GQA LEVEL 2 NVQ CERTIFICATE IN PRE PRESS FOR PRINT

Qualification Number
600/0608/0

Welsh Qualification Number
C00/1250/2

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PERSONAL COMPETENCE SUMMARY

Name	Company/Centre
Job Title	GQA Registration Number

UNITS OF COMPETENCE				ASSESSOR SIGNATURE Performance and knowledge assessment completed and supplemented with evidence overtime	DATE
Unit Number	**Mandatory Units**	**Level**	**Credit**		
Y/601/9389 PR001	Maintain Health and Safety within a Print Related Working Environment	2	4		
H/601/9394 PR997	Communicating and Working with Others in the Print Working Environment	2	3		
R/601/9407 PR996	Knowledge of the Organisations Printing Processes and related information	2	4		
Digital Printing (Mandatory) (Pathway - Mandatory - Credits: 8 Minimum)					
F/601/9399 PR250	Keep Equipment Clean and in Working Order for use in the Printing Industry	2	4		
R/502/8503 PR227	Operate digital printing machines	2	4		
Digital Printing (Optional) (Pathway - Optional - Credits: 1 Minimum)					
Pre-Press (Mandatory) (Pathway - Mandatory - Credits: 4 Minimum)					
F/601/9399 PR250	Keep Equipment Clean and in Working Order for use in the Printing Industry	2	4		
Pre-Press (Optional) (Pathway - Optional - Credits: 4 Minimum)					
Digital Artwork (Mandatory) (Pathway - Mandatory - Credits: 5 Minimum)					
M/601/9396 PR710	Create Digital Artwork for Print	2	5		
Digital Artwork (Optional) (Pathway - Optional - Credits: 4 Minimum)					

RELIABLE EVIDENCE: The forms of evidence available include (mark as appropriate)

Observation in the workplace	☐	Assessment of knowledge	☐
Records of prior experience	☐	Witness statement(s)	☐
Testimonial(s)	☐	Photographic evidence	☐
Work records	☐	External testing	☐

Passport Style Candidate Photo (Mandatory)

COMPETENCE COMPLETION SIGNATURES

By signing here, the Candidate and Assessor confirm that evidence presented is authentic and that the assessments took place in accordance with the relevant assessment strategy. Details of the assessments and evidence must be recorded in the assessment decision record/summaries at the end of each unit.

	Name and Signature	Date
Candidate		
Lead Assessor		
IQA		
EQA		

Introduction to the Qualification

Who is this Qualification for?

This qualification is aimed at those who work within a commercial production environment, with responsibilities for Digital Artwork, Digital Pre-Press or Digital Print Production. The standards cover the most important aspects of the job. This qualification is at Level 2, and should be taken by those who are fully trained to deal with routine assignments. Candidates should require minimum supervision in undertaking the job. A further qualification at Level 3 is also available. In addition, there are qualifications available to cover Machine Printing and Print Finishing.

Candidates for this qualification will need to contribute to the Company objectives, follow Health and Safety guidelines and in addition will have varied duties according to the relevant pathway, for example:

Those involved in Digital Printing will primarily be involved in:
- Operating Digital Printing machines
- Equipment maintenance

Those involved in Pre-Press will primarily be involved in:
- Producing image carriers for output
- Equipment maintenance

Those involved in Digital Artwork will primarily be involved in:
- Creating digital artwork for print
- Handling digital files
- Working with digital images

Candidates are likely to have jobs entitled:
- Desk Top Publisher/Artworker
- Pre-Press Operatives
- Digital Printer

What is required from candidates?

GQA Qualifications are made up of a number of units that have a credit value. These credits must be achieved in the correct combination from mandatory and optional units, and in some cases from specific pathways. This qualification includes 3 pathways for Digital Printing, Pre-Press and Digital Artwork. To achieve the qualification, candidates must complete the 3 mandatory units and then the required credits from one of the 3 pathways. The group of optional units is intended to allow all those involved in Pre-Press for Print to achieve the full qualification: when choosing from the optional units it is important to ensure the units selected are appropriate and achievable within your job role. This qualification has a minimum credit value of 19 credits. Qualifications are now required to indicate the total qualification time (TQT), this is to show the typical time it will take someone to attain the required skills and knowledge to meet the qualification criteria, this qualification has a TQT of 190 hours. Qualifications are also required to indicate the number of hours of teaching someone would normally need to receive in order to pass the qualification. These are referred to as Guided Learning Hours (GLH). The GLH for this qualification is 113.

Unit Ref	Title	Level	Credit
Mandatory Units (Candidates must achieve all credits from this group) (Mandatory - Credits: 11 Minimum)			
Y/601/9389	Maintain Health and Safety within a Print Related Working Environment	2	4
PR001			
H/601/9394	Communicating and Working with Others in the Print Working Environment	2	3
PR997			
R/601/9407	Knowledge of the Organisations Printing Processes and related information	2	4
PR996			
Digital Printing (Mandatory) (Pathway - Mandatory - Credits: 8 Minimum)			
F/601/9399	Keep Equipment Clean and in Working Order for use in the Printing Industry	2	4
PR250			
R/502/8503	Operate digital printing machines	2	4
PR227			
Digital Printing (Optional) (Pathway - Optional - Credits: 1 Minimum)			

Y/502/8504	Send and Receive Digital Files	2	1
PR124			
H/601/9430	Set and run booklet making machinery	2	5
PR356			
A/601/9417	Set and Run Guillotines	2	5
PR357			
Y/601/9392	Materials Handling, Transportation and Storage within the Print Working Environment	2	4
PR312			
Y/601/9439	Set and Run multi-knife trimming machinery	2	4
PR364			
R/502/8534	Preflight Digital Files	3	4
PR130			
J/502/8532	Manage Colour Reproduction In Digital Pre-Press	3	4
PR122			
Pre-Press (Mandatory) (Pathway - Mandatory - Credits: 4 Minimum)			
F/601/9399	Keep Equipment Clean and in Working Order for use in the Printing Industry	2	4
PR250			
Pre-Press (Optional) (Pathway - Optional - Credits: 4 Minimum)			
D/502/8505	Make photopolymer plates for flexographic printing	2	4
PR105			
K/601/9400	Make lithographic printing plates	2	4
PR251			
K/502/8507	Make Gravure Cylinders	2	4
PR106			
M/502/8508	Prepare Stencils for Printing	2	4
PR219			
L/502/8502	Output Digital Image Carriers for Print	2	8
PR129			
Y/502/8504	Send and Receive Digital Files	2	1
PR124			
Digital Artwork (Mandatory) (Pathway - Mandatory - Credits: 5 Minimum)			
M/601/9396	Create Digital Artwork for Print	2	5
PR710			
Digital Artwork (Optional) (Pathway - Optional - Credits: 4 Minimum)			
M/502/8511	Plan and Produce Edited Images	3	4
PR127			
Y/502/8504	Send and Receive Digital Files	2	1
PR124			
L/502/8502	Output Digital Image Carriers for Print	2	8
PR129			
A/502/8513	Use of scanning techniques to create digital images	2	6
PR125			
D/502/8505	Make photopolymer plates for flexographic printing	2	4
PR105			
K/601/9400	Make lithographic printing plates	2	4
PR251			
K/502/8507	Make Gravure Cylinders	2	4
PR106			

M/502/8508 PR219	Prepare Stencils for Printing	2	4
R/502/8534 PR130	Preflight Digital Files	3	4
J/502/8532 PR122	Manage Colour Reproduction In Digital Pre-Press	3	4

Achieving the combination of Mandatory units and the correct choice of Optional credits will mean the qualification has been completed and GQA will provide the Diploma with the qualification title. Where a candidate has completed additional credits the Diploma will list these as "additional credits", in cases where the candidate has not completed the full qualification and will not go on to do so, a Certificate of credit can be issued for the credits achieved.

Assessment guidance:

Evidence should show that you can complete all of the learning outcomes for each unit being taken.

Types of evidence:

Evidence of performance and knowledge is required. Evidence of performance should be demonstrated by activities and outcomes, and should be generated in the workplace only, unless indicated under potential sources of evidence (see below). Evidence of knowledge can be demonstrated though performance or by responding to questions.

