Level 3 - Unit 15 - Imaging Software (5 Credits)

Platinum - Unit 15 - Imaging Software

Relevant LINKS

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Handbook home page **[2]**

Overview

The candidate can use imaging software effectively by obtaining and using images for particular purposes. This work will address issues of licensing and copyright and how this effects what they are able to do. They also need to have a good understanding of the impact of file types on this process so that images are fit for purpose. Candidates will also use imaging software with a high degree of competence and accuracy and be able to use advanced features.

A work activity will typically be 'non-routine or unfamiliar' because the task or context is likely to require some preparation, clarification or research to separate the components and to identify what factors need to be considered. For example, time available, audience needs, accessibility of source, types of content, message and meaning, before an approach can be planned; and the techniques required will involve a number of steps and at times be non-routine or unfamiliar.

Example of context – an example might be to create a series of high quality images for a magazine publication or a brochure to be used in DTP.

Example of work at this level **[3] (to follow)**

Assessor's guide to interpreting the criteria

General Information

QCF general description for Level 3 qualifications

- Achievement at QCF level 3 (EQF Level 4) reflects the ability to identify and use relevant understanding, methods and skills to complete tasks and address problems that, while well defined, have a measure of complexity. It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgment within limited parameters. It also reflects awareness of different perspectives or approaches within an area of study or work.
- Use factual, procedural and theoretical understanding to complete tasks and address problems that, while well defined, may be complex and non-routine.
- Address problems that, while well defined, may be complex and non-routine. Identify, select and use appropriate skills, methods and procedures. Use appropriate investigation to inform actions. Review how effective methods and actions have been.

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- Take responsibility for initiating and completing tasks and procedures, including, where relevant, responsibility for supervising or guiding others. Exercise autonomy and judgement within limited parameters information and ideas

Requirements

- Standards must be confirmed by a trained Platinum Level Assessor or higher
- Assessors must at a minimum record assessment judgements as entries in the on-line mark book on the INGOTs.org certification site.
- Routine evidence of work used for judging assessment outcomes in the candidates' records of their day to day work will be available from their e-portfolios and on-line work. Assessors should ensure that relevant web pages and files are available to their Account Manager on request by supply of the URL.
- When the candidate provides evidence of matching all the criteria to the specification subject to the guidance below, the assessor can request the award using the link on the certification site. The Account Manager will request a random sample of evidence from candidates' work that verifies the assessor's judgement.
- When the Account Manager is satisfied that the evidence is sufficient to safely make an award, the candidate's success will be confirmed and the unit certificate will be printable from the web site.
- This unit should take an average level 3 learner 50 hours of work to complete.

Assessment Method

Assessors can score each of the criteria N, L, S or H. N indicates no evidence. L indicates some capability but some help still required. S indicates that the candidate can match the criterion to its required specification. H indicates performance that goes beyond the expected in at least some aspects. Candidates are required to achieve at least a S on all the criteria to achieve the full award.

Expansion of the assessment criteria

1. Candidates will obtain, insert and combine information for images

1.1 I can explain what images are needed

Candidates should be able to explain the context for their images and show that they are the correct ones.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance

Candidates should be able to give a clear indication that they know why they are gathering images or combinations of images and other information and that they are what is required for their task. As a very simple example, it is no good taking pictures with a low resolution camera if the end product will be displayed as bill board as the image quality will result in pixelation and poor resolutions.

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Equally, it is not good taking pictures with a 20 megapixel capacity when the end result is going to be blurred or some distortion affects added as it will be waste and will be hard to work on due to the file size.

1.2 I can explain how the context affects the way images should be prepared
Candidates should be able to explain what impact the brief they have has on how they go about getting their material.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
This criterion is an extension of 1.1 above. Candidates need to go into some detail as to why they are gathering their images and the design they have in mind will to some extent determine what packages and filters they need to use which will guide their preparatory work. A clear understanding of context will be driven by a client's needs in many cases and this will dictate what can be done and how. As indicated above, if the end product will be required to be expand onto large surfaces, poor quality images will not be suitable and can be rejected, it wil also link to what equipment should be used. Some understanding of image resolutions and other technical aspects will come into play here as well. Preparation could also include some aspects of compression technologies since many devices compress images by default these days.

