STANDARD KEMAHIRAN PEKERJAAN KEBANGSAAN
(National Occupational Skills Standard)

IT-058-3:2014

JABATAN PEMBANGUNAN KEMAHIRAN
KEMENTERIAN SUMBER MANUSIA

Department of Skills Development
Ministry of Human Resources, Malaysia

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STANDARD PRACTICE

NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS) FOR;

GRAPHIC DESIGN (DIGITAL)
LEVEL 3

1. INTRODUCTION

Over the years, Malaysia has witnessed tremendous growth in the Creative Multimedia industry with increasing employment opportunities, recipient to numerous international awards and the establishment of various funds to promote the industry.

The Information and Communication Technology (ICT) sector in Malaysia is divided into five (5) sub-sectors namely Creative Multimedia, System Architecture, Analysis and Design, Service Management and Delivery, and Information Security.

The government has strengthened ICT development through Economy Transformation Programme (ETP), where Communication, Content and Infrastructure (CCI) is among selected 12 NKEAs. The Entry Point Project (EPP) of the CCI focuses on Nurturing Malaysia's creative content industry. It aims to nurture the domestic creative content creation, services and distribution and broadcasting sectors, eventually transforming Malaysia into a regional hub for digital content. It is projected in year 2020, GNI impact in the creative content sector will be RM3.1 billion, out of which 66 percent will be generated in professional services, 22 percent in content creation, and the remaining portion in broadcasting (ETP, 2010).

1.1 Occupational Overview

Graphic design is an art of visual communication that combines images, words, and ideas to convey information to audiences. It often refers to both, the process which is known as designing and refers to the products which is known as designs. Designing is a problem solving process that requires substantial creativity, innovation and technical expertise. While, the design is a translation of a client's goal into a visual solution which is created from the manipulation, combination and utilisation of shape, colour, imagery, typography and space.

Graphic Designers are the people who have the artistic sensibility, skill and experience to create designs or images by any means of visual communication. Graphic Designers are responsible for arranging and using elements on different types of media to create design solutions that have a high visual impact. Their designs are required for a huge variety of products and activities, such as advertising, computer games, corporate communications and corporate identities. They develop creative ideas and concepts, choosing the appropriate media and

style to meet the client's objectives. The work demands creative flair, up-to-date knowledge of graphic software and a professional approach to time, costs and deadlines.

The entry level of Graphic Design (Digital) job area is level 3. The level 3 personnel are known by the industry as Graphic Designers (Digital).They work directly under Graphic Design (Digital) level 4 personnel who supervise and assign them job brief. These Graphic Design (Digital) level 4 personnel are normally known as Senior Graphic Designers (Digital). The highest level of this job area is level 5 personnel who are known as Lead Graphic Designers (Digital). The level 5 personnel responsible in producing complex designs, as well managing their subordinates.

Graphic Design (Digital) is different from Graphic Design in the printing sector. These two areas are separated by the job output, technology and the working environment. In printing sector the out puts are printed materials while in graphic design (digital) the outputs are in digital format and serve for digital media such as internet, e-book and mobile application. Therefore, Graphic Design (Digital) personnel require skills and competencies in using computer, software and computer applications.

1.2 Justification and Rational of NOSS development

The creative industry is becoming an increasingly important component of modern post industrial knowledge-based economy. It can be a vehicle of cultural identity that plays important role in fostering cultural diversity. In Malaysia, creative industry has been acknowledged as one of the fastest growing sectors in the economy, averaging at 11% per annum over the last five years. This demonstrates that it is an important key driver of the economy and more dynamic than other sectors in Malaysia.

Talents are the core competitiveness of creative industries as creative industry is people-oriented. The prerequisite for the fast development of creative industries in future is to cultivate a batch of creative talents to avoid talent gap. As graphic design is very much involve in creative contents production, this area is one of the current critical jobs required by the industry (MDeC, 2012). The effort to develop the National Occupational Skill Standard (NOSS) for Graphic Design (Digital) job area followed by developing the training manual is an enabler for the industry growth and could resolve the current gap in this job area.

1.3 Authority and Regulatory/Statutory Bodies Related to Industry

Currently, there are a number of authorities and regulator for the Creative Multimedia Industry in Malaysia. There are as follow:

- Ministry of Communications and Multimedia Malaysia
- Malaysian Multimedia and Communication Commission (MCMC)
- Malaysian Technology Development Corporation (MTDC)
- Malaysian Intellectual Property Organisation (MIPO)
- Malaysian Creative Content Association (MCCA)

1.4 Training Programme Pre-requisite

The entry requirements for this course are:
- Able to read and write in Bahasa Malaysia.
- Has passion and interest in graphic designing

2. OCCUPATIONAL STRUCTURE

Entry level for the Graphic Design (Digital) is at Level 3 due to their nature of work. Generally they work by following instructions and job brief schedules that are prepared by the superior. The personnel perform a significant range of varied work activities in a variety of context, which most of the tasks are complex and non-routine.

Graphic Design (Digital) Level 3 personnel may proceed to higher position for Level 4 and Level 5 as shown in Figure 2

2.1 ICT Sector Occupational Structure (OS)

The ICT sector creates many job titles ranges from Level 2 up to Level 5 to serve five (5) sub-sectors. Creative Multimedia is one of the critical sub sectors that comprises of eleven (11) job areas.

Graphic Design (Digital) Level 3 falls under the graphic design job area of the Creative Multimedia sub sector. This job area creates three job titles at level 3, 4 and 5 as shown in Figure 1.

2.2 ICT Sector Occupational Area Structure (OAS)

The Occupational Area Structure of Creative Multimedia as illustrated in Figure 2 shows that some job areas require same competency to perform different job functions. However, competencies for Graphic Design (Digital) job area are more specialised as its job functions are different from other job areas.

SECTOR	INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)											
SUB SECTOR	**CREATIVE MULTIMEDIA**											
JOB AREA	**Concept Design**	**Multimedia Programming**	**Audio Visual**		**Graphic Design (Digital)**	**2D Animation Production**	**3D Production**				**Visual Effects Compositing**	
			Audio	**Video**			**3D Animation**	**3D Modeling**	**3D Rigging**	**3D Lighting and Rendering**		
LEVEL 5	Lead Concept Artist	Senior Multimedia Programmer	Audio Visual Director		Lead Graphic Designer (Digital)	2D Lead Animator	3D Lead Animator	Lead Modeler	Lead Rigger	Lead Lighting & Rendering Artist	Lead Visual Effects Compositor	
LEVEL 4	Concept Artist	Multimedia Programmer	Audio Visual Senior Technician		Senior Graphic Designer (Digital)	2D Animator	3D Animator	Modeler	Rigger	Lighting & Rendering Artist	Visual Effects Compositor	
LEVEL 3	- No Level -	Junior Multimedia Programmer	Audio Technician	Video Technician	Graphic Designer (Digital)	2D Artist	3D Artist				Rotoscoping Artist	Prep Artist
LEVEL 2	- No Level -				Ink & Paint Artist / Scanner / Background Artist		- No Level -					
LEVEL 1	- No Level -											

