	ESKIMM1	ESKIMM2	ESKIMM3	ESKIDTP1	ESKIDTP2	ESKITU071	ESKITU072	ESKITP4062
HW52 45	Computing: Website Design and Development	X	X								X	X		X	X
H614 45	Computing: Website Graphics	X	X		X	X	X	X	X	X	X	X			X
HW51 45	Computing: Interactive Multimedia		X	X				X	X	X			X		X

NOS Code	Title	Developer
SKSIM19	Use mark-up in interactive media products	Creative Skillset
SKSIM21	Use style sheets in interactive media products	Creative Skillset
SKSIM22	Use scripting languages in interactive media products	Creative Skillset
ESKIDIS1	Design and imaging software	e-skills UK
ESKIDIS2	Design and imaging software	e-skills UK
ESKIDIS3	Design and imaging software	e-skills UK
ESKIMM1	Multimedia software	e-skills UK
ESKIMM2	Multimedia software	e-skills UK
ESKIMM3	Multimedia software	e-skills UK
ESKIDTP1	Desktop publishing software	e-skills UK
ESKIDTP2	Desktop publishing software	e-skills UK
ESKITU071	Capture and manipulate multimedia content	e-skills UK
ESKITU072	Design and develop interactive digital content	e-skills UK
ESKITP4062	Human Computer Interaction/Interface (HCI) Design	e-skills UK

5.3 Mapping of Core Skills development opportunities across the qualification

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
HW52 45	Computing: Website Design and Development	S3		S3			E5	E5	E5	E5	E5		
H614 45	Computing: Website Graphics	S3		S3			S5	S5	S5	S5	S5		
HW51 45	Computing: Interactive Multimedia	S3		S3	S4		S5	S5	E5	S5	S5	S3	

5.4 Assessment strategy for the qualification

<table>
<tr><th rowspan="2">Unit</th><th colspan="5">Assessment</th></tr>
<tr><th>Outcome 1</th><th>Outcome 2</th><th>Outcome 3</th><th>Outcome 4</th><th>Outcome 5</th></tr>
<tr><td rowspan="2">Computing: Website Design and Development</td><td colspan="4">Closed-book test</td><td></td></tr>
<tr><td colspan="5">Supervised open-book practical assignment</td></tr>
<tr><td>Computing: Website Graphics</td><td>Closed-book test</td><td colspan="2">Supervised open-book practical assignment</td><td colspan="2"></td></tr>
<tr><td rowspan="2">Computing: Interactive Multimedia</td><td colspan="2">Closed-book test</td><td colspan="3" rowspan="2"></td></tr>
<tr><td colspan="2">Supervised open-book practical assignment</td></tr>
</table>

6 Guidance on approaches to delivery and assessment

NPA Web Design consists of three mandatory units. This is a practical course and should be delivered in that context. Although it is a practical course, each unit will require underpinning knowledge from learners to be able to meet the outcomes within. This underpinning knowledge should be delivered before learners begin the practical activities.

NPA Web Design is the starting point for potential web designers and developers. The aim of the award is to develop the essential skills required to work in the web design and development sector. Learners undertake three units that will steer them through the building blocks of web design and development: HTML and CSS, the use of images and graphics on websites, and how websites are extended by integrating client-side scripting to add interactivity.

It is recommended that learners begin with *HW52 45 Computing: Website Design and Development* to develop their basic web authoring skills. It is then advised they follow this with *H614 45 Computing: Website Graphics* to develop their knowledge in the use of graphics within web design. The final unit learners undertake should be *HW51 45 Computing: Interactive Multimedia*. This unit relies on learners' previously developed web authoring skills and teaches them how to extend these skills by adding computer programming code to enhance their websites.

All three units could be assessed using one single project that covers all the outcomes, but this is at the assessor's discretion. For example, learners can be assessed developing a website containing only text during *HW52 45 Computing: Website Design and Development*. Learners can then be assessed creating graphics for this website to fulfil the outcomes in the *H614 45 Computing: Website Graphics* unit. Finally, learners can be assessed extending this website by adding client-side scripting to fulfil the outcomes for the *HW51 45 Computing: Interactive Multimedia* unit.

