

## Higher National Unit Specification

### General information for centres

**Unit title:** Design for Print: Digital Workflows and Desktop Publishing

**Unit code:** FOP8 34

**Unit purpose:** This Unit is designed to provide candidates with a broad knowledge of the theoretical concepts, principles and boundaries in the production of industry standard digital artwork for the printing process. It prepares candidates for this role by providing them with the underpinning knowledge needed to carry out this type of digital artwork preparation effectively. This Unit is suitable for those wishing to study print or those working in the print industry.

On completion of the Unit the candidate should be able to:

- 1 Apply typographic rules to the formatting of word processed files in a desktop publishing application.
- 2 Identify, create and edit the main image file types used in the print industry.
- 3 Generate industry standard files for remote proofing and printing.

**Credit points and level:** 1 HN Credit at SCQF level 7: (8 SCQF credit points at SCQF level 7\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

**Recommended prior knowledge and skills:** Access to this Unit will be at the discretion of the centre. There are no specific requirements; however it would be beneficial if candidates had practical computer skills and a basic knowledge of commercial print processes. This could be demonstrated by the achievement of an information technology or desktop publishing Unit or relevant work experience.

**Core Skills:** There are opportunities to develop the Core Skill of Information Technology in this Unit at SCQF Level 5, although there is no automatic certification of Core Skills or Core Skills components.

**Context for delivery:** If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

## General information for centres (cont)

**Assessment:** The Unit should be assessed holistically by a portfolio of evidence which includes: pro formas, record sheets, digital files and digital proofs. Much of the evidence should arise naturally out of the task/s set for the candidate.

The Unit should be assessed by means of a single project covering all three Outcomes. Where this is not possible, Outcomes may be assessed individually.

## **Higher National Unit specification: statement of standards**

**Unit title:** Design for Print: Digital Workflows and Desktop Publishing

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The sections of the Unit stating the Outcomes, knowledge and/or skills, and evidence requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

### **Outcome 1**

Apply typographic rules to the formatting of word processed files in a desktop publishing application

#### **Knowledge and/or skills**

- ◆ Typographic terminology
- ◆ Interpretation of typographic design specification
- ◆ Typographic rules

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can analyse and complete a tutor-set practical exercise which will demonstrate:

- ◆ understanding the correct use of technical terminology
- ◆ accurate interpretation of typographic design specifications
- ◆ the ability to apply the main typographic rules

Assessment should be carried out under open-book supervised conditions.

A final portfolio of work should be produced which includes final proofs together with a finished typographic layout and all corrected drafts.

#### **Assessment guidelines**

The assessment of this Outcome may be combined with the other Outcomes by using a single project that covers the knowledge and skills for all of the Outcomes. Where this is not possible each Outcome may be assessed in isolation. Candidates should draw on experience, textbooks, presentations and handouts to interpret the design specification.

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Design for Print: Digital Workflows and Desktop Publishing

### **Outcome 2**

Identify create and edit the main image file types used in the print industry

#### **Knowledge and/or skills**

- ◆ Bitmap and vector graphic files
- ◆ Cropping, scaling and resampling techniques
- ◆ Tone and colour values
- ◆ Basic retouching techniques
- ◆ Output formats for print
- ◆ Create images for print

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their knowledge and skills by showing that they can complete a practical assignment covering editing of three bitmap images and creation of one vector image to meet a given specification.

Assessment should be carried out under open-book, supervised conditions.

An observation schedule should be used to record candidate performance.

#### **Assessment guidelines**

The assessment and editing of images may be recorded on pro formas and included in the portfolio of evidence for the Unit. Images should be created based on a design specification which allows import to Desktop Publishing packages. All files may be saved and available in digital format. The assessment of this Outcome may be combined with the other Outcomes by using a single project that covers the knowledge and skills for all of the Outcomes. Where this is not possible the Outcome may be assessed in isolation. Candidates should draw on experience if applicable, textbooks and handouts to evaluate, modify and create the required images.