Figure 1: The Occupational Structure of Graphic Design (Digital) (Level 3) Personnel

| JOB AREA | Concept Design | Multimedia Programming | Audio Visual | | Graphic Design (Digital) | 2D Animation Production | 3D Production | | | | Visual Effects Compositing |
| | | | Audio | Video | | | 3D Animation | 3D Modeling | 3D Rigging | 3D Lighting and Rendering | |

SECTOR	INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)										
SUB SECTOR	CREATIVE MULTIMEDIA										
JOB AREA	Concept Design	Multimedia Programming	**Audio Visual** Audio	Video	Graphic Design (Digital)	2D Animation Production	**3D Production** 3D Animation	3D Modeling	3D Rigging	3D Lighting and Rendering	Visual Effects Compositing
LEVEL 5	Concept Design	Multimedia Programming	Audio Visual Production		Graphic Design (Digital)	2D Animation Content Production	3D Animation Content Production	3D Animation Modeling and Rigging Management		3D Lighting and Rendering Production	Visual Effects Compositing Management
LEVEL 4	Concept Design	Multimedia Programming	Audio Visual Production		Graphic Design (Digital)	2D Animation Production Operation	3D Animation Production Operation	3D Animation Modeling and Rigging		3D Lighting and Rendering Production Operation	Visual Effects Compositing Production
LEVEL 3	*- No Level -*	Multimedia Programming	Audio Support & Maintenance	Video Support & Maintenance	Graphic Design (Digital)	2D Production Operation Support	3D Operation Production Support				Rotoscoping
LEVEL 2	*- No Level -*					*Embedded to Level 3* / *Embedded to Level 3* / *Embedded to Level 3*	*- No Level -*				
LEVEL 1	*- No Level -*										

Figure 2: Occupational Area Structure for Graphic Design (Digital) (Level 3) Personnel

3. DEFINITION OF COMPETENCY LEVEL

The NOSS is developed for various occupational areas. Candidates for certification must be assessed and trained at certain levels to substantiate competencies. Below is a guideline of each NOSS Level as defined by the Department of Skills Development, Ministry of Human Resources Malaysia.

Sijil Kemahiran Malaysia (SKM) Tahap 1 (Malaysian Skills Certificate Level 1)	:	Competent in performing a range of varied work activities, most of which are routine and predictable
Sijil Kemahiran Malaysia (SKM) Tahap 2 (Malaysian Skills Certificate Level 2)	:	Competent in performing a significant range of varied work activities, performed in a variety of contexts. Some of the activities are non-routine and required individual responsibility and autonomy.
Sijil Kemahiran Malaysia (SKM) Tahap 3 (Malaysian Skills Certificate Level 3)	:	Competent in performing a broad range of varied work activities, performed in a variety of contexts, most of which are complex and non-routine. There is considerable responsibility and autonomy, and control or guidance of others in often required.
Diploma Kemahiran Malaysia (DKM) Tahap 4 (Malaysian Skills Diploma Level 4)	:	Competent in performing a broad range of complex technical or professional work activities, performed in a variety of contexts, and with substantial degree of personal responsibility and autonomy. Responsibility for the work of others and allocation of resources is often present.
Diploma Lanjutan Kemahiran Malaysia (DLKM) Tahap 5 (Malaysian Skills Advanced Diploma Level 5)	:	Competent in applying a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources features strongly, as do personal accountabilities for analysis, diagnosis, planning, execution and evaluation.

4. MALAYSIAN SKILLS CERTIFICATION

Candidates shall be awarded Sijil Kemahiran Malaysia (SKM) Level 3 in Graphic Design (Digital) after they are assessed, verified and fulfilled Sijil Kemahiran Malaysia requirements.

5. JOB COMPETENCIES

5.1 Core Competencies

Core competencies for Graphic Design (Digital) Level 3 are:

- Graphic Visualization
- Vector Graphics Design
- Typography Design
- Layout Design
- Graphic Editing

5.2 Elective Competencies

The elective competency for Graphic Design (Digital) Level 3 is:

- Graphic Animation

6. WORKING CONDITIONS

Graphic Design (Digital) level 3 personnel normally work according to project schedule. They are responsible to support pre-production to produce artworks as end products. They can choose to work in the office as full time staff or choose to work as independent freelancers. Those working as freelancers may work from home. They may be required to work beyond typical hours in order to meet project deadlines and client's requirements.

Graphic Design (Digital) level 3 personnel need to keep up-to-date with the ever-changing technology. They must be able to understand new terminologies and grasp new technologies faster. In addition, they need to be able to work both independently and as part of a team and be able to work well under pressure. Ideally, they should possess problem-solving ability and good communication skills for dealing with colleagues and clients.

7. EMPLOYMENT PROSPECTS

7.1 Malaysia Market

Malaysia has built a competitive industry and achieved high penetration rates for communications services. Malaysia's mobile penetration of 106 percent compares favourably to Southeast Asia's 76 percent (PEMANDU: ETP Report 2010) stimulates demand in creative contents. Many foreign companies are attracted by this scenario to set up their business in Malaysia especially within the Multimedia Super Corridor (MSC). At the national level, the creative content industry has contributed 1.27 per cent or RM9.4 billion to the Gross Domestic Product (GDP). The industry is expected to continue to grow at a rate of 11 per cent and generate a GDP of RM33 billion in 2020 (Malaysian Digest, Nov 2012). This positive scenario creates great prospects for graphic design (digital) talents.

7.1.1 Employment Opportunities

Other related occupations with respect to employment opportunities are:

- Senior Graphic Designer
- Multimedia Designer
- Storyboard Artist
- Visual Artist
- Trainer

7.1.2 List of Industries

Other related industries with respect to employment opportunities are:

- Film and TV industries
- Production house
- Digital Games
- Training
- Animation
- Broadcasting
- Publishing and media
- Advertising and marketing

7.2 International Market

The creative industries are among the most dynamic sectors in the world economy providing new opportunities for developing countries to leapfrog into emerging high-growth areas of the world economy (UNCTAD Report, August 2013). Most of developed countries especially European countries, Japan, Korea and Singapore now see the creative industries as a key component in a new knowledge economy. Globally, creative industry grows rapidly especially in advertising, broadcasting and mobile application.

However, the industry rapid development is not realigning with the increasing number of talents. The gap is still very obvious globally. This climate is a pull factor for the local talents in graphic design (digital) job area to work abroad and serve for the international companies.

8. TRAINING INDUSTRIAL / PROFESSIONAL RECOGNITION, OTHER QUALIFICATIONS AND ADVANCEMENT

8.1 Training

Graphic Design (Digital) personnel may enhance their knowledge and skill by attending professional courses provided by software companies and graphic design related vendors.