Quantity of evidence:

Evidence should show that you can meet the requirements of the units in a way that demonstrates that the standards can be achieved consistently over an appropriate period of time.

Potential sources of evidence:

The main source of evidence for each unit will be observation of the candidate's performance and knowledge demonstrated during the completion of the unit. This can be supplemented by the following types of physical or documentary evidence:

- Accident books/reporting systems
- Notes and memos
- Safety records
- Photographic/video evidence
- Training records/reviews
- Job bags/works instruction tickets
- Job samples
- Customer feedback (internal or external)
- Witness testimonies
- Production records

Examples of evidence could include:

- Assessor observation reports
- Screen dumps
- Printed output (good and fault copies)
- Proof copies
- Witness testimonies
- Job bags/work instruction tickets/production records
- Examples of maintenance and/or records
- Examples of component replacement and/or records
- Use of equipment inc PPE
- Emergency procedures, risk assessments
- Accident reporting systems
- Tutor and employer feedback/reviews
- Photographic evidence
- Professional discussion
- Responses to oral and written questions
- Written narrative

Please Note that photocopied or downloaded documents such as manufacturers' or industry guidance, H&S policies, Risk Assessments etc, are not normally acceptable evidence for GQA qualifications unless accompanied by a record of a professional discussion or Assessor statement confirming candidate knowledge of the subject. If you are in any doubt about the validity of evidence, please contact your GQA EQA.

GQA Qualification Implementation Requirements covering Centre Approval, Candidate Assessment and ongoing Quality Assurance

This document indicates the requirements of Approved Centres delivering GQA qualifications and / or units of credit.

1. Equality of Opportunity

Equality of access to fair and valid assessment is necessary for all candidates undergoing assessment. This may mean making reasonable adjustments to normal assessment methods for candidates with particular or special assessment requirements. Candidates work patterns should not become a barrier to assessment, the organisation of which may have to be flexible. In the same way, reasonable adjustment arrangements may be necessary for candidates with a disability. For example, a candidate who is unable, through disability, to produce oral or written evidence, may be allowed to use the method they normally use as a substitute for the required form of communication. Reasonable adjustments need to be approved by GQA.

2. Recognised/Approved Assessment Centres

2.1 Individual centres must be approved by GQA to offer specific qualifications and / or units of credit. A centre may be a single organisation or a partnership of two or more organisations. It may operate at a single location or have satellites. For further details see the GQA booklet "Guide to Centre Approval". The Centre Approval process is carried out by a GQA approved EQA. Each Centre must maintain a centre file. It is important to be clear what the steps in the assessment process are:

- plan evidence collection and opportunities for assessment
- collect evidence
- judge evidence
- determine whether sufficient evidence has been presented
- make an assessment decision and give feedback to the candidate

NB Any deviation from the norm must be approved by a GQA EQA

2.2 Assessors and Verifiers

All Assessors of candidate performance must be competent, to make qualitative judgements, both in the skills they are assessing and in the assessment of candidates and hold the appropriate Assessor national award. Assessor occupational knowledge related to the qualifications being assessed is essential and must be illustrated to GQA prior to approval.

IQA's are responsible for the quality assurance of the assessment process within a centre. They should have a relevant occupational background, be competent in internal verification and hold the IQA national award. It is recommended that IQA's work towards national recognition of assessor competence.

EQAs are responsible for ensuring accurate and consistent standards of assessment across centres, qualifications, units of credit and over time. They should have a relevant occupational background, be competent in external quality assurance and hold the relevant national external quality assurance award. GQA will approve and licence all individuals involved in the assessment and verification of its approved qualifications and / or units of credit. Individuals who are working towards the Assessor or IQA national awards can only be provisionally licensed. The judgement of provisional licence holders will need to be agreed/authorised by a fully qualified and GQA licensed individual who cannot carry out a dual role in relation to a specific candidate.

All GQA Assessors and Verifiers must undertake a minimum of 2 significant CPD activities in both occupational areas and assessment and verification. Reflective CPD records must be maintained and made available to GQA EQA's for review.

2.3 Centre Approval, Monitoring Reviews and Quality Assurance

The centre recognition/approval process is the start of a significant part of the awarding body's quality assurance system. The Approval process will begin with an EQA review of centre procedures to ascertain the potential centres ability to deliver GQA qualifications and / or units of credit. Centres will be expected to meet the relevant regulatory authority criteria for delivery of qualifications prior to initial approval; continued compliance with the criteria will be monitored through regular EQA visits. It is recommended that centre reviews are conducted at minimum every six months by a GQA EQA.

New or multi-site centres may be required to undertake quarterly or more frequent EV reviews to ensure that different

locations can be seen to satisfy the national requirements.
GQA will ensure that unacceptable barriers relating to the assessment and internal verification of candidates in small companies do not deny recognition of competence to competent young workers. In such circumstances, GQA will demonstrate that its quality assurance procedures remain sufficient and rigorous to ensure that the competence outcomes have standing and credibility in the occupational area.

Enhanced quality procedures to ensure consistency of assessment and verification will be necessary and will include:
• a high level of sampling of assessment decisions N.B. In some instances the EQA may visit each assessment location and qualification / unit of credit candidate (e.g. single candidates dispersed throughout different small companies on government funded programmes)
• an in-depth scrutiny of assessment plans, materials and records
• specific centre guidance aimed at the successful implementation of qualifications and / or units of credit in SMEs via approved centre partnerships. This can include guidance on the quantity and quality of valid, authentic, and transferable evidence expected to be attributed to individual candidates
• ensuring centres are following the requirements prescribed in any appropriate assessment strategies and applicable codes of practice
• the identification and publication of good practice in centres

As part of the Quality Assurance process Proskills require an Enhanced external quality assurance process. This will be in the form of 1 significant underpinning knowledge question answered by the candidate for each unit of the qualification. The questions will be decided by GQA, and guideline answers must be submitted for approval and once approved kept in the Centre File to allow independent assessment

3. Qualification / Unit of Credit Candidates

All candidates must register with a GQA recognised/approved centre. The centre must maintain appropriate candidate personal details for external audit purposes etc.
The centre will provide candidates with advice and guidance on how to prepare for assessment and allocate an Assessor who will assess candidate ability to meet the requirements of the relevant qualifications / unit of credit. It is the candidate's responsibility to demonstrate competence and to do this they must:
• prove they can consistently meet all the qualification and / or unit of credit criteria
• provide evidence from work, that they can perform competently in all the contexts specified in the qualification / unit of credit requirements
• prove that they have the knowledge and understanding required to perform competently, even where they have not provided evidence from the workplace

It is therefore critical that quality evidence is provided in a format to allow the Assessor to make a decision and for the IQA to audit/verify his/her decision.

4. Evidence

A qualification and / or credit is awarded when a person has achieved the necessary outcomes of the qualification and / or unit of credit.
The specific combination of units necessary to achieve a qualification is detailed in the qualification structure. Certificates of Unit Credit can be awarded when candidates achieve any one, or more, units from the qualification.
The evidence the candidate brings forward is primarily evidence of performance of what he/she can do, not just what he/she knows. The assessment criteria / qualification requirements are described within the qualification and / or unit of credit itself and can incorporate practical skills and knowledge.
The assessor's role is to judge each relevant item of evidence. Each must be judged against the qualification and / or unit of credit requirements. It is not sensible to collect evidence against individual criteria. Nor is it effective. If items of evidence were collected for each of the criteria, the candidate may have to produce many items of evidence, well above the number actually required. GQA recommend holistic assessment.

When judging each item of evidence, the assessor is deciding whether the evidence:
• is authentic – i.e. actually produced by the candidate
• meets the criteria
• relates as appropriate to a context defined within the qualification and / or unit of credit
• confirms that the candidate has the required underpinning knowledge

When the assessor makes a decision about the candidate's competence, he or she examines all the evidence available to determine:
• if the evidence, as a whole, covers all the evidence of achievement
• whether the evidence indicates consistency in competent performance
• whether there is enough evidence on which to base an inference of competence
The answer can only be:
• yes (the candidate is competent)

• no (the candidate is not yet competent)
• there is insufficient evidence to make a decision

Consistency means that the individual is likely to achieve the standard in their work role, in the different activities defined in the qualification and / or unit of credit over time and range of work. The assessor must judge how long a time period is enough to be confident that the candidate can perform reliably to the standard. Unsupported evidence i.e. based on a single assessment/visit will not normally prove consistency.

