



National Unit specification: general information

Unit title: Computer Applications for Print: An Introduction
(SCQF level 5)

Unit code: FV52 11

Superclass: KH

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Summary

In this Unit candidates will be introduced to a range of computer applications and their uses within printing pre-press. The aim of the Unit is to make candidates aware of the computer applications available, as well as their contents, purpose and suitability. It is designed for those students who require the basic knowledge and skills to use computer applications programs within printing. This Unit is a mandatory Unit of the National Certificate in Screen Printing at SCQF level 5. It can also be delivered as a freestanding Unit.

This Unit is suitable for candidates who are already undertaking a screen printing or creative print course and is aimed at school leavers and adult returners. It is also suitable for those who already work in the printing industry or are interested in doing so. Candidates with an interest in art and design for decorative printing and textile application would benefit from taking this Unit.

Outcomes

- 1 Describe the sources, contents and purpose of computer application packages used in printing pre-press.
- 2 Demonstrate the functions of a selection of computer application packages used in printing pre-press and output artwork.

Recommended entry

Entry to the Unit is at the discretion of the centre. The Unit may be suitable for candidates with no formal computer qualifications

National Unit specification: general information (cont)

Unit title: Computer Applications for Print: An Introduction

Credit points and level

1 National Unit credit at SCQF level 5: (6 SCQF credit points at SCQF level 5*)

**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.*

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes of this Unit specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

National Unit specification: statement of standards

Unit title: Computer Applications for Print: An Introduction

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Describe the sources, contents and purpose of computer application packages used in printing pre-press.

Performance Criteria

- (a) Identify sources of computer application packages used in printing.
- (b) Describe the contents of computer application packages used in printing.
- (c) Describe the purpose of computer application packages used in printing.

Outcome 2

Demonstrate the functions of a selection of computer applications packages used in printing pre-press and output artwork.

Performance Criteria

- (a) Demonstrate the functions of a vector graphics computer application package used in printing pre-press and output artwork
- (b) Demonstrate the functions of a bitmap graphics computer application package used in printing pre-press and output artwork.
- (c) Demonstrate the functions of a desktop publishing computer application package used in printing pre-press and output artwork.

National Unit specification: statement of standards (cont)

Unit title: Computer Applications for Print: An Introduction

Evidence Requirements for this Unit

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

Describe the sources, contents and purpose of computer application packages used in printing pre-press.

Performance Criteria

- (a) Identify sources of computer application packages used in printing.
- (b) Describe the contents of computer application packages used in printing.
- (c) Describe the purpose of computer application packages used in printing.

The evidence for Outcome 1 of this Unit must be produced under closed-book supervised conditions. Written and/or oral evidence will be produced to demonstrate that candidates have achieved all of the Outcomes and Performance Criteria and will include:

- ◆ The identification of the sources of computer application packages used in printing pre-press. Sources of packages to include:
 - manufacturers
 - in-house
 - bureaux
 - high street
- ◆ A description of the contents of computer application packages used in printing pre-press. Contents to include:
 - installation guide
 - tutorial
 - reference guide
- ◆ In addition, the description must include the function of each section contained within installation guides:
 - set up for new printer
 - tutorial — demonstration exercises
 - reference guide — command/instruction formats and other information appropriate to this section
- ◆ A description of the purpose of computer application packages used in printing to include:
 - vector graphics
 - bitmap graphics
 - desktop publishing software

Outcome 2

Product/performance evidence will be provided to demonstrate that candidates have achieved all of the Outcomes and Performance Criteria.

National Unit specification: statement of standards (cont)

Unit title: Computer Applications for Print: An Introduction

Evidence for Outcome 2 will be provided under open-book conditions. Product/performance evidence will be gathered throughout delivery of the Unit, with progress monitored by teachers/lecturers on an ongoing basis.

Evidence will include:

Correct use of a minimum of three computer application packages used in printing to produce output artwork of an acceptable industry standard. These must include:

- ◆ Vector
- ◆ Bitmap
- ◆ Desktop publishing (DTP)

Evidence may be generated by the use of practical assignments.