8.2 Industrial / Professional Recognition:

Currently, there is no standard reference of professional qualification with respect to this particular job title. The professional recognition for this job area is given by the associations. Among the associations are:

- Persatuan Animasi Malaysia (ANIMAS)
- The Association of Post Production & Animation Companies Malaysia (POSTAM)
- Perbadanan Kemajuan Filem Nasional Malaysia (FINAS)
- Pertubuhan Wakaf Reka Grafik Malaysia (wREGA)

9. SOURCES OF ADDITIONAL INFORMATION

- **Ministry Of Communications and Multimedia Malaysia**
  Lot 4G9, Persiaran Perdana, Precint 4
  Pusat Pentadbiran Kerajaan Persekutuan
  62100 Putrajaya, Malaysia
  Tel**:**   +603-8000 8000
  Website: www.kmm.gov.my

- **Multimedia Development Corporation (MDeC)**
  MSC Malaysia Headquaters
  Persiaran APEC, 63000, Cyberjaya
  Selangor Darul Ehsan, Malaysia
  Tel**:** 1-800-88-8338,
  Fax**:**   +603-83153115
  Website: www.mscmalaysia.my

- **Suruhanjaya Komunikasi dan Multimedia Malaysia**
  Off Persiaran Multimedia
  63000 Cyberjaya,
  Selangor Darul Ehsan, Malaysia
  Tel: +603-86888000,
  Fax: +603-86881000
  Website: www.skmm.gov.my

- **National IT Council (NITC) Secretariat**
  The Ministry Of Science, Technology and Innovation (MOSTI)
  Aras 1-7, Blok C4 dan C 5
  Pusat Pentadbiran Kerajaan Persekutuan
  62662 Putrajaya, Malaysia
  Tel: +603-88858000
  Website: www.mosti.gov.my

- **Pertubuhan Wakaf Reka Grafik Malaysia (wREGA)**
  wREGA Secretariat
  No. 6, Jalan 14/7, 46100 Petaling Jaya
  Selangor Darul Ehsan, Malaysia
  Tel**:**   +603 - 7954 0987
  Fax**:**   +603 - 7954 0991
  Website: www.wrega.org

- **Persatuan Industri Komputer dan Multimedia Malaysia (PIKOM)**
  The National ICT Association of Malaysia
  1106 & 1107, Block B, Phileo Damansara II
  No. 15, Jalan 16/11,
   46350 Petaling Jaya
  Selangor Darul Ehsan, Malaysia
  Tel**:**   +603-7955 2922,
  Fax**:**   +603-7955 2933
  Website: www.pikom.org.my

10. ACKNOWLEDGEMENT

11. NOSS DEVELOPMENT COMMITTEE MEMBERS

GRAPHIC DESIGN (DIGITAL) LEVEL 3

	PANEL	
1.	Arez Ezman Mohamed Salleh	Founder / Art Director / Producer Bhadra Rajya Asura Studios
2.	Hernani Bidin	Creative Manager Orenj Media House
3.	Melvin Ho Yoon Kong	Graphic Strategy Designer Hopena Sdn. Bhd. *(MSC status company)*
4.	Mohd. Fuad Mahadi Ya'akob	Managing Director Adi Karya Sdn. Bhd.
5.	Mohd. Samsul Harun	Multimedia Designer Netcarbon. Sdn. Bhd. *(MSC status company)*
6.	Muhamad Shah Reezal Muhamad Nor	Content Analyst, Interactive Media Madcat World Sdn. Bhd. *(MSC status company)*
7.	Muhammad Ismawi Muhammad Ismail	Lecturer & Manager Limkokwing University
8.	Nurman Nik Ahmad	Animation Director And Writer Bhadra Rajya Asura Studios
	FACILITATOR	
9.	Jaiyah Shahbudin	Malaysian Academy of Creative Technology Sdn. Bhd. (MACiT) *(MSC Status Company)*
	CO-FACILITATOR	
10.	Rosliza Awang Senik	Malaysian Academy of Creative Technology Sdn. Bhd. (MACiT) *(MSC Status Company)*

COMPETENCY PROFILE CHART (CPC)

SECTOR	INFORMATION AND COMMUNICATION TECHNOLOGY		
SUB SECTOR	CREATIVE MULTIMEDIA		
JOB AREA	GRAPHIC DESIGN		
NOSS TITLE	GRAPHIC DESIGN (DIGITAL)		
JOB LEVEL	THREE (3)	JOB AREA CODE	IT-058-3:2014

← COMPETENCY → ←————————— COMPETENCY UNIT —————————→

CORE	GRAPHIC VISUALISATION IT-058-3:2014-C01	VECTOR GRAPHICS DESIGN IT-058-3:2014-C02	TYPOGRAPHY DESIGN IT-058-3:2014-C03	DIGITAL LAYOUT DESIGN IT-058-3:2014-C04
	GRAPHIC EDITING IT-058-3:2014-C05			
ELECTIVE	GRAPHIC ANIMATION IT-058-3:2014-E01			
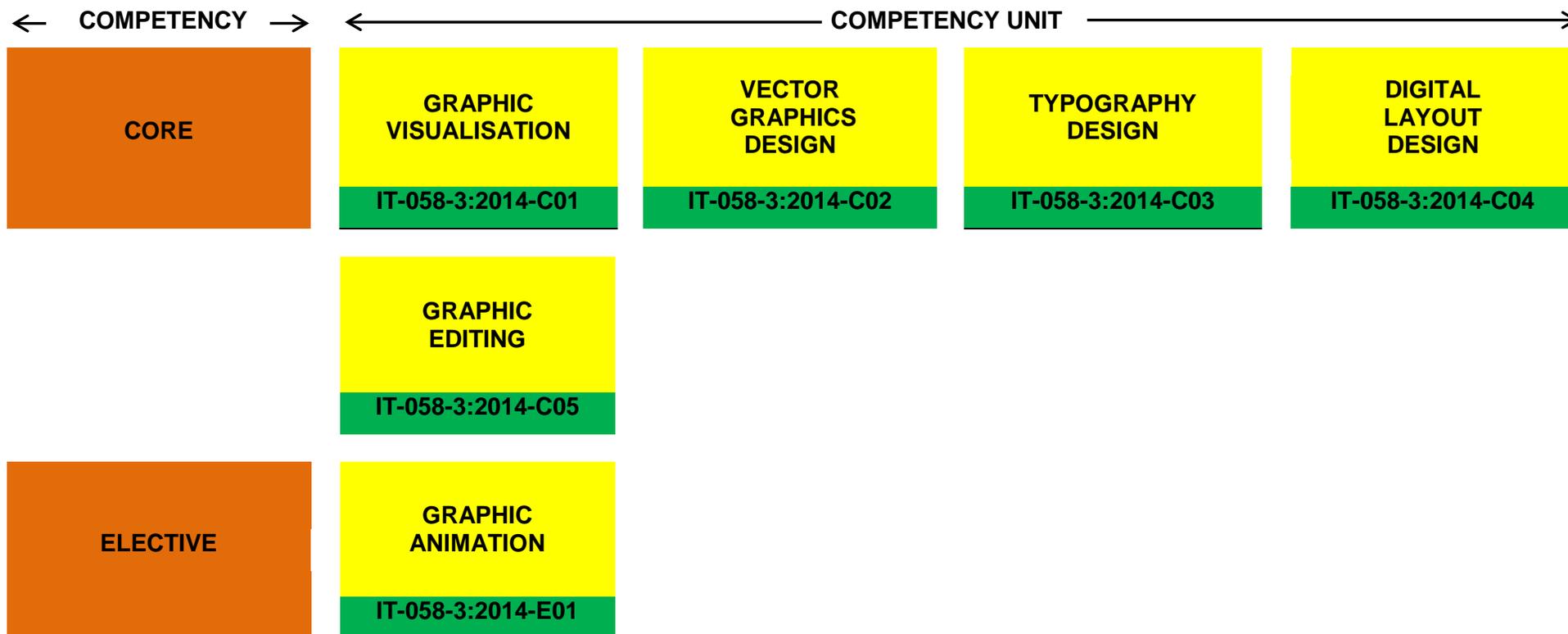
COMPETENCY PROFILE (CP)