Performance evidence

Performance evidence can be what the individual actually produces, or the way the individual achieves the standard. One is called product evidence and the other process evidence.
Product evidence is tangible – you can look at it and feel it. Products can be inspected and the candidate can be asked questions about them.

In order to make a fair and objective assessment, the assessor must be able to answer the question: Is there sufficient evidence that the candidate can consistently meet the requirements of the qualification and / or unit of credit?
Process evidence describes the way the candidate has achieved an outcome – how they went about it. This may be, for example, the way the quality of products is checked or the way customer complaints are handled. This usually means observing the candidate in action.
Performance evidence may cover a number of outcomes. It makes sense to plan evidence collection so that what the candidate does, in the normal course of their job, can be related to different outcomes and units. The activities that clearly link to the qualification and / or unit of credit requirements are the things to concentrate on when planning evidence collection and assessment and when monitoring the candidate's progress. Look for opportunities in the candidate's job when evidence can be collected against a number of units at the same time.

Performance evidence can be:
• Naturally occurring – evidence produced in the normal course of work. Evidence of this sort is usually of high quality and reliable. It is also cost effective to collect naturally occurring evidence
• Taken from previous achievements – the candidate may be able to bring forward evidence from previous work experience to show that they are still competent to the standard.
• Evidence of prior achievement can be used when it can be shown to support a judgment that the candidate can still achieve the standard. So, the assessor must be satisfied that the evidence of prior achievement is sufficiently reliable to justify saying that the candidate is currently competent.
• Simulated – from circumstances specially designed to enable the candidate's performance to be assessed. Simulation is generally not acceptable. The exceptions to this are:

- Dealing with emergencies
- Dealing with accidents
- Certain pre-approved real time simulators
- Limited other procedures that cannot be practically performed in the workplace, and for which sufficient evidence can be collected through other means.

NB:It is not always possible or feasible to collect naturally occurring evidence. It is likely that some simulation may be needed, when it may take too long to wait for the evidence to arise e.g. it may be an aspect of performance which occurs infrequently. An example of this may be evidence of how to deal with emergencies i.e. it makes sense to look for evidence from sources other than naturally occurring ones, rather than for, say, waiting for the building to burn down. Centres must obtain GQA EQA approval prior to the use of simulation.

Knowledge evidence

Being able to achieve a standard requires the ability to put knowledge to work. The qualification and / or unit of credit indicates the knowledge each person should use if they are to perform competently.
It should not be necessary to test all of the candidate's knowledge separately; however, any exception to this would be detailed in the relevant Assessment Strategy. Performance evidence could show that the candidate knows what he or she is doing. When this is not the case, or if the assessor is not convinced from the performance evidence, it may be necessary to check the individual's knowledge separately.

Oral or written assessments must clearly provide a suitable means of checking the breadth and depth of an individual's knowledge. Assessors will need to judge the best mix of knowledge evidence according to individual circumstances. Knowledge evidence is useful when deciding the quality of performance evidence, but must not be used in isolation to judge competence or as an alternative to performance evidence. Care must be taken that candidate evidence is auditable and verifiable.

NB: These Qualification implementation guidelines are generic across the full range of GQA qualifications. Further guidance on acceptable evidence on each qualification will be found in the Introduction to the Qualification section of the candidate booklet

Candidate Declaration

Candidate Name.....

Centre/Company Name.....

Assessor(s) Name(s).....

I acknowledge receipt of this copy of GQA qualification booklet. The unit structure provides information on which units must be achieved to be awarded the qualification. The individual units detail the necessary requirements etc that I must achieve.

I understand that I will have an important role in preparing for and planning assessments and with guidance from the Assessor I will collect and record relevant evidence.

I have been informed of the appeals system, should I want to appeal against any part of the assessment process.

I understand the assessments will be carried out with regard to the company's/centre's Equal Opportunities Policy.

Candidate signature.....

Date.....

Production/Process Activity Guideline

To aid new or established workers, a centre may wish to describe a normal production/process activity relevant to the achievement of the national vocational qualification and identify which units/elements it will contribute to, e.g. the act of preparation for work, implementation and completion will contribute to a number of units of competence.

Production/Process Activity Relevant to the Achievement of this Qualification	Contributory to: Units/Elements

Y/601/9389	Maintain Health and Safety within a Print Related Working Environment	Level 2	4 Credits
PR001			

The aim of this unit is to provide the learner with the knowledge and skills to be able to work safely in the print working environment and to be able to carry out the correct actions should an accident or emergency occur.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1. Know which health and safety acts, regulations and guidelines apply to the print working environment.	1.1 State which acts, regulations and guidelines apply to the Print environment.			
	1.2 Explain how these acts, regulations and guidelines apply in practice.			
2. Know how to carry out an assessment of hazards and risks in the print working environment and the types of hazards or risks that can occur.	2.1 Describe the steps in carrying out a risk assessment.			
	2.2 Give 3 examples of risk or hazards that can occur in the print working environment.			
	2.3 Explain the actions required when discovering unsafe working conditions.			
3. Be able to identify hazards and assess risks in the print working environment.	3.1 Carry out a risk assessment of the print related working environment.			
4. Know how to adopt safe working practices.	4.1 State the employer's and manufacturer's instructions available for equipment in the work area and how to access them.			
	4.2 Describe three tasks in the work area and the equipment and personal protective equipment (PPE) used.			
	4.3 Explain the choices of equipment and personal protective equipment given in the example above.			
	4.4 Explain what to do if the required PPE or tools and equipment are not fit for purpose.			
5. Be able to adopt and adhere to safe working practices.	5.1 Follow employer's and manufacturer's instructions on the safe use of equipment and materials.			
	5.2 Select and use personal protective equipment in accordance with Company guidelines and legislation.			
	5.3 Select and use tools and equipment in accordance with Company guidelines and legislation.			
6. Know how to ensure there is no unauthorised or unsafe access to the working area.	6.1 Explain how to establish who is authorised to enter the work area.			
	6.2 Explain how to establish if a person is authorised to enter the work area.			
	6.3 Explain how to ensure that authorised people entering the work area are kept safe.			
7. Know what to do in the event of accidents or emergencies.	7.1 Describe the Company procedures to follow in the case of an accident.			
	7.2 Describe the Company procedure to follow in the case of an emergency.			
	7.3 Describe the procedure for evacuating workers and visitors.			
	7.4 Describe the procedure for the reporting and recording of accidents and emergencies.			

Assessor comments/feedback

H/601/9394 PR997	Communicating and Working with Others in the Print Working Environment	Level 2	3 Credits

The aim of this unit is to provide the learner with the knowledge and skills to communicate and work effectively with others in the print working environment.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.Ref.No		
1. Know what information to share with colleagues on your job role and why this is important.	1.1 Give 3 examples of information linked to your job role that needs to be shared with colleagues.			
	1.2 Explain why sharing information with colleagues is important.			
2. Be able to share information with colleagues.	2.1 Share information with colleagues using different methods, for example: • Face to face conversations • Company systems • Written notes • Drawings/sketches • Telephone (voice or text) • Email • Internet			
3. Know why it is important to respond promptly to requests.	3.1 Explain why it is important to respond promptly to requests from colleagues and customers and give 3 examples.			
4. Be able to respond promptly to requests from colleagues.	4.1 Respond promptly to requests from colleagues and/or customers to include the provision of: • Information • Physical assistance • Advice			
5. Know why good working relationships with colleagues are important and how barriers to this can be overcome.	5.1 Explain why good working relationships are important.			
	5.2 Give 3 examples of problems in developing and maintaining good working relationships with colleagues and suggest solutions.			
6. Be able to develop and maintain good working relationships with colleagues.	6.1 Develop and maintain good working relationships with colleagues.			