### **Outcome 3**

Generate industry standard files for remote proofing and printing

#### **Knowledge and/or skills**

- ◆ Preflight requirements
- ◆ File identification and collection for remote output
- ◆ File generation techniques for soft proof, hard proof and print quality output
- ◆ Contract proof requirements and generation techniques

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their knowledge and skills by showing that they can:

## **Higher National Unit specification: statement of standards (cont)**

### **Unit title:** Design for Print: Digital Workflows and Desktop Publishing

- ◆ Correctly use five preflight facilities: colour mode, spot colour, resolution, hairline, font
- ◆ Identify and collect all files required for remote printing of a single document
- ◆ Generate four portable document format files for proofing and one hard proof

The candidate should produce a preflight report, packaged files for remote printing, a soft proof and a hard proof.

Assessment should be carried out under open-book, supervised conditions.

An observation schedule should be used to record candidate performance.

### **Assessment guidelines**

The assignment may include the generation of preflight reports, packaged files for remote printing, a soft proof and a hard proof, all of which may be included in the final portfolio of evidence. The assessment of this Outcome may be combined with the other Outcomes by using a single project that covers the knowledge and skills for all of the Outcomes. Where this is not possible the Outcome may be assessed in isolation. Candidates should draw on experience if applicable, textbooks presentations and handouts to generate the evidence required for the Outcome.

## Administrative Information

<b>Unit code:</b>	F0P8 34
<b>Unit title:</b>	Design for Print: Digital Workflows and Desktop Publishing
<b>Superclass category:</b>	KH
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### History of Changes:

Version	Description of change	Date

**Source:** SQA

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## **Higher National Unit specification: support notes**

### **Unit title:** Design for Print: Digital Workflows and Desktop Publishing

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

### **Guidance on the content and context for this Unit**

This Unit was developed as part of the HNC/HND Printing where it is a mandatory Unit. It is intended for those who are taking a qualification at Higher National level or have experience in this or related fields and wish to further their knowledge and experience.

The Unit is primarily intended to prepare candidates to undertake the preparation of digital artwork for printing processes. The Unit adopts a structured approach to the identification, evaluation, formatting, modification, generation and integration of digital files to ensure that the preparation of digital artwork matches design specifications and output requirements. It prepares candidates for this role by providing them with the underpinning knowledge needed to carry out this type of task effectively. It is primarily intended for candidates in printing, publishing, graphic design and photography. It would also be relevant to those with appropriate work experience such as the use of desktop publishing or computer graphic packages. Candidates will be expected to exercise a degree of autonomy in carrying out the tasks required for the Unit.

There are no prescriptive software and hardware facilities. However, tasks should replicate working practices for artwork preparation in terms of software and hardware used in the printing industry. The relevant facilities should be available to the candidate throughout the duration of the Unit. In some cases the candidate may choose to create their own digital files, eg by taking photographs with a digital camera or scanning artwork. Although these activities could enhance the learning process, they are not directly assessable as part of the Unit.

### **Guidance on the delivery and assessment of this Unit**

The Unit is practical in nature and formal delivery should be kept to a minimum. Candidates are encouraged to gain as much practical experience as possible to explore the features of the software and hardware.

The Unit is expressed in three separate Outcomes but may be assessed holistically. Assessment will normally be by single assessment based on a project. Candidates should be provided with all relevant files, however it is acceptable for candidates to provide their own bitmap files where this is possible (subject to lecturer approval).

The following notes give some additional information on each Outcome:

#### **Outcome 1**

Candidates should undertake a practical exercise implementing the main typographic principles which involves:

## Higher National Unit specification: support notes (cont)

### Unit title: Design for Print: Digital Workflows and Desktop Publishing

- ◆ Interpretation of a typographic design specification.
- ◆ Import of word processed files into a desktop publishing document.
- ◆ Knowledge of typography to accurately render a predefined typographic layout with respect to type style, size, leading and formatting.

Candidates should be able to use the point measurement system, distinguish between serif and sans serif typefaces, import raw text and set up style sheets in a DTP program to set font, leading, size, style, kerning, alignment and indent.