Sub Sector	CREATIVE MULTIMEDIA
Job Area	GRAPHIC DESIGN
NOSS Title	GRAPHIC DESIGN (DIGITAL)
Level	THREE (3)

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria	
1. Graphic Visualisation	IT-058-3:2014-C01	Graphic visualization is a work process to generate idea and to transfer idea from verbal or text form to visual form that is known as artwork using visual art skills. It is a first stage in graphic designing before any graphic elements are applied to a design. As it is a crucial stage that determine the final design, visualisation must be clear, sharp and definite. The person who is competent in this CU shall be able to interpret graphic design visualisation job brief, generate design or concept idea, execute visualisation and carry out graphic visualisation documentation.	1. Interpret graphic visualisation job brief 2. Generate design / concept idea	1.1	Design specification identified based on job brief
				1.2	Client's corporate identity identified according to job brief
				1.3	Base idea, theme and concept determined
				2.1	Brainstorming session participated to discuss base idea, theme and concept
				2.2	Subject related to the job brief researched
				2.3	Relevant data related to design or concept idea compiled and extracted
				2.4	Design or concept idea created using creative

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		The outcome of this CU is to produce visualised idea based on design concept in accordance with job brief.		process 2.5 Draft of concept idea (verbal or text format) presented to superior 2.6 Feedback from superior on concept or idea assessed and concept or idea amended based on superior's feedback 2.7 Concept or idea approval acquired from superior
			3. Execute idea visualisation	3.1 Idea sketches produced based on approved concept / idea 3.2 Idea sketches evaluated, filtered and refined 3.3 Visualised idea submitted to superior 3.4 Feedback from superior on visualised idea assessed and visualised idea amended based on superior's feedback 3.5 Visualised idea completed and submitted to superior for further development

CU Title	CU Code	CU Descriptor	CU Work Activities		Performance Criteria
			4. Carry out graphic visualisation documentation.	4.1	Sketches compiled in accordance with company documentation procedure.
				4.2	Visualised idea labelled, indexed and filed in accordance with company documentation procedure
				4.3	Visualised idea scanned and transferred into digital format in accordance with company documentation procedure
2. Vector Graphics Design	IT-058-3:2014-C02	Vector graphics design is a process to create digital images through a sequence of commands or mathematical statements that place lines and shapes in a given two-dimensional or three-dimensional space. The vector graphic file is created and saved as a sequence of vector statements. The person who is competent in this CU shall be able to interpret vector graphics design job brief, execute vector design and carry out vector designs documentation.	1. Interpret vector graphics design job brief	1.1 1.2 1.3 1.4	Vector graphic design requirements identified based on job brief Visualised idea defined Design software determined according to vector graphic design requirement Job schedule interpreted according to project milestone
			2. Execute vector design	2.1 2.2	Visualised idea traced according to vector design work process Colour applied to the design using software

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		The outcome of this CU is to create a vector graphic file using visualised idea in accordance with design requirements.		tools 2.3 Graphic effect selected and applied to the design 2.4 Design resized according to job specification 2.5 Minimum of two additional alternative vector design produced and submitted to superior according to work procedure 2.6 Feedback from superior on vector designs assessed 2.7 Vector designs amended based on superior's feedback 2.8 Vector designs produced and submitted to superior for further development
			3. Carry out vector designs documentation	3.1 Vector designs indexed and filed in accordance with company documentation procedure. 3.2 Vector design saved in multiple formats and archived in accordance with company documentation procedure.

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
3. Typography Design	IT-058-3:2014-C03	Typography design is a process in creating, modifying and arranging type glyphs (characters) using a variety of illustration techniques to make messages visible. Typography determines the clarity of messages which aim to influence consumers' perception. The person who is competent in this CU shall be able to interpret typography design job brief, carry out typography design and perform typography designs documentation. The outcome of this CU is to create text design content and design outcome using typography as a communication tool	1. Interpret typography design job brief 2. Carry out typography design	1.1 Typography design requirements identified based on job brief 1.2 Visualised idea defined. 1.3 Job schedule interpreted according to project milestone 2.1 Relevant font type compiled from font library 2.2 Font type selected according to typography design requirements 2.3 Colour applied to the font using software tools 2.4 Effects selected and applied to the font 2.5 Font resized according to job specification or content 2.6 Draft of typographic design submitted to superior according work procedure 2.7 Feedback from superior on draft of typographic design assessed 2.8 Draft of typographic design amended

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				according to superior's feedback
				2.9 Typographic design produced and submitted to superior for further development
			3. Perform typographic design documentation	3.1 Typographic designs digitally labelled and filed in accordance with company documentation procedure
				3.2 Hardcopy references printed and indexed in accordance with company documentation procedure
4. Digital Layout Design	IT-058-3:2014-C04	Digital layout design is a design process in arranging the elements (content) on a page, such as image placement, and text layout and style.

The person who is competent in this CU shall be able to interpret layout design job brief, prepare layout design, compose layout design and carry out layout design documentation. | 1. Interpret layout design job brief | 1.1 Type of layout format design determined according to digital and online specification |
				1.2 Layout design specification defined based on job brief
				1.3 Layout design template determined according to job specification
				1.4 Type of content and image identified according to design outcome

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		The outcome of this CU is to produce harmonious design in relation to digital and online technical specification and design outcome.	2. Prepare layout design work	requirement 2.1 Grid structure drafted according to layout requirement 2.2 Layout format inserted according to digital and online final outcome 2.3 Layout elements arranged according to digital and online final outcome 2.4 Content and image sorted in digital format
			3. Compose layout design	3.1 Layout sketches and outline illustrated using software 3.2 Grid layout designed according to job specification 3.3 Layout elements, images and contents applied to layout according to digital and online layout specification 3.4 Draft of layout design submitted to superior according to work procedure

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria	
				3.5	Feedback from superior on draft of layout design assessed
				3.6	Draft of layout design amended according to superior's feedback
				3.7	Layout design produced and submitted to superior for further development
			4. Carry out layout design documentation	4.1	Design template compiled and labelled in accordance with company documentation procedure
				4.2	Hardcopy references printed and indexed in accordance with company documentation procedure
5. Graphic Editing	IT-058-3:2014-C05	Graphic editing is a process of altering, manipulating, enhancing and transforming graphic elements using various types of tools and software to fulfill the graphic specification. It is the final stage in producing final artwork. The person who is competent in this CU shall be able to interpret graphic editing job brief, prepare	1. Interpret graphic editing job brief	1.1	Graphic editing job scope confirmed based on job brief
				1.2	Editing software and tools determined according to job specification
				1.3	Final artwork specification defined and confirmed
				1.4	Job schedule interpreted according to job milestone