Assessor comments/feedback

R/601/9407 PR996	Knowledge of the Organisations Printing Processes and related information	Level 2	4 Credits

The aim of this unit is to provide the learner with the knowledge of the Organisation's processes, products and equipment and also knowledge of the specific Department(s) worked in by the learner.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Know the Departments within the Organisation and their area of responsibility.	1.1 List the Departments within the Organisation.			
	1.2 Explain the responsibilities of each Department.			
	1.3 Describe the job roles within each Department.			
2. Know the products produced by the Organisation.	2.1 List the products produced by the Organisation.			
	2.2 List the products produced by the specific Department(s) worked in.			
	2.3 Name the materials used to produce the printed product.			
3. Know the types of equipment used within the Organisation for print related work.	3.1 List 3 pieces of equipment/machinery used within the Organisation for print related work.			
	3.2 Explain the purpose of each piece of equipment/machinery given in answer to 3.1.			
4. Know the printing processes/operations used within the Department(s) worked in.	4.1 Name the printing processes/operations carried out within the Department(s) worked in.			

Assessor comments/feedback

F/601/9399 PR250	Keep Equipment Clean and in Working Order for use in the Printing Industry	Level 2	4 Credits

The aim of this unit is to provide the learner with the knowledge and skills to keep printing equipment clean and in working order within the print industry. It includes basic maintenance and problem solving.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to keep printing equipment clean.	1.1 Obtain and use cleaning equipment and materials in accordance with manufacturer's and Company guidelines.			
	1.2 Remove any build up of materials and dust in or around the machine.			
	1.3 Use personal protective equipment in accordance with Company guidelines and legislation.			
	1.4 Dispose of used cleaning agents and waste material in accordance with environmental regulations.			
	1.5 Check that the machine is safe to operate and all guards are fitted in accordance with manufacturer's and Company guidelines after cleaning.			
2. Be able to keep printing equipment in working order.	2.1 Identify the lubrication points on the machine and the manufacturer's recommended types of lubricant and lubrication intervals.			
	2.2 Carry out lubrication of the machine in accordance with Company schedules.			
	2.3 Examine machinery for worn or defective components.			
	2.4 Restore machine to a safe operating condition after replacing components or performing lubrication.			
3. Know how to keep printing equipment clean and in working order.	3.1 Explain how to obtain maintenance plans and schedules.			
	3.2 Explain how to record removal and replacement of components and lubrication of machinery.			
	3.3 Explain how to carry out the cleaning and/or replacement of filters.			
	3.4 Describe the type of machine faults that need to be referred to the responsible person and why.			
	3.5 List consumables that are likely to require periodic replacement.			
	3.6 List three components which they have replaced, explaining methods and tools.			
	3.7 Explain when and how to isolate the machinery to carry out the cleaning process.			
	3.8 Explain the reasons and benefits of regular cleaning and maintenance of machinery.			

Assessor comments/feedback

R/502/8503 PR227	Operate Digital Printing Machines	Level 2	4 Credits

The aim of this unit is to provide the learner with the knowledge and skills to be able to operate digital printing machines in a production environment – where there is a customer, either internal or external, for whom work is produced.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to prepare digital printing machines for production.	1.1 Obtain and check the job specification.			
	1.2 Ensure the required type, quantity and quality of materials are available to meet the job specification.			
	1.3 Accurately identify printing and post-printing requirements of the job.			
	1.4 Check that the machine and the work area are safe and ready for production.			
	1.5 Download or print the digital job file(s) to the digital printing machine so that the print output meets the job specification.			
	1.6 Make adjustments to the machine settings or print download settings as necessary to achieve the required job specification and quality standards.			
2. Be able to operate a digital printing machine.	2.1 Run the digital printing machine at the required speed and in accordance with manufacturer and Company guidelines.			
	2.2 Keep up the supply of materials and consumables throughout the run.			
	2.3 Check that quality standards and job specifications are met.			
	2.4 Take action to correct faults which fall within the job holder's responsibility.			
	2.5 Record production and quality assurance details in line with Company requirements.			
	2.6 Follow the Company procedure for the removal of waste.			
3. Know how to operate digital printing machines.	3.1 Describe 4 things to check to ensure effective operation of the print machine.			
	3.2 Explain how to start up and shut down the print machine.			
	3.3 Explain where to obtain information on the setting and operation of print machinery.			
	3.4 Explain the Company procedure for obtaining authorisation to begin production and why it is important to follow the procedure.			
	3.5 Explain when and how to monitor the quality of the output, give 3 examples of things to monitor.			
	3.6 Explain the Company procedure for the disposal of 2 types of waste.			
	3.7 Explain how to identify and correct faults which: • Affect the quality of the product • Produce a shortfall in output			
	3.8 Describe 3 situations that can be overcome by adjustments, how to make adjustments to the settings to meet the job specifications and how to ensure the machine is safe for use after adjustments have been made.			
	3.9 Describe 2 problems that can occur when operating Print machines that may not be resolved by adjustment and the Company procedure for dealing with them.			

	3.10 Explain the Company/manufacturer requirements in relation to machine cleaning, lubrication and maintenance. To include: • The principal activities involved with machine cleaning, lubrication and maintenance • Roles and responsibilities for cleaning, lubrication and maintenance • Which components wear or become degraded over time • The choice and use of suitable cleaning agents and lubricants			

Assessor comments/feedback

Y/502/8504	Send and Receive Digital Files	Level 2	1 Credits
PR124			

The aim of this unit is to provide the learner with the knowledge and skills to be competent in the sending and receiving of digital files over a telecommunications network, including as email attachments, by ISDN or through a virtual private network or similar permanent connection.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to send digital files by electronic means.	1.1 Confirm that the file(s) to be sent are in the format required by the customer and are of a suitable size for transmission.			
	1.2 Make sure the transmission method is suitable for the files to be transmitted, taking into account for example: • Customer's preferences • Speed of transmission • Security • Cost			
	1.3 Make sure that the information accompanying the digital file(s) is: • Detailed enough for the customer • Clear and accurate			
	1.4 Send the files to the specified people.			
	1.5 Complete all records on the transmission as required by Company procedures.			
2. Be able to receive digital files by electronic means.	2.1 Confirm that the digital communications systems are operating and are ready to receive incoming files.			
	2.2 Check for incoming files in accordance with Company guidelines.			
	2.3 Confirm that the required files have been received.			
	2.4 Save received files in accordance with Company guidelines.			
	2.5 Complete all records on the files received in accordance with Company guidelines.			

Assessor comments/feedback

Y/502/8504	Send and Receive Digital Files (continued)	Level 2	1 Credits
PR124			

3. Know how to send and receive digital files.	3.1 Explain how to check that virus software is up-to-date and functioning correctly on the host computer, why this is important and what to do if there is a problem.			
	3.2 Explain how to seek confirmation that digital files sent have been received as required, and when this has to be done to comply with Company procedures.			
	3.3 Explain the Company procedure when a digital file has been: • Sent to the wrong address • Sent to the correct address but in the wrong format			
	3.4 Describe one problem that could occur when sending digital files and how to overcome the problem.			
	3.5 Explain the Company procedure when a file has been received in the following situations: • From a known source but unable to open • From an unknown source			
	3.6 State how to deal with digital files in relation to the following: • File conversion techniques • File compression and decompression techniques • File management			

Assessor comments/feedback

H/601/9430	Set and run booklet making machinery	Level 2	5 Credits
PR356			

The aim of this unit is to provide the learner with the knowledge and skills to be able to set up and operate booklet making machinery. It includes knowledge of problems that can occur with this type of equipment.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to set booklet making machinery.	1.1 Obtain and check the job specification.			
	1.2 Identify and obtain the materials required for the job.			
	1.3 Ensure the working environment is safe for production.			
	1.4 Set the collator to meet the job specification taking into consideration, for example: • The size of the flat sheet • The flat sheets are in the required sequence • Each pile showing its different, correctly-positioned printed image • Mis-feed and double detector(s) are set correctly • Production times			
	1.5 Set the stitch-fold unit so that: • The staples are positioned as required by the job specification • The fold is made in the required position • The settings are appropriate for the booklet thickness and size			
	1.6 Ensure the output meets the job specifications and Company quality standard prior to full production.			
2. Be able to run booklet making machinery.	2.1 Operate the machinery at the required production speed and in accordance with Company guidelines.			
	2.2 Keep up the supply of materials throughout the run.			
	2.3 Monitor the output to ensure the job specification and Company quality standards are met.			
	2.4 Record production information in accordance with Company requirements.			
	2.5 Follow the Company procedures for the removal of waste.			
	2.6 Stack or pack finished work in accordance with Company approved methods.			
3. Know how to set and run booklet making machinery.	3.1 Explain how to start up and shut down machinery for: • Normal operation • Emergency situations			
	3.2 Explain 3 things to check to ensure effective operation of the machinery.			
	3.3 Explain where to obtain information on the setting and operation of machinery.			
	3.4 Explain the Company procedure for obtaining authorisation to begin production and why it is important to follow the procedure.			
	3.5 Explain when and how to monitor the quality of the output, give 3 examples of things to monitor.			
	3.6 Explain the Company procedure for the disposal of 2 types of waste.			