#### Outcome 2

Candidates should undertake practical assignment/s covering image manipulation and creation which involves:

- ◆ Bitmap and vector images.
- ◆ Assessment and editing of bitmap images for tone and colour reproduction.
- ◆ Cropping, scaling and resampling of bitmap images to conform to a predefined layout design.
- ◆ Creation of vector artwork which meets the requirements of a predefined design brief.
- ◆ Generation of bitmap and vector file formats suitable for import into a desktop publishing program.

The editing of bitmap files should be limited to non-creative techniques, these could include cropping, re-sampling, scaling, tone and colour editing, blemish retouching, noise reduction, sharpening and saving in required file format for import to a desktop publishing application.

The design brief for the creation of a vector file should include the use of text manipulation techniques and simple drawing tools.

#### Outcome 3

Candidates should undertake practical assignment/s covering file preparation for proofing and print this will include:

- ◆ Creation of a preflight profile which meets the requirements of set print criteria.
- ◆ Generation of a preflight report detailing faults in a predefined file.
- ◆ Generation of a preflight report after the candidate has corrected the predefined file.
- ◆ Creation of a file folder containing all digital files required for remote printing.
- ◆ Generation of Portable Document Format with preflight reports suitable for soft proof, hard proof and print
- ◆ Production of an accurate hard proof.

DTP files may be flightchecked using either the preflight facility within a DTP package or stand-alone preflight software.

Data collected for output should include native DTP file, all linked images (bitmap and vector) and all used fonts.

PDFs should be flightchecked using either the preflight facility within a PDF package or stand-alone preflight software.



## **Higher National Unit specification: support notes (cont)**

### **Unit title:** Design for Print: Digital Workflows and Desktop Publishing

The Unit is expressed in three separate Outcomes but should be assessed holistically. Assessment will normally be by single assessment based on a project that will be undertaken as and when appropriate. Candidates should be provided with all relevant files, however it is acceptable for candidates to provide their own bitmap files where this is possible (subject to lecturer approval).

In some circumstances it may be appropriate to use shorter stand-alone assessments for each Outcome. Assessments of this nature could also be used for reassessment purposes.

#### ***Opportunities for developing Core Skills***

This Unit offers opportunities to further develop and extend the Core Skill Using Information Technology at SCQF Level 5. The Unit does not seek to embed the skill, as development of all elements is seen as a likely pre requirement of the Unit, transferring data to different types of file manipulating sizes colours styles and using more than one software package.

### **Open learning**

This Unit would be suitable for open learning providing that the candidate has access to a suitable computer with internet access and pre-press software.

If this Unit is delivered by open or distance learning methods, additional planning and resources may be required for candidate support, assessment and quality assurance. A combination of new and traditional authentication tools may have to be devised for assessment and reassessment purposes like oral questioning or use of webcam to record performance.

For further information refer to the SQA guide, Assessment and Quality Assurance of Open and Distance Learning ([www.sqa.org.uk](http://www.sqa.org.uk)).

### **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. For information on these, please refer to the SQA document *Guidance on Alternative Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs*, which is available on SQA's website: [www.sqa.org.uk](http://www.sqa.org.uk).

## **General information for candidates**

### **Unit title:** Design for Print: Digital Workflows and Desktop Publishing

This Unit is designed to enable you to develop the skills and techniques required to prepare digital artwork and type for printing processes. It has four main areas:

- ◆ Analysis of a typographic design specification and use typographic techniques to implement it in a desktop publishing application.
- ◆ Evaluation and editing of digital image files for output via a desktop publishing application, integrate digital images in a desktop publishing application to produce a unified page layout.
- ◆ Evaluation of a final page layout, and revision and amendment of it as required.
- ◆ Output of a fully functional soft proof and hard proof.

Assessment may be either by means of a single project covering all of the Outcomes or by individual assessment for each of the three Outcomes.

In undertaking this Unit you will also develop your IT skills in desktop publishing, vector graphics, digital image processing and flightchecking.