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		graphic editing work, execute graphic editing and carry out artwork documentation. The outcome of this CU is to provide artwork enhancement services including image manipulation, colour correction, composition and special effect to ensure final artwork produced according to job specification and customer requirement.	2. Prepare graphic editing work	2.1 Graphic image prepared according to design requirement 2.2 Design tools prepared in accordance with graphic editing requirement 2.3 Colour output determined based on job brief 2.4 Graphic elements determined and selected in accordance with job specification
			3. Execute graphic editing	3.1 Selected images/ graphics manipulated according to job specification 3.2 Colour of images/ graphics corrected using colour correction software 3.3 Graphic elements arranged in accordance with graphic specification 3.4 Artwork produced and submitted to superior for feedback 3.5 Feedback from superior on artwork assessed and confirmed

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				3.6 Artwork amended according to superior's feedback
				3.7 Final artwork produced and submitted to superior for approval
			4. Carry out artwork documentation	4.1 Final artwork labelled and filed in accordance with company documentation procedure
				4.2 Final artwork archived in accordance with company documentation procedure
6. Graphic Animation	IT-058-3:2014-E01	Graphic animation is a variation of motion which is manipulated frame-by-frame to create movement. The animated graphic is used for web development, interactive interface, flash banner and others to enhance the application of graphic design. The person who is competent in this CU shall be able to determine graphic animation job requirement, create graphic animation workspace, create graphic animation composition,	1. Determine graphic animation job requirement	1.1 Animation job specification defined
				1.2 Digital software and tools determined according to job specification
				1.3 Graphic animation specification determined
				1.4 Graphic elements identified based on animation job brief
				1.5 Job schedule interpreted according to job milestone
			2. Create graphic animation workspace	2.1 Graphic animation stage defined according to job

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		and graphic animation. The outcome of this CU is to produce basic graphic animation that will be applied to graphic elements in accordance with job brief specification.		specification 2.2 Animation tools selected according to animation requirement 2.3 Animation layout defined based job specification 2.4 Animation setting determined according to job specification 2.5 Graphic animation workplace set up
			3. Create graphic animation composition	3.1 Graphic elements library established 3.2 Multiple layers created according to animation compisition requirement 3.3 Graphic elements imported to the layers 3.4 Graphic elements resized and repositioned according to animation requirement
			4. Carry out graphic animation	4.1 Graphic animation techniques selected according to job specification 4.2 Animation timing for

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				elements set based on animation requirement
				4.3 Animation effects applied to graphic elements
				4.4 Animation total duration determined according to job specification
				4.5 Graphic animation published and previewed to superior
				4.6 Feedback from superior on graphic animation assessed and confirmed
				4.7 Graphic animation amended according to superior's feedback
				4.8 Graphic animation produced and submitted to superior for approval
			5. Carry out graphic animation documentation	5.1 Graphic animation digitally labelled and filed in accordance with company documentation procedure
				5.2 Graphic animation archived according to company documentation procedure

CURRICULUM of COMPETENCY UNIT (CoCU)

Sub Sector	CREATIVE MULTIMEDIA						
Job Area	GRAPHIC DESIGN (DIGITAL)						
NOSS Title	GRAPHIC DESIGN (DIGITAL)						
Competency Unit Title	GRAPHIC VISUALISATION						
Learning Outcomes	The person who is competent in this CU shall be able to produce visualised idea based on design concept in accordance with job brief. Upon completion of this competency unit, trainees will be able to: • Interpret graphic visualisation job brief • Generate design/concept idea • Execute idea visualisation • Carry out graphic visualisation documentation						
Competency Unit ID	IT-058-3:2014-C01	**Level**	Three (3)	**Training Duration**	350 Hours	**Credit Hours**	35

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria

1. Interpret graphic visualisation job brief	i. Design fundamental
	  • Terminology
	  • Design elements (i.e.: basic shape/ form, colour, line)
	  • Design principle (i.e.: unity, balance, scale and proportion)
	ii. Corporate identity such as
	  • Logo (mark)
	  • Logo type
	  • Corporate colour
				15 hours	Lecture or Group Discussion	i. Graphic visualisation job extracted from job brief
						ii. Graphic visualisation requirement defined
						iii. Base idea described
						iv. Graphic theme selected
						v. Design principle applied

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Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria

	• Branding
	iii. Graphic theme such as
	  • Colour theme
	  • Mood theme
	  • Corporate theme
	iv. Graphic concept such as
	  • Modern
	  • Conservative
	  • Fantasy
	v. Idea development methodology such as
	  • Brainstorming
	  • Mind mapping
	  • Keyword technique
	vi. Job brief contents, such as:
	  • Project information
	  • Project's requirements
	  • Deadline
	  • Client's information
	vii. Peer-to-peer training
	viii. Workplace ergonomic practice
						vi. Graphic concept determined
						vii. Idea development methodology applied

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Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	ix. wREGA Graphic Designer Code Of Professional Conduct (COPC)					
		i. Define graphic visualisation job requirement ii. Define base idea iii. Determine graphic theme iv. Identify graphic concept	*Attitude:* i. Accuracy in defining graphic visualisation job requirements ii. Precise in identifying graphic theme and graphic concept iii. Adhere to Graphic Designer Code Of Professional Conduct (COPC) by wREGA *Safety/Environment*: i. Adhere to workplace ergonomics practice	35 hours	Observation, Demonstration or Group Discussion	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
2. Generate design/concept idea	i. Research skill, such as • Online research • Print media ii. Creative process, such as • Design relevancy • Idea combination (i.e.: design functionality)			40 hours	Lecture or Group Discussion	i. Design relevancy assessed ii. Creative process applied iii. Design/ concept idea produced iv. Design/ concept idea refined v. Design/ concept idea details presented
		i. Determine researched data relevancy and validity ii. Create design/concept ideas from researched data iii. Refine design/ concept idea iv. Describe design/ concept idea details	*Attitude:* i. Factual in determining data relevancy and validity ii. Ensure suitability in selecting and implementing design/ concept idea iii. Detail in describing design/ concept idea details	100 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			Safety/Environment: i. Adhere to workplace ergonomics practice			
3. Execute idea visualisation	i. Drawing technique, such as: • Pencil drawing • Sketches (i.e.: thumbnail) ii. Drawing medium, such as: • Ink • Marker • Colour pencil iii. Creative visualisation techniques, such as: • Distortion • Collage • Comparison iv. Copyright Act 1987			40 hours	Lecture	i. Drawing technique selected ii. Drawing medium established iii. Thumbnail idea sketches produced iv. Creative visualisation techniques applied v. Visualised idea produced and presented
		i. Create idea sketches ii. Apply drawing technique iii. Apply creative visualisation techniques iv. Create visualised idea	*Attitude:* i. Creative in applying drawing technique ii. Accuracy in evaluating visualized idea	100 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			iii. Adhere to Copyright Act 1987 *Safety/Environment*: i. Adhere to workplace ergonomics practice			
4. Carry out graphic visualisation documentation	i. Digital format: • Scanned outputs • File extensions (i.e.: .JPG, .PDF, .TIFF) ii. Documentation procedure, such as: • Indexing • Labelling • Archiving - Archiving medium (i.e.: network server, CD/ DVD, cloud storage) iii. List of extracted jobs from job brief			6 hours	Lecture or Group Discussion	i. Checklist on graphic visualisation job (job brief) recorded ii. Sketches categorised, indexed and recorded iii. Visual idea digitised and archived iv. Documentation procedure applied