1.3 I can provide guidance on what and how any copyright or other constraints may apply to use of own and others' images
Candidates should be able to create a guide for others in how laws on images [4] apply to their work.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
Candidates should be able to document the different licenses that they have had to understand for their work and where they have created their own original material, what licenses they have used. In many cases, candidates should be encouraged to use royalty free and open licensed materials to encourage more flexibility and strict licensing does not always help with creativity.

1.4 I can obtain, insert and use images
Candidates should be able to show basic competence with image manipulation.

Evidence: will be provided by short guides, finished products and assessor feedback.

Additional information and guidance
Candidates should be able to use any graphic manipulation package efficiently and with a great deal of competence. They should be able to use the package to modify (if required) any material that they gather and to edit this for their required purpose, whether this is to use in another context, such as a DTP document, or as a stand-alone image on something like a website or on-line gallery. Their work should demonstrate a range of materials of all different types, formats, sizes and resolutions.

1.5 I can explain how file format affects image quality, format and size and how to choose appropriate formats for saving images
Candidates should be able to explain how images work in great detail in terms of their format and type.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
There are a large number of proprietary and incompatible graphic formats. For photographic images that are to be displayed in web pages .jpg should be used. Jpg (Jpeg) trades off quality against size of file. If a large high resolution image is required for professional photographic work on paper .jpg files will still be large and once reduced in file size can not be brought back to the original size without the original file. Another disadvantage of jpg is that it does not support image transparencies such

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that the background can show through. This means logos can be left with undesirable border around them if they are on a background that is a different colour from the main display background. .png can be used to get around this problem because png does support transparency. Although .png files are compressed they always keep all the original data so that you can get back to the original. This means in situations where it is critical to make the file size as small as possible (e.g. when the image has to be transferred over a low bandwidth connection or storage space is at a premium, jpg will be better. GIMP [5] can edit and convert a very wide range of images between proprietary and open formats and it is free. On-line convertors [6] are also freely available. SVG - scalable vector graphics - should be used to design logos, diagrams and illustrations. Indeed just about anything that is not a photograph or scanned image. Any .svg image is likely to be small in file size and can be scaled to any output device from high resolution images for paper to large screen TVs. The files stay the same size and the images will be as crisp as the display device is capable of producing. Furthermore, .svg images can be exported to .png from Inkscape [7] and from .png converted to jpg if required in those formats. An increasing number of applications support SVG and it is likely to become increasingly important.

1.6 I can use appropriate techniques to organise and combine information of different types or from different sources
Candidates should be able to show a range of image types that are original and remixed.

Evidence: will be provided by finished work in portfolios and assessor feedback.

Additional information and guidance
Candidates should be able to show a range of images in different formats and in different contexts to show a clear understanding of imaging software applications and techniques. It is likely that candidates will explore different techniques when they investigate the best imaging software (and should be encouraged to do so) to use and these trials and experiments can be used as a gallery of work to explain the range of features possible.

1.7 I can store and retrieve files effectively, in line with guidelines and conventions where available
Candidates should be able to show good file management skills in terms of naming conventions, if appropriate, and good house-keeping, especially with large image files.

Evidence: will be provided by finished work and assessor feedback.

Additional information and guidance
Candidates should be able to adhere to local guidelines for file management and show a general understanding of how to store and retrieve files to assist in their general work.

2. Candidates will use imaging software tools to create, manipulate and edit images

2.1 I can explain what technical factors affecting images need to be taken into account and how to do so
Candidates should be able to show and explain the main tools they are using in terms of hardware and software.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
Candidates should be able to demonstrate a good understanding of their working environment and this will vary from place to place. They should be able to explain the hardware and software they are suing and list some of the strengths and weaknesses of these choices. For example, if they are using low resolution cameras, this may determine how much manipulation they can do and the overall quality achievable for their projects. Their reports or presentations of the working environment