6.1 Sequencing/integration of units

NPA Web Design consists of three units. It is advised that the units are delivered in the following order:

1 *Computing: Website Design and Development*
2 *Computing: Website Graphics*
3 *Computing: Interactive Multimedia*

Product evidence from *Computing: Website Design and Development* can be re-used in the *Computing: Website Graphics* and *Computing: Interactive Media* units.

Computing: Website Design and Development (40 hours)

Delivery of this unit should navigate learners through the process of building a website using HTML and CSS. Learners will begin the process by gathering requirements through reading a given brief, and produce a plan. From that plan learners will produce a design for a website. Learners will then develop a website that matches their design. The last part of the unit involves testing and evaluating the website they build.

All five outcomes in this unit are assessed holistically using a single open-book practical assignment. The assessor should provide a brief that learners can use to complete all the outcomes. Learners should have access to online and offline resources throughout this unit. Most of the evidence produced will be practical. However, recorded oral evidence throughout the practical activities, or an end-of-unit test, will be used to assess learners' knowledge.

Computing: Website Graphics (40 hours)

This unit focuses on website graphics. Learners will capture, create and optimise their own graphics. Throughout this unit learners will develop an understanding of the usability and legal issues associated with using graphics on websites.

Outcome 3 requires the learners to build a web page to incorporate their optimised images and graphics. Learners could incorporate their images and graphics into the website they built in *HW52 45 Computing: Website Design and Development* unit, to pass this outcome.

Computing: Interactive Multimedia (40 hours)

At the time of starting this unit learners should be familiar with building web pages using HTML and CSS. This unit focuses on consolidating this knowledge. Learners have to add interactivity to a website using a client-side programming language. It is important to note that learners should not be reassessed on developing a website using HTML and CSS in this unit. Learners can use the website they designed and developed in *HW52 45 Computing: Website Design and Development*, or the assessor can supply a pre-built website. Both outcomes in this unit are assessed holistically using a single open-book practical assignment. The assessor should provide a brief that learners can use to complete all the outcomes. Learners should have access to online and offline resources throughout this unit. Most of the evidence produced will be practical. However, recorded oral evidence throughout the practical activities, or an end-of-unit test, will be used to assess learners' knowledge.

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.

More information and guidance on the *Recognition of Prior Learning* (RPL) may be found on our website **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

Leaners may progress to external qualifications. Suitable awards for progression include:

- NPA in Computer Networks and Systems SCQF level 5
- NPA in Digital Media Animation SCQF level 5
- NPA in Computers and Digital Photography SCQF level 5
- NPA in Cyber Security SCQF level 5/6
- NPA PC Passport SCQF levels 5/6
- National 5 Computing Science
- Higher Computing Science

This is by no means an exhaustive list. There are many other appropriate full/part-time courses at SCQF levels 5 and above in a wide range of subject areas.

The most relevant National Certificate (NC) programme to progress to is NC Computing with Digital Media. The NPAs are embedded within that award so articulating learners will have at least three credits towards the NC qualification (see Section 6.2.3/4).

6.2.2 Professional recognition

There is no professional recognition for these awards.

6.2.3 Transitional arrangements

The revised units will replace the existing units in August 2020. Until that time, the following transitional framework will be used for learners who possess units in the existing award.

National Progression Award in Web Design at SCQF level 5 (transitional framework)

4 code	2 code	Unit title	SQA credit	SCQF credit points	SCQF level
H614	45	Computing: Website Graphics	1	6	4
HW52	45	Computing: Website Design and Development **or**	1	6	4
HW51	45	Computing: Interactive Multimedia **or**	1	6	4

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

6.2.4 Credit transfer

The following table defines the credit transfer arrangements between the 'old' and 'new' units.