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
		i. Update checklist on graphic visualisation job (job brief) ii. Compile and file all idea sketches iii. Scan visualised idea and transfer into digital format for archiving iv. Apply documentation procedure	*Attitude:* i. Systematic in compiling and filing all the sketches and documents *Safety/Environment*: i. Adhere to workplace ergonomics practice	14 hours	Demonstration or Project	

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information	1. Communication skills
01.02 Document information, procedures or processes	2. Conceptual skills
01.03 Utilize basic IT applications	3. Interpersonal skills
01.04 Analyze information	4. Learning skills
01.05 Utilize the internet to locate and gather information	5. Leadership skills
01.11 Apply thinking skills and creativity	6. Multitasking and prioritizing
02.01 Interpret and follow manuals, instructions and SOP's	7. Self-discipline
02.03 Communicate clearly	8. Teamwork
02.04 Prepare brief reports and checklists using standard forms	
02.11 Convey information and ideas to people	
03.01 Apply cultural requirements to the workplace	
03.02 Demonstrate integrity and apply ethical practices	
03.03 Accept responsibility for own work and work area	
03.04 Seek and act constructively upon feedback about performance	
03.06 Respond appropriately to people and situations	
03.08 Develop and maintain a cooperation within work group	
03.13 Develop and maintain team harmony and resolve conflicts	
03.14 Facilitate and coordinate teams and ideas	
03.15 Liaise to achieve identified outcomes	
03.16 Identify and assess client / customer needs	
03.17 Identify staff training needs and facilities access to training	
04.01 Organize own work activities	
04.02 Set and revise own objectives and goals	
04.03 Organize and maintain own workplace	
04.04 Apply problem-solving strategies	
04.05 Demonstrate initiative and flexibility	
04.07 Negotiate acceptance and support for objectives and strategies	

05.01	Implement project / work plans
06.02	Comply with and follow chain and command
06.03	Identify and highlight problems
06.04	Adapt competencies to new situations / systems

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM: Trainees)
1. Computer	1:1
2. Printer	1:25
3. Sample of graphic visualisation job brief	1:5
4. Sample of visualised idea (Mock-up)	1:5
5. Scanner	1:25
6. Stationaries	1:1

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CURRICULUM of COMPETENCY UNIT (CoCU)

Sub Sector	CREATIVE MULTIMEDIA						
Job Area	GRAPHIC DESIGN (DIGITAL)						
NOSS Title	GRAPHIC DESIGN (DIGITAL)						
Competency Unit Title	VECTOR GRAPHICS DESIGN						
Learning Outcomes	The person who is competent in this CU shall be able to create a vector graphic file using visualised idea in accordance with design requirement. Upon completion of this competency unit, trainees will be able to: • Interpret vector graphics design job brief • Execute vector design • Carry out vector designs documentation						
Competency Unit ID	IT-058-3:2014-C02	**Level**	Three (3)	**Training Duration**	300 Hours	**Credit Hours**	30

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
1. Interpret vector graphics design job brief	i. Type of vector graphic project, such as: • Corporate identity • Packaging • Graphic icon • Character design ii. Type of project technical setting, such as: • Dimension • Aspect ratio • Colour scheme iii. Vector graphic software • Open source			15 hours	Lecture or Group Discussion	i. Vector graphic design job extracted from job brief ii. Vector project requirements identified iii. Project technical setting described iv. Project work flow and Gantt Chart prepared

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria

	• Licensed
	iv. Vector graphic tools (hardware), such as:
	  • Mouse
	  • Drawing tablet
	  • Touch pad
	  • Input devices (i.e.: scanner, camera)
	v. Job brief contents, such as:
	  • Project information
	  • Project's requirements
	  • Deadline
	  • Client's information
	vi. Personalised vector graphic job milestones and planning
	  • Time management
	  • Gantt Chart
	  • Schedule
	vii. Peer-to-peer training
	viii. Workplace ergonomics practice
	ix. wREGA Graphic Designer Code Of Professional Conduct (COPC)					

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
		i. Determine type of vector graphic project ii. Define selected visualised design (sketches) iii. Identify related vector graphic software iv. Identify related vector graphic tools (hardware) v. Define personalised vector graphic job milestones	*Attitude:* i. Accuracy in interpreting visualised design ii. Precise in identifying related vector graphic software and hardware iii. Adhere to Graphic Designer Code Of Professional Conduct (COPC) by wREGA *Safety/Environment*: i. Adhere to workplace ergonomics practice	30 hours	Observation, Demonstration or Group Discussion	
2. Execute vector design	i. Digital drawing tools, such as: • Pen tools • Line tools • Shape tools ii. Colouring tools, such as • Paint bucket			72 hours	Lecture or Group Discussion	i. Digital drawing tools described and applied ii. Drawing performed using digital drawing tools iii. Colour theme

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	• Gradient tool • Eye drop iii. Texturing, such as: • Stamping • Brush pattern iv. Vector effect, such as: • Shadow • Extrusion • Glowing • Sumi-e • Blur v. Transformation tools, such as: • Resize • Distortion • Skew vi. Copyright Act 1987					selected and applied to the design using colouring tools iv. Vector effects applied to the design v. Vector designs produced and presented
		i. Select digital drawing tools ii. Perform digital drawing iii. Apply colour theme to the selected design iv. Create graphic effects v. Produce multiple vector designs	*Attitude:* i. Accuracy in performing digital drawing ii. Precise in determining colour theme iii. Ensure suitability in selecting relevant graphic effects	168 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			iv. Creative in creating multiple vector designs v. Adhere to Copyright act 1987 *Safety/Environment*: i. Adhere to workplace ergonomics practice			
3. Carry out vector designs documentation	i. Digital format: • File extensions (such as .JPG, .PDF, .TIFF) ii. Documentation procedure, such as: • Indexing • Labelling • Archiving - Archiving medium (i.e.: network server, CD/ DVD, cloud storage) iii. List of extracted jobs from job brief			5 hours	Lecture or Group Discussion	i. Checklist on vector design job (job brief) recorded ii. Vector design categorised, indexed and recorded iii. Vector design archived iv. Documentation procedure applied

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
		i. Update checklist on vector design job (job brief) ii. Compile and organise vector design files iii. Archive vector digital file iv. Apply documentation procedure	*Attitude:* i. Systematic in compiling and organising vector design files *Safety/Environment*: i. Adhere to workplace ergonomics practice	10 hours	Demonstration or Project	

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.03 Utilize basic IT applications 01.06 Utilize word processor to process information 01.11 Apply thinking skills and creativity 02.01 Interpret and follow manuals, instructions and SOP's 02.02 Follow telephone/telecommunication procedure 02.03 Communicate clearly 02.06 Write memos and letters 02.07 Utilize local area network (LAN) Internet to exchange information 02.08 Prepare pictorial and graphic information	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritizing 7. Self-discipline 8. Teamwork