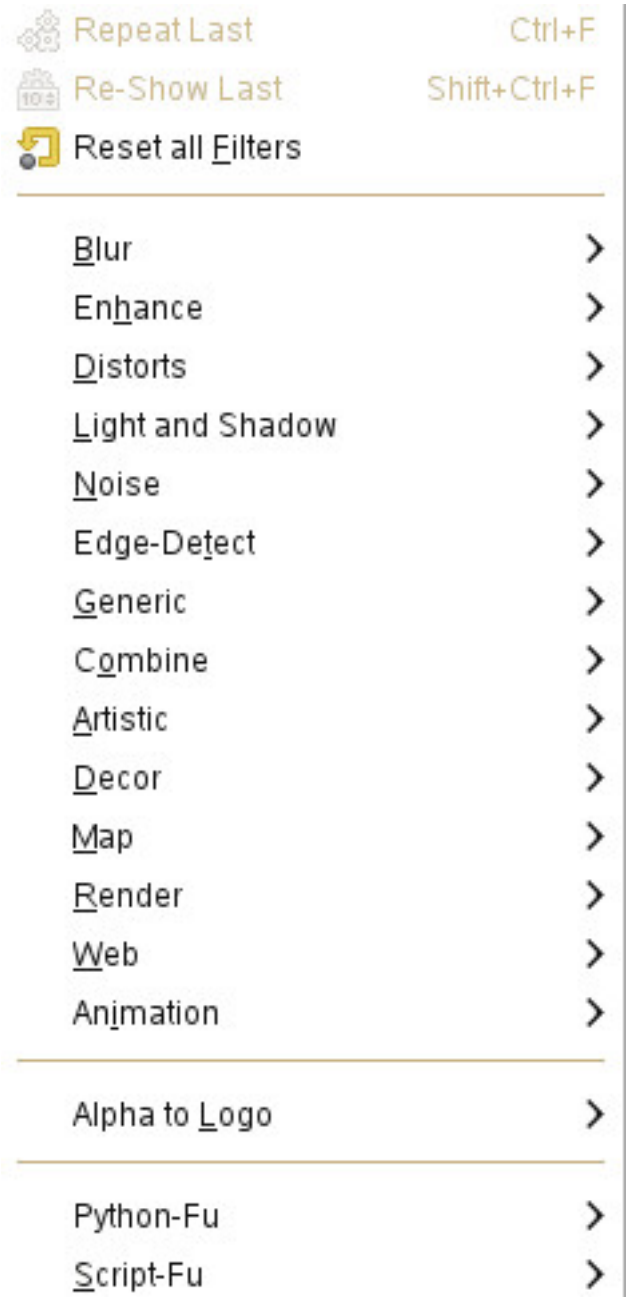
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should show a good level of technical understanding which may overlap with other criterion above.

2.2 I can select and use suitable tools and techniques efficiently to create images
Candidates should be able to show an appreciation and skilled usage of a wide range of digital tools throughout the process.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
Candidates will be using many different features for their work and in some cases may not even know what is possible, until they experiment. Most modern image manipulation software is very sophisticated and they may not be able to use the full range in the time-frame allowed for the unit, but they must use as much as is relevant for their intended outcomes. Something like Gimp has a huge range of filters.