	3.7 Define the possible causes of faults which can result in, for example: • Pages missing or duplicated • Wire stitches or staples missing, broken or misformed • Wire stitches/staples and fold not aligned • Trimming faults such as out of square or wrong size • Marking of inside or outside pages			
	3.8 Describe 3 situations that can be overcome by adjustments, how to make adjustments to the settings to meet the job specifications and how to ensure the machine is safe for use after adjustments have been made.			
	3.9 Describe 2 problems that can occur when operating machinery that may not be resolved by adjustment and the Company procedure for dealing with them.			

Assessor comments/feedback

A/601/9417	Set and Run Guillotines	Level 2	5 Credits
PR357			

The aim of this unit is to provide the learner with the knowledge and skills to be able to set and run guillotines, including knowledge of faults and problems that can occur with guillotines.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to set/programme and run guillotines.	1.1 Obtain all details of work required.			
	1.2 Identify and obtain the materials needed to meet the job specification.			
	1.3 Check that the guillotine and work area is safe and ready for production.			
	1.4 Follow manufacturer's instruction to start up the guillotine.			
	1.5 Set up the guillotine taking into consideration: • The use of an existing programme or the need to create a programmed cutting sequence • The required cut size(s) is (are) produced with minimum handling • Setting the back fence manually for each cut • Production time			
	1.6 Run the guillotine, making sure that, for example: • Cuts are clean, square and accurately positioned • Clamp pressure does not cause marking or set-off			
	1.7 Monitor the output to ensure the job specification and Company quality standards are met.			
	1.8 Record production information in accordance with Company requirements.			
	1.9 Follow the Company procedures for the removal of waste.			
2. Know how to run guillotines.	2.1 Explain the information required to carry out the work and where to obtain it.			
	2.2 Describe the principles of guillotining.			
	2.3 Explain the risks associated with operating a guillotine, and how to avoid them.			
	2.4 Explain how to start up and stop the guillotine in: • Normal operation • Emergency situations			
	2.5 Explain the Company's method for stacking of finished work from the machine.			

Assessor comments/feedback

A/601/9417	Set and Run Guillotines (continued)	Level 2	5 Credits
PR357			

3. Be able to monitor quality of guillotine cutting.	3.1 Check that the Company's quality standards are being met.			
	3.2 Record the quality assurance details following Company procedures.			
4. Know how to monitor quality of guillotine cutting.	4.1 Describe the Company's quality standards for guillotine work.			
	4.2 Describe 3 faults with a product that can occur in guillotine work, how to identify them, and how to rectify them.			
	4.3 Explain how to check that the machine is safe to operate, once quality defects have been corrected.			
	4.4 Explain the Company procedure for recording and reporting problems or faults.			

Assessor comments/feedback

Y/601/9392 PR312	Materials Handling, Transportation and Storage within the Print Working Environment	Level 2	4 Credits

The aim of this unit is to provide the learner with the knowledge and skills to be able to identify, transport and store materials within the Print Working Environment.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to identify and select the required type and quantity of materials.	1.1 Identify materials by their labels/identification marks.			
	1.2 Locate materials.			
	1.3 Check that materials match their markings.			
	1.4 Select the required type and quantity of materials.			
2. Be able to handle and transport materials in a safe manner.	2.1 Handle the materials safely, and in accordance with Company guidelines, taking into account for example: • Handling equipment • Manual handling techniques • Personal protective equipment			
	2.2 Transport the materials safely using the appropriate transportation methods and equipment as specified in Company guidelines. To include: • Manual handling • Handling/lifting equipment			
3. Know the impact of incorrect handling and transporting of materials.	3.1 Describe how materials can be damaged during the handling and transportation of materials.			
	3.2 Explain the types of personal injury that can occur through incorrect handling and transportation of materials.			
4. Know how to position/store materials in accordance with organisational procedures.	4.1 Explain 3 things to consider when positioning or storing materials.			
	4.2 Give 3 examples of difficulties/hazards in positioning or storing materials.			
	4.3 Give solutions to the 3 examples given.			
5. Be able to position or store materials in accordance with organisational procedures.	5.1 Position or store materials, taking into account: • Avoiding damage to the materials or surrounding objects • Security of materials • Ease of access for further work			

Assessor comments/feedback

Y/601/9439	Set and Run multi-knife trimming machinery	Level 2	4 Credits
PR364			

The aim of this unit is to provide the learner with the knowledge and skills to be able to set up and run multi-knife trimming machinery. It includes the need to understand how to make adjustments and solve problems with this type of equipment.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to set multi-knife trimming machinery.	1.1 Obtain and check the job specification.			
	1.2 Identify and obtain the materials required for the job.			
	1.3 Ensure the working environment is safe for production.			
	1.4 Set up the multi-knife trimmer so that: • Piles are fed squarely into the trimmer • The clamp holds the pile firmly without marking • Piles are trimmed squarely and delivered without damage or distortion • The trimmed size is within variations permitted by their company • Production times can be met			
2. Be able to run multi-knife trimming machinery.	2.1 Operate the machinery at the required production speed and in accordance with Company guidelines.			
	2.2 Keep up the supply of materials throughout the run.			
	2.3 Monitor the output to ensure the job specification and Company quality standards are met.			
	2.4 Record production information in accordance with Company requirements.			
	2.5 Follow the Company procedures for the removal of waste.			
	2.6 Stack or pack finished work according to the Company's approved method.			
3. Know how to set and run multi-knife trimming machinery.	3.1 Explain how to start up and shut down the machinery for: • Normal operation • Emergency situations			
	3.2 Explain 3 things to check to ensure effective operation of the machinery.			
	3.3 Explain where to obtain information on the setting and operation of machinery			
	3.4 Explain the Company procedure for obtaining authorisation to begin production and why it is important to follow the procedure.			
	3.5 Explain when and how to monitor the quality of the output, give 3 examples of things to monitor.			
	3.6 Explain the Company procedure for the disposal of 2 types of waste.			
	3.7 Define the possible causes of faults which can result in, for example: • Unacceptable cut size variation • Score marks on cut surfaces • Glue marks on cut surfaces • Ragged cut on bottom pages • Book spines splitting at head or tail • Books not square • Creasing on spines			

	3.8 Describe 3 situations that can be overcome by adjustments, how to make adjustments to the settings to meet the job specifications and how to ensure the machine is safe for use after adjustments have been made.			
	3.9 Describe 2 problems that can occur when operating machinery that may not be resolved by adjustment and the Company procedure for dealing with them.			