Existing units		Revised units	
F180 11	Computing: Interactive Multimedia for Website Development	HW51 45	Computing: Interactive Multimedia
F182 11	Computing: Website Design and Development	HW52 45	Computing: Website Design and Development

The credit transfer is full and two-way. Learners who possess either existing or revised units can use them (in combination) to contribute to the group award.

6.3 Opportunities for e-assessment

If evidence is produced by means of an e-portfolio, learners are required to collate a portfolio of evidence which may take a variety of digital forms, eg text, graphics, web pages, video, audio clips. This may be stored in an appropriate online platform.

6.4 Support materials

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

6.5 Resource requirements

This unit should be delivered by a computing specialist, who is a competent programmer, with a good understanding of current web design standards.

Learners will need access to a computer equipped with an advanced text editor and at least two different web browsers during all three units. To undertake the H614 45 *Computing: Website Graphic*s unit learners will also need access to photo editing and/or vector graphics software.

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**.

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)**.

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:

- candidates 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 candidates 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**.

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

Version Number	Description	Date

Acknowledgement

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

9 General information for learners

This section will help you decide whether this is the qualification for you by explaining what the qualification is about, what you should know or be able to do before you start, what you will need to do during the qualification and opportunities for further learning and employment.

NPA Web Design focuses on three important areas of web design and development: HTML and CSS coding, graphics, and client-side scripting. The award was developed as a springboard for future web designers and developers. It consists of three units, each focusing on a different area.

To achieve this qualification, you will need to become competent in developing websites by progressing through key stages of the website development process.

Computing: Website Design and Development focuses on developing HTML and CSS. You will analyse a brief, identify the purpose of the website and the key audience, and then produce requirements. After this stage you will produce a website design, before progressing onto developing your website. After your website is complete you will test and evaluate it.

The website you produce will be assessed as a practical assignment. Your knowledge may be assessed using an end-of-unit test; your teacher/lecturer will decide this.

Computing: Website Graphics focuses on the man technical aspects of producing graphics for websites. This includes learning about the uses of graphics and digital images in websites. You will learn about the different graphical file formats, the appropriate use of each, and how to optimise graphics for quality and performance.

Throughout this unit you will develop practical skills in creating graphics and optimising digital images for use on websites. You will learn how to incorporate graphics into web pages and ensure the graphics display as expected.

To achieve this unit you will be assessed on your ability to identify and describe the technical aspects of graphics, and carry out a practical assessment where you will test web pages that include optimised graphics and digital images you create.

Computing: Interactive Multimedia is the final unit of this award. At this stage of the course you will have experience in building websites using HTML and CSS. This unit will help you progress on to learning how to add interactivity to websites using client-side script.

You will be introduced to the key skills required to implement client-side scripting to further extend websites, including learning about client-side frameworks.

This unit will further prepare you for a career in web design by requiring you to research the usability issues web designers face when trying to bring a website to life, using client-side scripting. You will also develop essential computer programming skills in this unit.

This unit will be assessed using a practical assignment. You will also be required to provide evidence of your knowledge of client-side frameworks and technical terminology. You may produce this throughout the unit or at the end of unit delivery; your teacher/lecturer will decide this.

On completion of this award, you will be able to:

- Develop a plan for a website to a given brief
- Design a website to meet identified requirements
- Construct web pages to match a design
- Test the operation of the website produced
- Evaluate the developed website
- Describe the technical aspects of website graphics and digital images
- Produce graphics for a given website brief
- Create a web page with optimised digital images and graphics for a given brief
- Research and identify the range of client-side options available at their disposal
- Identify and solve any usability issues relating to the implementation of client-side scripting
- Write HTML code to link client-side scrip to a website
- Write client-side script to add interactivity to a website
- Test computer-programming code in a variety of web browsers

Throughout the award you will also develop the following Core Skills:

- *Communication*
- *Numeracy*
- *Problem Solving*
- *ICT*
- *Working with Others*