National Unit specification: support notes

Unit title: Computer Applications for Print: An Introduction

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 is aligned to the following National Occupational Standard (NOS) Units from Proskills and Skillset:

- ◆ J26 Manage Digital Files
This Standard is about the preparation of visual material for publication on any platform. It requires an understanding of the techniques of digital imaging and digital processing. It involves editing images for editorial and creative purposes. This Unit maps well to Outcome 2 of *Computer Applications for Print: an Introduction*, where learners are asked to demonstrate the functions of a bitmap graphics computer application package used in Printing pre-press.
- ◆ Unit MPR34 Design and Produce Creative Digital Colour Artwork for Print (Unit 711 — Proskills)
This Unit covers the design and production of digital artwork for print using software such as desktop publishing, electronic page composition or graphic illustration. The Unit is intended for designers working in a production environment whose role involves working with and advising customers on appropriate specifications for artwork for print and producing finished digital artwork to agreed or amended specifications. This Unit maps well to Outcome 2 of *Computer Applications for Print: an Introduction* where learners are asked to demonstrate the functions of a vector and DTP computer application package used in printing pre-press.
- ◆ PI — 22 Plan, Setup and Control the Digital Workflow
This Unit covers the planning, set-up and control of digital workflow to maximise effectiveness and efficiency. The digital workflow covers such things as the purpose of the software, its set-up, the compatibility of hardware components, the efficient setting-up and linking of hardware components, and the creation and use of automated procedures for optimising the efficiency of software. This Unit maps well to Outcome 1 of *Computer Applications for Print: an Introduction* where learners are asked to describe the sources, contents and purpose of computer application packages used in Printing pre-press.

In Outcome 1 of this Unit candidates should know the sources and contents of computer application packages used in printing pre-press, as well as understand their purpose.

Outcome 2 of this Unit could be delivered through practical demonstrations by the tutor and learners should be encouraged to use the software in a series of instructed exercises once they have become familiar with the interface. The exercise will take the learner through a number of steps leading to output of finished files. This would enable them to output artwork in a variety of methods.

National Unit specification: support notes (cont)

Unit title: Computer Applications for Print: An Introduction

This is a mandatory Unit within the National Certificate in Screen Printing at SCQF level 5 and should be delivered in the early stages of the programme. The Unit will introduce learners to both creative and output computer applications such as vector, bitmap and desktop publishing software as well as future developments. Through use of the various computer applications students will gain an understanding of the processes of originating and preparing files for print production.

This Unit could also be delivered as part of a programme of Units in Creative Printmaking or Art and Design.

Guidance on learning and teaching approaches for this Unit

In Outcome 1 candidates should know the sources and contents of computer application packages used in printing pre-press, as well as understand their purpose. This could be delivered through practical demonstrations by the tutor with students following on by researching, via the internet, the sources of software used in the centre. They could then investigate the availability of competitive software and lower cost more basic software for those on limited budgets.

Outcome 2 of this Unit could be delivered through practical demonstrations by the tutor and learners should be encouraged to use the software in a series of instructed exercises once they have become familiar with the interface. The exercise will take the learner through a number of steps leading to output of finished files. This would enable them to output artwork in a variety of methods.

Guidance on approaches to assessment for this Unit

This Unit is both theoretical and practical.

Outcome 1 should be carried out using a written/oral closed-book assessment by means of an integrated assessment where students would describe the sources, contents and purpose of computer application packages used in printing pre-press.

Outcome 2 of this Unit will be assessed by learners using the software in a series of exercises once they have become familiar with the interface. Candidates will be required to create and output artwork in a variety of formats. Examples of this could be:

- ◆ digital files (native vector, bitmap and DTP and/or soft proofs in PDF form)
- ◆ prints (monochrome and/or colour)
- ◆ films
- ◆ image carriers used in printing (screens and/or plates)

The lecturer could record progress by means of a checklist, which could be submitted as part of the evidence in addition to the quality and coverage of software techniques of the end product.

The work may be presented in any of the formats stated.

National Unit specification: support notes (cont)

Unit title: Computer Applications for Print: An Introduction

The integration of *ICT* Core Skill elements into the Unit assessments will be done by students demonstrating the functions of a selection of computer applications packages used in printing pre-press to perform specific tasks in Outcome 2.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

Opportunities for developing Core Skills

As candidates are doing this Unit they will be developing aspects of the Core Skill in *Information and Communication Technology (ICT)* in Processing Information at SCQF level 5.

Candidates will use ICT to carry out a range of processing tasks:

- ◆ Demonstrate the functions of a selection of computer applications packages used in printing pre-press.
- ◆ Use appropriate computer applications packages to perform specific tasks.

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

History of changes to Unit

Version	Description of change	Date

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