Assessor comments/feedback

R/502/8534 PR130	Preflight Digital Files	Level 3	4 Credits

This unit covers the checking or 'preflighting' of digital artwork files supplied for production-scale printing. It includes knowledge of problems and possible solutions.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to preflight digital artwork files.	1.1 Identify the digital artwork files that are required to be preflight checked.			
	1.2 Select the preflight software to be used for checking the digital artwork and select a profile, rules or values, against which the artwork will be compared.			
	1.3 Preflight the artwork file(s) using the electronic preflight software.			
	1.4 Review the preflight report and save it, if required, in a suitable format, either electronic or paper based.			
2. Be able to interpret and report the results of preflighting digital artwork files.	2.1 Interpret the results of electronic preflighting and determine which issues reported are significant and which are not; giving reasons.			
	2.2 Decide whether the artwork file should be allowed to proceed to the next stage of production.			
	2.3 Decide the appropriate course of action to be taken e.g.: • Forward to next stage of production • Amend content • Return file to originator • Seek advice			
	2.4 Maintain any quality assurance or other records required by the Organisation.			
3. Know how to preflight digital files.	3.1 Explain the purpose of preflight checks.			
	3.2 Outline the procedures to follow when: • The standard has been met • The standard cannot be met without further changes			
	3.3 Describe how to ensure the safe handling of customer material as required by the Company.			
	3.4 Describe how to deal with digital files in relation to the following: • File conversion techniques • Missing fonts and images • Knockout v Overprinting • RGB v CMYK and other colour models			
	3.5 Describe 3 faults encountered in preflighting, their causes and possible solutions.			
	3.6 Explain the recording and reporting procedures, including: • Who to inform • Documentation required			
	3.7 Explain the main features of quality assurance and quality control systems.			

Assessor comments/feedback

J/502/8532	Manage Colour Reproduction In Digital Pre-Press	Level 3	4 Credits
PR122			

The aim of this unit is to provide the learner with the knowledge and skills to be able to ensure that colours are properly represented to the customer from the outset and that the colours when printed are predictable and meets the customer's expectations or are at least within acceptable commercial parameters.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to manage the calibration of digital pre-press equipment.	1.1 Calibrate a display monitor in the workflow to produce accurate colour reproduction.			
	1.2 Calibrate digital output devices, e.g. image setter/CTP setter, digital press, proofer(s).			
	1.3 Store device profiles created during calibration			
	1.4 Maintain records of calibration checks as required by the Company.			
2. Be able to configure pre-press software within the workflow.	2.1 Identify which software applications in the workflow have colour management features.			
	2.2 Identify what each colour management feature in each software application is set to do.			
	2.3 Ensure that any software colour management features that may alter the colour values in digital images, either through the use of colour profiles, dot gain compensation/simulation, colour mode conversion or total ink content calculations, are configured to meet the job requirements.			
	2.4 Establish what the typical dot gain is on printing machines and configure the application software or workflow appropriately to make allowance for dot gain.			
	2.5 Save software settings once configuration is complete.			
	2.6 Inform colleagues who use the workflow to be aware of how it is configured and where in the workflow colour mode changes and colour profiles are used.			
	2.7 Use appropriate reference material to check that the hardware and software colour management configuration produces reliable colour reproduction on press and/or from any 'high resolution' proofing device(s).			
3. Be able to use colour profiles correctly.	3.1 Identify source profiles and destination profiles stored within the workflow.			
	3.2 Select the required destination profiles for outputting to specific devices.			
	3.3 Ensure that source profiles embedded in image files are appropriate to meet the job requirements.			
	3.4 Where an embedded source profile is not correct or is missing, advise the appropriate person of the consequences.			
	3.5 Assign a new profile.			
	3.6 Assign the required profile to a file after conversion to a new colour mode.			
	3.7 Ensure that all application software in the workflow are set to use source and destination profiles appropriate to job requirements.			

4. Know how to manage colour reproduction in digital prepress.	4.1 State the requirements for security and storage within the Company for computer system security and virus protection.			
	4.2 State Company procedures for communicating with: • Colleagues • Customers • Suppliers			
	4.3 Describe workplace policy and practice in relation to the following: • Workplace objectives, priorities, standards and procedures • The range of work carried out in the workplace			
	4.4 Describe the operation of equipment for the following: • The set-up of digital imaging equipment and software • The operation of digital imaging equipment and software			
	4.5 Describe how digital imaging is affected by: • Colour theory, e.g.: additive and subtractive systems such as RGB and CMYK; colour gamuts • Colour management: how to set up, maintain and use image profiles • The range of methods, equipment, material and software appropriate to the imaging requirements • The assembly and set-up of image editing and output systems • The operation of image editing and output systems			
	4.6 State how to deal with digital files in relation to the following: • Dealing with embedded information • File management • File types and which file formats can carry embedded profiles			
	4.7 Explain the Company administrative procedures, include 2 of the following: • Scheduling • Recording and reporting • Product labelling • Reporting faults and production downtime			
	4.8 Explain the main features of quality assurance and quality control systems, including: • Techniques for controlling quality, including inspection, testing, sampling, use of input and output controls • Equipment for controlling quality in pre-press			
	4.9 Describe the principal activities involved with machine cleaning, lubrication and maintenance in relation to equipment worked on.			
	4.10 Explain the principal types of proof and their role in the printing process.			

Assessor comments/feedback

D/502/8505 PR105	Make photopolymer plates for flexographic printing	Level 2	4 Credits

The aim of this unit is to provide the learner with the knowledge and skills to be able to carry out the production and output of photopolymer plates for flexographic printing. It includes identifying the work to be done, exposing plates, processing plates, checking the quality of output.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to prepare photopolymer plates for print.	1.1 Obtain and check the job specification.			
	1.2 Ensure the correct type, quantity and quality of materials are available.			
	1.3 Check that: • Negatives match with artwork • Elements match imposition • Non-image density matches the manufacturer's recommendations and their company's quality standard			
	1.4 Prepare the exposure unit in accordance with the job requirements.			
	1.5 Handle and load plate material in accordance with Company procedures.			
	1.6 Position plate material so that all image elements fall accurately on the finished plate.			
	1.7 Select exposure values which produce the required plate characteristics after processing.			
	1.8 Expose the assembly in accordance with job requirements.			
	1.9 Pass the plate for processing.			
2. Be able to process photopolymer plates.	2.1 Load the processor according to specified instructions, handling materials in accordance with Company Health and Safety guidelines.			
	2.2 Set and operate processor in accordance with job requirements and safe operating procedures.			
	2.3 Trim the finished plate to the required size.			
	2.4 Check that the finished plate meets the Company's standard for: • Thickness • Relief height • Spots and blemishes			
	2.5 Keep waste to a minimum and dispose of it in accordance with Company procedures.			
	2.6 Report when the plate is ready for production.			
3. Know how to make photopolymer plates for flexographic printing.	3.1 Describe what details are needed to produce the job.			
	3.2 Describe the quality standards relating to plate production.			
	3.3 Explain the key parts of a negative film which should be checked prior to output.			
	3.4 Describe the risks which arise when handling plates and materials and operate exposure units and how to avoid them.			
	3.5 Explain the plate making methods and the function of the equipment in use in the Company.			
	3.6 Identify the suitable safe lighting conditions to be used during production.			
	3.7 Describe the make ready procedures for the plate making equipment in use.			

	3.8 State the Company's waste disposal procedures.			
	3.9 State the Company procedures for reporting machine faults and breakdowns.			
	3.10 Give two examples of faults that can occur, what causes them and how to correct them.			
	3.11 Describe how to recognise when to correct faults themselves and when to ask for help.			

Assessor comments/feedback

K/601/9400	Make lithographic printing plates	Level 2	4 Credits
PR251			

The aim of this unit is to provide the learner with the knowledge and skills to be able to make lithographic printing plates and store them for reuse.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to produce lithographic printing plates.	1.1 Identify the required plate material for plate making to meet the job specification.			
	1.2 Identify the required files and materials for exposing the plate to meet the job specification.			
	1.3 Check that the imaging/exposure and any online processing equipment is ready for operation.			
	1.4 Load the plate into the imaging/exposure equipment in accordance with manufacturer's instructions.			
	1.5 Begin the imaging/exposure of the plate in accordance with Company guidelines.			
	1.6 On completion of imaging/exposure, develop the plate to meet the job specification.			
	1.7 Check the plate for correct exposure, completeness of the image and free from physical damage or blemishes.			
2. Know how to maintain lithographic printing plates.	2.1 Explain how and when to clean and protect plates for reuse.			
	2.2 Explain the conditions and procedure for storage of plates.			
3. Know how to produce lithographic printing plates.	3.1 Explain the types of lithographic printing plates and their uses.			
	3.2 Explain the process of producing a lithographic printing plate.			
	3.3 Explain 3 checks to make before beginning the production process.			
	3.4 Describe three common faults in plate making and plate processing, their causes and how to correct them.			
	3.5 Explain how and why, to report a fault that is not able to be corrected either due to lack of knowledge or lack of authority.			