02.09 Prepare flowcharts 02.10 Prepare reports and instructions 02.11 Convey information and ideas to people 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.06 Respond appropriately to people and situations 03.07 Resolve interpersonal conflicts 03.08 Develop and maintain a cooperation within work group 03.09 Manage and improve performance of individuals 03.14 Facilitate and coordinate teams and ideas 03.15 Liaise to achieve identified outcomes 03.16 Identify and assess client / customer needs 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.07 Negotiate acceptance and support for objectives and strategies 05.01 Implement project / work plans 06.02 Comply with and follow chain and command 06.03 Identify and highlight problems 06.04 Adapt competencies to new situations / systems	

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM: Trainees)
1. Computer	1:1
2. Drawing tablet (optional)	1:1
3. Printer	1:25
4. Sample of vector design job brief	1:1
5. Sample of vector design final outcome	1:5
6. Scanner	1:5
7. Vector software	1:1

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CURRICULUM of COMPETENCY UNIT (CoCU)

Sub Sector	CREATIVE MULTIMEDIA
Job Area	GRAPHIC DESIGN (DIGITAL)
NOSS Title	GRAPHIC DESIGN (DIGITAL)
Competency Unit Title	TYPOGRAPHY DESIGN
Learning Outcomes	The person who is competent in this CU shall be able to create text design content and design outcome using typography as a communication tool. Upon completion of this competency unit, trainees will be able to: • Interpret typography design job brief • Carry out typography design • Perform typographic design documentation

Competency Unit ID	IT-058-3:2014-C03	Level	Three (3)	Training Duration	300 Hours	Credit Hours	30

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
1. Interpret typography design job brief	i. Typeface design • Font anatomy (i.e.: bracket, crossbar, stem, counter) • Font characteristics (i.e.: caps height, ascender, descender) • Font families (i.e.: brush script, wingdings, gothic) • Typeface classifications (i.e.:			15 hours	Lecture or Group Discussion	i. Typography design job extracted from job brief ii. Typefaces requirement described and justified iii. Characteristic of typefaces determined iv. Typography hierarchy determined v. Visualised idea

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Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	serif, sans-serif, ornamental) • Hierarchy (i.e.: weight, size, contrast, colour, position) • Character spacing (i.e.: kerning, tracking, alignment) • Screen typography • Font types (i.e.: Arial, Times New Roman, Optima) ii. Lettering design, such as: • Glyph design • Dimension (i.e.: 3 X 5, 4 X 5) iii. Job brief contents, such as: • Project information • Project's requirements: • Deadline • Client's information iv. Personalised					described vi. Project work flow and Gantt Chart prepared

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	typography design job milestones and planning, including: • Time management • Gantt Chart • Schedule v. Peer-to-peer training vi. Workplace ergonomic practice vii. wREGA Graphic Designer Code Of Professional Conduct (COPC)					
		i. Identify required typefaces ii. Identify characteristic of typefaces iii. Identify typeface design purpose iv. Define visualised idea v. Define personalised typography design job milestones	_Attitude:_ i. Meticulous in identifying required typefaces ii. Detail in identifying characteristic typefaces iii. Accuracy in interpreting visualised idea iv. Adhere to Graphic Designer Code Of Professional	30 hours	Observation, Demonstration or Group Discussion	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			Conduct (COPC) by wREGA *Safety/Environment:* i. Adhere to workplace ergonomics practice			
2. Carry out typography design	i. Typography hierarchy, such as: • Title • Headline • Sub-headings ii. Font style, such as: • Uppercase • Small caps • Italic • Bold • Underline • Subscript/ superscript iii. Digital design tools, such as: • Text tools • Colour tools (i.e.: solid, outline, colour selection/ swatch/ gradient)			72 hours	Lecture or Group Discussion	i. Typography hierarchy described ii. Font style selected iii. Colour theme selected iv. Typography design created using digital design tools

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	• Text path (i.e.: horizontal, vertical, organic line) • Texture (i.e.: masking) • Shadow iv. Copyright Act 1987					
		i. Select relevant typeface ii. Apply design tools iii. Apply colour theme to the selected design iv. Generate typography design draft	*Attitude:* i. Knowledgeable in identifying typeface design purpose ii. Precise in defining typeface relevancy and determine colour theme iii. Adhere to Copyright act 1987 *Safety/Environment*: i. Adhere to workplace ergonomics practice	168 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
3. Perform typographic design documentation	i. Digital format: • File extensions (such as .JPG, .PDF, .TIFF) ii. Documentation procedure, such as: • Indexing • Labelling • Archiving - Archiving medium (i.e.: network server, CD/ DVD, cloud storage) iii. List of extracted jobs from job brief			5 hours	Lecture or Group Discussion	i. Checklist on typography design job (job brief) recorded ii. Typography design categorised, indexed and recorded iii. Typography design archived iv. Documentation procedure applied
		i. Update checklist on typography design job (job brief) ii. Compile and organise typography design file iii. Archive typography digital file iv. Apply documentation procedure	_Attitude:_ i. Systematic in compiling and organising typography design files	10 hours	Demonstration	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			Safety/Environment: i. Adhere to workplace ergonomics practice			

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.03 Utilize basic IT applications 01.06 Utilize word processor to process information 01.11 Apply thinking skills and creativity 02.01 Interpret and follow manuals, instructions and SOP's 02.02 Follow telephone/telecommunication procedures 02.03 Communicate clearly 02.07 Utilize local area network (LAN) Internet to exchange information 02.08 Prepare pictorial and graphic information. 02.09 Prepare flowcharts 02.10 Prepare reports and instructions 02.11 Convey information and ideas to people 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritizing 7. Self-discipline 8. Teamwork

03.06 Respond appropriately to people and situations	
03.07 Resolve interpersonal conflicts	
03.08 Develop and maintain a cooperation within work group	
03.09 Manage and improve performance of individuals	
03.14 Facilitate and coordinate teams and ideas	
03.15 Liaise to achieve identified outcomes	
03.16 Identify and assess client / customer needs	
04.01 Organize own work activities	
04.02 Set and revise own objectives and goals	
04.07 Negotiate acceptance and support for objectives and strategies	
05.01 Implement project / work plans	
06.02 Comply with and follow chain and command	
06.03 Identify and highlight problems	
06.04 Adapt competencies to new situations / systems	

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM: Trainees)
1. Computer	1:1
2. Graphic software	1:1
3. Printer	1:25
4. Sample of typography design job brief	1:5
5. Sample of typography design final outcome	1:5
6. Scanner	1:25

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CURRICULUM of COMPETENCY UNIT (CoCU)

Sub Sector	CREATIVE MULTIMEDIA
Job Area	GRAPHIC DESIGN
NOSS Title	GRAPHIC DESIGN (DIGITAL)
Competency Unit Title	DIGITAL LAYOUT DESIGN
Learning Outcomes	The person who is competent in this CU shall be able to produce harmonious design in relation to digital and online technical specification and design outcome. Upon completion of this competency unit, trainees will be able to: • Interpret layout design job brief • Prepare layout design work • Compose layout design • Carry out layout design documentation

Competency Unit ID	IT-058-3:2014-C04	Level	Three (3)	Training Duration	300 Hours	Credit Hours	30

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
1. Interpret layout design job brief	i. Digital Layout format • Web Design • Printing Design • Application Design • Mobile Application Design ii. Layout guidelines such as • Resolution and dpi (i.e.: maximum and minimum, optimization) • Size (object /			15 hours	Lecture or Group Discussion	i. Digital Layout design job extracted from job brief ii. Digital layout format described and determined iii. Digital layout guidelines determined iv. Layout template specified

