

Title	Demonstrate knowledge of digital photography, operate a camera and prepare images for production		
Level	3	Credits	20

Purpose	People credited with this unit standard are able to: demonstrate knowledge of digital photography processes; maintain and configure a digital still camera; present digital photographs taken using a digital still camera; download and manipulate images from a digital still camera; and open and print a range of images saved from a digital still camera.
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Classification	Printing > Digital Processes for Print
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Available grade	Achieved
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Guidance Information

- 1 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
 - Copyright Act 1994;
 - Health and Safety at Work Act 2015;
 - Privacy Act 2020;
 - Resource Management Act 1991;
 - International Standards Organisation (ISO) requirements include but are not limited to – ISO 5800:1987, ISO 6:1993, ISO 2240:2003.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

- 2 **Definition**
Workplace procedures refer to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, manufacturer's requirements, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the print sector.
- 3 **Range**
 Either a Single Lens Reflex (SLR) or mirrorless digital camera with manual controls can be used for the practical components of this unit standard.

4 Assessment information

Any appropriate software available in the workplace may be used for downloading, manipulating and printing images.

Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, workplace procedures and legislative requirements.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of digital photography processes.

Performance criteria

- 1.1 Explain the differences between a phone's camera and a SLR or mirrorless digital camera.
- 1.2 Describe resolution of a digital image and its relationship to file size, and the proposed final use of the image.
- 1.3 Identify and describe the different formats of images in terms of the advantages and disadvantages of each format.

Range includes but is not limited to – JPEG (joint photographic experts group), RAW (image file), Tiff (tagged image file format), PSD (proportional sum derivative), EPS (encapsulated PostScript).
- 1.4 Describe optical zoom and digital zoom.
- 1.5 Describe colour spaces in terms of image colours.

Range includes but is not limited to – sRGB (standard red, green, blue), RGB (red, green, blue), AdobeRGB, CMYK (cyan, magenta, yellow, black).
- 1.6 Describe light in terms of its temperature, and the effect on perceived colour.
- 1.7 Describe effects of depth of field on a photographic image.
- 1.8 Describe effects of different lenses and filters on photographic images.

Range may include but is not limited to – fixed, zoom (telephoto), panoramic (wide angle), close up (macro), UV (ultra-violet), polarising, IR (infra-red), neutral density.
- 1.9 Describe 8, 16 and 32 bit images in terms of editing and quality.
- 1.10 Describe effects of aperture, shutter speed and relevant ISO requirements on photographic images.

Outcome 2

Maintain and configure a digital still camera.

Performance criteria

2.1 Maintain camera and set up ready for use.

Range may include but is not limited to – memory card, batteries, cleaning, handling, storage, file format, file size.

2.2 Configure camera settings and adjust according to photographic situations.

Range may include but is not limited to – sensitivity modes, exposure controls, focus, white balance, metering mode, zoom.

Outcome 3

Present digital photographs taken using a digital still camera.

Performance criteria

3.1 Present photographs that demonstrate a range of photographic situations.

Range situations include but are not limited to – architecture, landscapes, portraiture, action, close-up, product photography.

3.2 Present photographs that demonstrate technical considerations of photography.

Range technical considerations include but are not limited to – correct focus, depth of field, exposure, movement, sharpness, colours, resolution, tonal range, composition.

3.3 Present photographs that demonstrate the use of a range of photographic modes.

Range may include but is not limited to – manual and/or automatic modes, programme modes.

Outcome 4

Download and manipulate images from a digital still camera.

Performance criteria

4.1 Download images and view electronically.

4.2 Save image files and name appropriately for retrieval.

4.3 Digitally adjust images to meet job requirements.

Range may include but is not limited to – designer, customer, or branding requirements; printing process; includes but is not limited to – contrast, brightness, colours, lightness, composition, red eye, blemishes/spots removed, sharpened.

4.4 Format images to specifications, and save appropriately.

Range physical size, resolution, format, colour space, bit depth.

Outcome 5

Open and print a range of images saved from a digital still camera.

Performance criteria

5.1 Open a range of saved still images and print to given specifications on/in specified media.

Range range of images includes but is not limited to – architecture, landscapes, portraiture, action, close-up, product photography; evidence of 10 images is required.

Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	12 December 2008	31 December 2025
Review	2	30 March 2023	N/A

Consent and Moderation Requirements (CMR) reference	0013
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.