Assessor comments/feedback

K/502/8507 PR106	Make Gravure Cylinders	Level 2	4 Credits

The aim of this unit is to provide the learner with the knowledge and skills to be able to carry out the preparation and production of gravure cylinders for print. The learner will also be required to know how to deal with faults and problems occurring during the process.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to produce gravure cylinders for print.	1.1 Obtain and check the job specification.			
	1.2 Ensure sufficient materials are available for the required job.			
	1.3 Check that the cylinder is clean and suitable for the job requirements.			
	1.4 Ensure all checks and adjustments necessary are made so that the work can be carried out efficiently and safely.			
	1.5 Select and prepare the required masks.			
	1.6 Keep waste materials to a minimum.			
2. Know how to prepare the gravure cylinder	2.1 Explain what details are required to carry out the work required.			
	2.2 Describe the types of cylinders in use in the Company, and the types of job for which they are used.			
	2.3 Explain why it is important to check that the cylinder is clean and suitable for the job.			
	2.4 Explain the range, use and limitations of processing materials and equipment.			
	2.5 Describe the range, use and limitations of processing materials and equipment waste.			
	2.6 Explain the types of mask in use in the Company.			
3. Be able to transfer the image to the cylinder.	3.1 Check that the equipment is ready for image transfer.			
	3.2 Set and operate the equipment so that: • The complete image is transferred to the cylinder • The image is sharp and clean, at the required resolution • The finished cylinder is free from faults and suitable for production			
	3.3 Keep waste to a minimum and dispose of it in accordance with Company procedures.			
	3.4 Report when the plate is ready for production.			

Assessor comments/feedback

4. Know how to transfer the image to the cylinder.	4.1 Describe the cylinder making methods and equipment in use in the Company.			
	4.2 Explain the most suitable environmental conditions for production.			
	4.3 Describe the risks associated with operating the equipment.			
	4.4 Explain how to set up and operate the equipment.			
	4.5 Describe the Company's waste disposal procedures.			
	4.6 Explain the common faults which can occur when making gravure cylinders, what causes them and how to correct them.			
	4.7 Explain to whom they must report when there are faults, and when the plate is ready for production.			

Assessor comments/feedback

M/502/8508 PR219	Prepare Stencils for Printing	Level 2	4 Credits

The aim of this unit is to provide the learner with the knowledge and skills to be able to identify mesh and frame size, including preparing the mesh and checking the tension. Also the learner will be required to prepare the mesh material, apply and dry stencil material, position the photo-positive; also exposing, developing and drying the stencil.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to prepare the mesh.	1.1 Obtain and check the job specification.			
	1.2 Identify and select the mesh type and frame size.			
	1.3 Check the tension of the mesh.			
	1.4 Check that the condition of new and used mesh is suitable for use.			
	1.5 Prepare the mesh so that it will accept the stencil.			
2. Know how to prepare the mesh.	2.1 Explain how to identify the image size.			
	2.2 Explain how to identify the machine to be used.			
	2.3 Explain how to select the frame.			
	2.4 Explain how to identify the required mesh material.			
	2.5 Describe why it is important that reclaimed mesh is free from stains and ghost images and how to confirm this.			
	2.6 Describe how to treat mesh material.			
	2.7 Explain how to check that stencil residue has been completely removed from reclaimed screens.			
	2.8 Describe the health and safety requirements when using chemicals and what personal protective equipment to use.			
	2.9 Describe the Company procedure for reporting unsuitable frames and meshes.			
3. Be able to prepare stencils for production.	3.1 Check that they have all the details required for the job.			
	3.2 Obtain the photo-positive and check that it is fit for use.			
	3.3 Apply the stencil material to the screen and dry it in accordance with manufacturer's and Company guidelines.			
	3.4 Position the photo-positive accurately on the screen.			
	3.5 Confirm that the exposure is correct to suit the stencil system.			
	3.6 Develop the stencil ensuring the water temperature and pressure are set in accordance with manufacturer's and Company guidelines.			
	3.7 Dry stencils checking that drying is even over the entire surface.			
	3.8 Check the stencils are free from fault.			
4. Know how to prepare stencils.	4.1 Describe the methods to use in the production of the different types of stencils.			
	4.2 Explain how to choose the type of stencil to use.			
	4.3 Give reasons for choosing a particular stencil type.			
	4.4 Describe the materials available for the production of stencils.			
	4.5 Explain what safe light conditions are used in stencil processing.			
	4.6 Explain why it is important to position the photopositive accurately and how the machine affects positioning.			

	4.7 Describe how to achieve the optimum exposure			
	4.8 Describe the effects of under and over exposure.			
	4.9 Explain how the condition of the stencil affects the printed image.			
	4.10 Describe two common faults associated with preparing the stencils for print.			

Assessor comments/feedback

L/502/8502 PR129	Output Digital Image Carriers for Print	Level 2	8 Credits

The aim of this unit is to provide the learner with the knowledge and skills to produce image carriers for printing, utilising digital system technology, e.g. Computer to Plate, (flexo, gravure, litho) film output technology.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to impose images electronically.	1.1 Obtain all the details needed for the job.			
	1.2 Select an appropriate imposition scheme by taking into account, for example: • The quantity required • The working size of the job • Paper size • Printing machine sizes and the number available • The type of printing machine to be used • Colour fall (where appropriate) • The method of finishing			
	1.3 Retrieve or create an imposition template that meets the requirements of the imposition scheme.			
	1.4 Identify and correct data, system and software problems which will affect the production of impositions.			
2. Be able to prepare images for processing.	2.1 Check that the job files are compatible with the imaging software to be used.			
	2.2 Set the required output parameters to meet the job specification, taking into account, for example: • Resolution • Screen ruling and dot type • Screen angle • Orientation • Position on the image carrier • Register or other marks • Right/wrong reading • Emulsion up/down • Separations settings			
	2.3 Make sure the required image carrier is loaded into the output device.			
	2.4 Check that the output device is calibrated and prepared for operation.			
3. Be able to produce and process image carrier.	3.1 Send the data to the output device.			
	3.2 After imaging, process the image carrier as required.			
	3.3 Check that output meets the job requirements for quality and specification.			
	3.4 Store finished output in line with Company guidelines.			
	3.5 Keep records for quality assurance and administrative purposes as required by their company.			
	3.6 Archive digital files in accordance with Company procedures.			
4. Know how to produce computer-generated image carriers.	4.1 Explain what information is required to start the work.			
	4.2 Describe 3 factors to consider when selecting an appropriate imposition scheme.			
	4.3 Describe three problems that can occur during the process of producing computer generated image carriers and suggest possible solutions.			
	4.4 Explain the Company procedures for reporting faults and delays to production.			