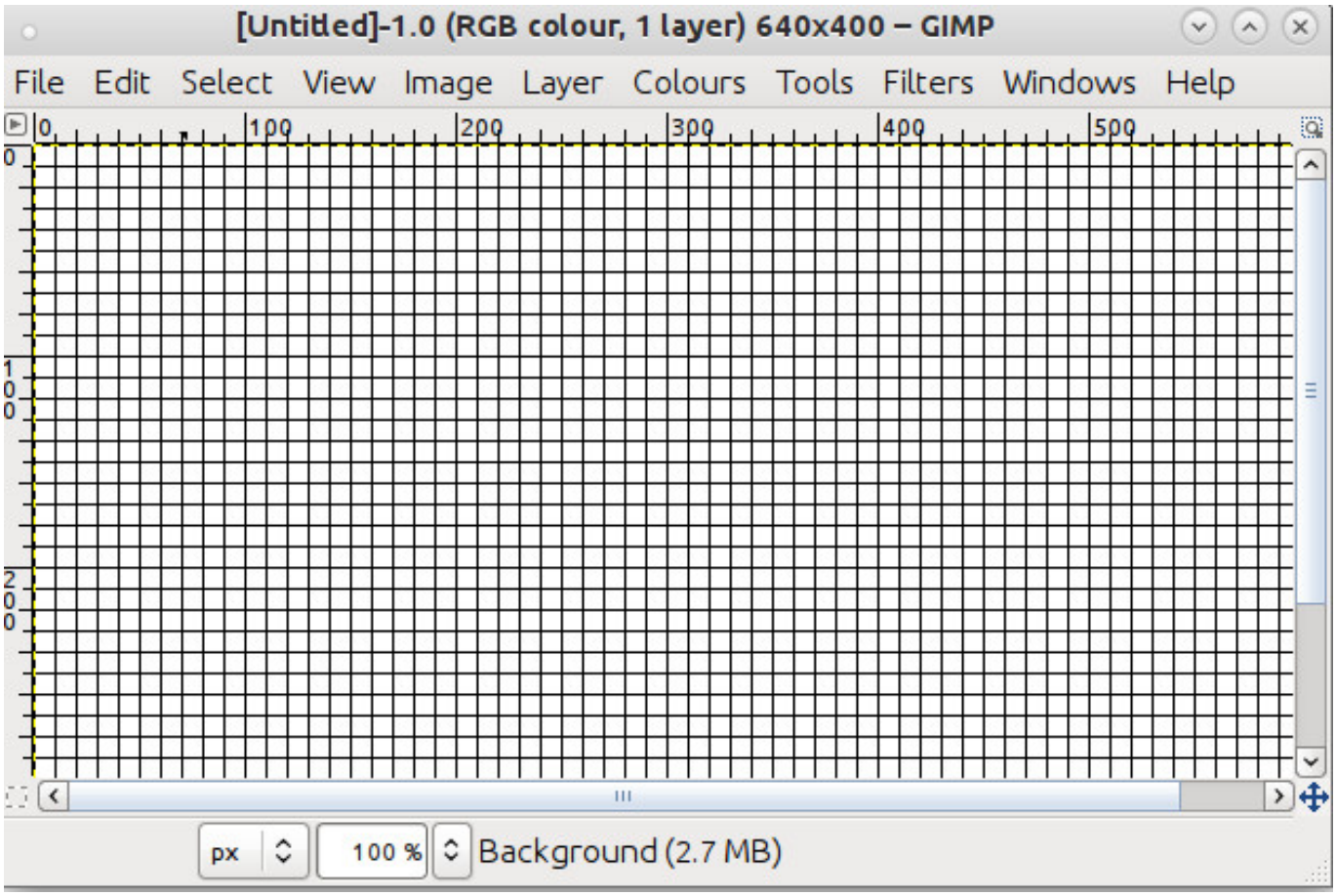
In most cases, the finished images should demonstrate these skills, but it would also be helpful to have a short guide on how the tools were used and what effects can be created as a result.

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2.3 I can use guidelines and dimensioning tools appropriately to manipulate and edit images
Candidates should be able to show advanced skills in image manipulation t get exact results.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
This will depend on the type of image being created, but precision is always essential in image manipulation. Some printing systems are very specific about dimensions and outputs allowed. Most image software will include tools in order to check dimensions. The following is an image from Gimp including grid lines to snap images to and rulers for precise entry and positioning.



2.4 I can select and use appropriate tools and techniques to manipulate and edit images
Candidates should be able to show skill and advanced competence in image manipulation and editing.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
Candidates should be comfortable with all of the main menus and tool bars available on the software and should be able to accomplish most requirements. Other tools can be used to change the colour and brightness, colour depth and other aspects of the image. All these will depend on what images are being created but evidence of an understanding has to be shown to a professional level by the candidates themselves.

2.5 I can check images meet needs, using IT tools and making corrections as necessary
Candidates should be able to work with client briefs and feedback.

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Evidence: will be provided by short guides and client feedback.

Additional information and guidance
Candidates should be making images to a professional level and this will therefore require them to work with real clients. These clients will have expectations and needs and also have detailed feedback throughout the process. If candidates can use some type of collaborative tool to have sign off on their work and reactions and adjustments to received feedback this would be very helpful. The material, if it contains text based material, must be free from errors of SPAG.

2.6 I can identify and respond appropriately to quality problems to ensure that images are fit for purpose and meet needs
Candidates should be able to produce professional quality final pieces.

Evidence: will be provided by short guides and assessor and/or client feedback.

Additional information and guidance
The finished material must be to a very high standard and free of any errors or quality problems, such as distortions of incorrect resolutions. Where possible, they must compare the material to established needs and objectives set out before the work began.

Moderation/verification

The assessor should keep a record of assessment judgements made for each candidate and make notes of any significant issues for any candidate. They must be prepared to enter into dialog with their Account Manager and provide their assessment records to the Account Manager through the on-line mark book.

They should be prepared to provide evidence as a basis for their judgements through reference to candidate e-portfolios and through signed witness statements associated with the criteria matching marks in the on-line markbook. Before authorizing certification, the Account Manager must be satisfied that the assessors judgements are sound.

Source URL: https://theingots.org/community/sil3u15x

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