	4.5 Describe the operation of equipment for the following: • The set-up of digital equipment and software • The operation of digital imaging equipment and software			
	4.6 State the characteristics of sensitive material in printing.			
	4.7 Explain how to deal with the digital files in relation to the following: • File conversion techniques • File compression and decompression systems • File management			

Assessor comments/feedback

M/601/9396	Create Digital Artwork for Print	Level 2	5 Credits
PR710			

The aim of this unit is to provide the learner with the knowledge and skills to be able to create digital artwork and prepare the layout of documents, including images and text. Proofreading and problem solving skills and knowledge are also required.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to prepare layout of documents for print.	1.1 Obtain and check the job specification.			
	1.2 Agree the number of colours that will be used to print the job in line with the job specification.			
	1.3 Identify, locate and retrieve data, text and graphics required for the job.			
	1.4 Select or create a template that is appropriate for the style of document.			
	1.5 Confirm page size and orientation, margins, columns, headers and footers to produce a balanced presentation throughout the document.			
	1.6 Select typefaces appropriate for the style of document or as specified by the customer.			
	1.7 Save templates and originals to preserve their integrity and to comply with the organisation's requirements.			
2. Be able to set text to agreed typographical specifications.	2.1 Use input devices to import or capture image files to meet the job requirements.			
	2.2 Retain required text formatting when importing original text files.			
	2.3 Use automated checking facilities to eliminate spelling and other errors.			
	2.4 Check the document against the job requirements and the typographical specification to confirm that: • The layout is correct • The correct typefaces have been used			
	2.5 Rotate, crop, and/or overlay text to create effective digital artwork to meet the customer's requirements.			
	2.6 Align and justify the text to meet the job requirements throughout the document.			
	2.7 Use effects, for example: • Bold • Italics • Underlines • Indents • Horizontal and vertical alignment			
	2.8 Select and apply printable colours to text where required.			
3. Be able to import and use images in digital artwork.	3.1 Use input devices to import or capture image files e.g. CD, scanner, camera, pen drive.			
	3.2 Choose a file format, image resolution which is suitable for the printing method to be used to print the document.			
	3.3 Resize images to fit the available space on the page.			
	3.4 Rotate, crop, and/or overlay images to create effective digital artwork suitable for its purpose and the customer's requirements.			

4. Be able to proof and correct digital artwork for print.	4.1 Output a suitable proof for checking.			
	4.2 Review the document for possible faults with images, such as low resolution, poor colour, sizing or text wrapping problems before submission.			
	4.3 Submit the proof for review.			
	4.4 Amend existing file in line with alterations marked on the proof e.g. data, text, image.			
	4.5 Save intermediate and final files to preserve their integrity and to comply with their organisation's requirements.			
	4.6 Obtain authorisation before releasing the work for print.			
5. Know how to create digital artwork for print.	5.1 Describe the organisation's arrangements and requirements for the safety, security and storage of customers' work.			
	5.2 Identify the reasons for selecting one printing process over another			
	5.3 Describe 3 pieces of hardware and software used to produce artwork for print.			
	5.4 Explain the meaning of the following terms: • Typography • Alignment • Font-style and size • Copyright • Cropping • PDF			
	5.5 Identify 3 factors which can have an influencing effect on the creation of digital artwork for print.			
	5.6 Identify the range of file types used in the creation of artwork for print and their suitable application.			
	5.7 Identify the administrative procedures to be considered when producing artwork for print.			
	5.8 Identify the checks which must be carried out to ensure the artwork is suitable for output.			
	5.9 List 4 types of proofreader's marks and explain their meanings.			
	5.10 Explain the difference between "brightness" and "contrast" in relation to images.			
	5.11 Explain the term "image resolution".			
	5.12 Explain what is meant by "bleed" with regards to the page edge.			
	5.13 Explain the term "screen ruling" and how it can be expressed.			

Assessor comments/feedback

M/502/8511 PR127	Plan and Produce Edited Images	Level 3	4 Credits

The aim of this unit is to provide the learner with the knowledge and skills to edit digital images. It covers the process of retrieving, editing, converting and archiving for production output.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to decide on the imaging approach.	1.1 Ensure all elements of the job are available, e.g. photos (digital or original).			
	1.2 Select the hardware and software most suitable for the editing they intend to carry out.			
	1.3 Check the compatibility of the elements to be combined in the editing process and decide how to treat any elements that are not compatible.			
2. Be able to produce edited images.	2.1 Import the required image elements correctly into the editing software.			
	2.2 Produce edited images to suit the requirements of the job.			
	2.3 Produce edited images which are accurate in terms of the following: • Physical size • File size • Content • Colour • Sharpness • Brightness (exposure) • Contrast • Colour space — RGB, CMYK and greyscale • Output resolution			
	2.4 Check the content and quality of the edited images against customer requirements and workplace standards.			
	2.5 Take action to make customer amendments.			
	2.6 Maintain the confidentiality of customer material.			
	2.7 Save the edited image data files in the required/ appropriate format.			
3. Know how to plan and produce edited images.	3.1 Explain their understanding of the law as it affects printing in relation to: • Copyright and ownership of images • Obscenity • Forgery			
	3.2 Describe the ethical issues relevant in printing.			
	3.3 Describe how to ensure the safe handling of customer material as required by their company.			
	3.4 State the requirements for security and storage within their company for: • High value products or print with a high risk of theft • Secure means of archiving digital and conventional prints			
	3.5 State Company procedures for communicating with customers.			
	3.6 Describe workplace policy and practice in relation to the following: • Standards • Procedures			
	3.7 Describe the operation of image editing equipment and software.			

	3.8 Describe the key factors which affect digital imaging, to include: • Sources of original material, e.g. photographers and graphic artists • Colour theory, e.g.: additive and subtractive systems such as RGB and CMYK; colour gamuts • Compatibility in digital images • The relationship between image size, file size and resolution • File formats for digital images – the differences between them and the reasons for using them			
	3.9 Describe how to deal with digital files in relation to the following: • File conversion techniques • File compression and decompression systems • File management			

Assessor comments/feedback

A/502/8513 PR125	Use of scanning techniques to create digital images	Level 2	6 Credits

The aim of this unit is to provide the learner with the knowledge and skills to be able to convert analogue material into digital form. It covers all aspects of scanning, including detailed intervention where automatic settings do not give the required result.

Learning outcome. The learner will:	Assessment criteria. The learner can:	Evidence.ref.no		
1. Be able to decide on the appropriate scanning approach.	1.1 Make an accurate assessment of the suitability of the material for scanning.			
	1.2 Make an accurate assessment of the scanner operations necessary to produce the required output.			
	1.3 Check that the scanners available will produce the quality of output to meet customer requirement.			
	1.4 Select the most suitable scanning equipment for the material to be scanned and the output required.			
2. Be able to prepare equipment and material for scanning.	2.1 Carry out any low-resolution scanning necessary to establish the correct software values.			
	2.2 Apply the required software values for: • The material to be scanned • The output required			
	2.3 Ensure that the scanner to be used, and the material to be scanned, are clean.			
	2.4 Handle the material to be scanned in accordance with Health and Safety guidelines.			
	2.5 Load the material to be scanned with regard to alignment and positioning.			
3. Be able to produce and save scanned images in line with the job specification and Company standards.	3.1 Produce scanned images which are correct in terms of the following: • Physical size • File size • Content • Orientation • Colour • Sharpness • Brightness (exposure) • Contrast • Colour space — RGB, CMYK and greyscale • Output resolution			
	3.2 Produce scanned images to the required image profiles.			
	3.3 Produce scanned images which are free of the following unwanted effects: • Physical defects — fingerprints, dust damage and scratches • Newton's rings • Moiré patterning from screened originals • Pixelisation • Posterisation • Halo effects			
	3.4 Assess the scanned images accurately against customer requirements and workplace standards.			
	3.5 Detect any problems with the scanned images and identify the probable causes of the problems.			
	3.6 Maintain the confidentiality of customer material.			
	3.7 Save the scanned image data files in the required format.			

4. Know how to plan and capture digital images.	4.1 Explain the law affecting printing in relation to: • Defamation • Copyright and ownership of images • Obscenity • Incitement • Forgery • Data Protection			
	4.2 Describe how to ensure the safe handling of customer material as required by their company.			
	4.3 State the Company requirements for the safe storage and archiving of digital artwork.			
	4.4 Describe the operation of equipment for the following: • The set-up of scanning equipment • The operation of scanning equipment			
	4.5 Describe how digital imaging is affected by: • Colour theory, e.g.: additive and subtractive systems such as RGB and CMYK; colour gamuts • The relationship between image size, file size and resolution • File formats for digital images – the differences between them and the reasons for using them • The range of methods, equipment, material and software appropriate to the imaging requirements • Methods of controlling contrast, density and colour characteristics during scanning • The assessment of material for scanning – potential problems and solutions • Colour management: how to set up, maintain and use image profiles			
	4.6 Describe how to identify and correct three faults which affect the quality of the scanned image.			
	4.7 Describe the principal activities involved with machine cleaning and calibration: • The choice and use of suitable cleaning agents and lubricants • The methods used to set up and calibrate a scanner for use			

Assessor comments/feedback

Notes

Notes

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