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	element) (i.e.: default size) • Width and height (i.e.: resizable to avoid scroll bar/truncated data (for web application), margin) • Placement (i.e.: left to right, top to bottom, right to left) • Focus point/ Highlight (i.e.: image, typography, design greatest visual) • Alignment (i.e.: left for normal text or label, right for numeric data, right for button) - Accessibility (i.e.: easy to read, easy to interact)					v. Required content and images determined vi. Project work flow and Gantt Chart prepared

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	iii. Job brief contents, such as: • Project information • Project's requirements • Deadline • Client's information iv. Personalised layout design job milestones and planning • Time management • Gantt Chart • Schedule v. Peer-to-peer training vi. Workplace ergonomics practice vii. Adhere to Graphic Designer Code Of Professional Conduct (COPC) by wREGA					
		i. Identify digital layout format ii. Identify digital layout guidelines iii. Define design layout template iv. Determine required graphic elements	*Attitude:* i. Particulars in identifying layout concept and layout guidelines ii. Detail in defining design layout	30 hours	Observation, Demonstration or Group Discussion	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
		v. Define personalised layout design job milestones	template iii. Meticulous in interpreting layout design requirements iv. Adhere to Graphic Designer Code Of Professional Conduct (COPC) by wREGA *Safety/Environment:* i. Adhere to workplace ergonomics practice			
2. Prepare layout design work	i. Grid in layout Design such as • 2 column • Asymmetric column • Mix column ii. Layout format, such as: • Header • Sub-header • Sidebar			18 hours	Lecture or Group Discussion	i. Grid structure set up ii. Layout format produced iii. Layout elements produced iv. Graphic elements applied v. Image thumbnail sketches produced

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Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	• Content • Footer iii. Layout elements, such as: • Head line • Logo • Graphic • Text • Signature iv. Graphic elements, such as: • Background • Banner • Separator • Shadow • Glass					
		i. Generate grid structures ii. Draft layout format iii. Apply layout elements iv. Develop graphic elements v. Sketch layout thumbnail	*Attitude:* i. Accuracy in setting up grid structures ii. Meticulous in interpreting layout format requirements iii. Creative in drafting layout design thumbnail sketches	42 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			Safety/Environment: i. Adhere to workplace ergonomics practice			
3. Compose layout Design	i. Layout design technique using digital software • Web • Application • Print • Mobile App ii. Layout design specification, such as: • Margin • Row • Column Gaps iii. Layout design content, such as: • Graphic • Text • Image • Video iv. Layout design output • Resolution • Size v. Copyright Act 1987			54 hours	Lecture or Group Discussion	i. Layout design specification determined ii. Layout design content selected based on project requirements iii. Layout design template produced

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
		i. Create digital layout design based on thumbnail sketches ii. Apply required layout elements iii. Import required layout design content iv. Prepare layout design template	*Attitude:* i. Accuracy in determining required layout elements inside the design ii. Systematic in exporting required element inside the design iii. Detail in preparing layout design template iv. Adhere to Copyright act 1987 *Safety/Environment*: i. Adhere to workplace ergonomics practice	126 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
4. Carry out layout design documentation	i. Digital format: • File extensions (such as .JPG, .PDF, .TIFF) ii. Documentation procedure, such as: • Indexing • Labelling • Archiving - Archiving medium (i.e.: network server, CD/ DVD, cloud storage) iii. List of extracted jobs from job brief			5 hours	Lecture or Group Discussion	i. Checklist on digital layout design job (job brief) recorded ii. Thumbnail sketches categorised, indexed and recorded iii. Digital layout design archived iv. Documentation procedure applied
		i. Update checklist on digital layout design job (job brief) i. Collect and organise layout design sketches ii. Scan layout design sketches and transfer into digital format for archiving iii. Apply documentation procedure	*Attitude:* i. Systematic in compiling and organising layout design files *Safety/Environment*: i. Adhere to workplace ergonomics practice	10 hours	Demonstration or Project	

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information	1. Communication skills
01.02 Document information, procedures or processes	2. Conceptual skills
01.07 Utilize database applications to locate and process information	3. Interpersonal skills
01.11 Apply thinking skills and creativity	4. Learning skills
02.01 Interpret and follow manuals, instructions and SOP's	5. Leadership skills
02.02 Follow telephone/telecommunication procedures	6. Multitasking and prioritizing
02.07 Utilize local area network (LAN) Internet to exchange information	7. Self-discipline
02.08 Prepare pictorial and graphic information.	8. Teamwork
02.09 Prepare flowcharts	
02.10 Prepare reports and instructions	
02.11 Convey information and ideas to people	
03.01 Apply cultural requirements to the workplace	
03.02 Demonstrate integrity and apply ethical practices	
03.07 Resolve interpersonal conflicts	
03.08 Develop and maintain a cooperation within work group	
03.13 Develop and maintain team harmony and resolve conflicts	
03.14 Facilitate and coordinate teams and ideas	
03.15 Liaise to achieve identified outcomes	
03.16 Identify and assess client / customer needs	
04.01 Organize own work activities	
04.02 Set and revise own objectives and goals	
04.03 Organize and maintain own workplace	
04.04 Apply problem-solving strategies	
04.05 Demonstrate initiative and flexibility	
04.06 Allocate work	
04.07 Negotiate acceptance and support for objectives and strategies	
05.01 Implement project / work plans	
05.02 Inspect and monitor work done and / or in progress	

06.02 Comply with and follow chain and command 06.03 Identify and highlight problems 06.04 Adapt competencies to new situations / systems 06.05 Analyze technical systems	

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM: Trainees)
1. Computer	1:1
2. Drawing tablet (optional)	1:1
3. Graphic editing software	1:1
4. Printer	1:25
5. Sample of digital layout design job brief	1:5
6. Sample of digital layout design final outcome	1:5
7. Scanner	1:25
8. Vector software	1:1
9. Stationaries	1:1

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CURRICULUM of COMPETENCY UNIT (CoCU)

Sub Sector	CREATIVE MULTIMEDIA						
Job Area	GRAPHIC DESIGN (DIGITAL)						
NOSS Title	GRAPHIC DESIGN (DIGITAL)						
Competency Unit Title	GRAPHIC EDITING						
Learning Outcomes	The person who is competent in this CU shall be able to provide artwork enhancement services including image manipulation, colour correction, composition and special effect to ensure final artwork produced according to job specification and customer requirements. Upon completion of this competency unit, trainees will be able to: • Interpret graphic editing job brief • Prepare graphic editing work • Execute graphic editing • Carry out artwork documentation						
Competency Unit ID	IT-058-3:2014-C05	**Level**	Three (3)	**Training Duration**	350 Hours	**Credit Hours**	35

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
1. Interpret graphic editing job brief	i. Type of editing project, such as: • Image manipulation • Colour correction • Composition (i.e.: Text , layout, element editing • Special effect ii. Type of project technical setting, such as: • Dimension			15 hours	Lecture or Group Discussion	i. Editing job extracted from job brief ii. Type of editing project determined iii. Project aspect ratio, dimension and colour scheme determined iv. Graphic editing hardware and software

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Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria

	• Aspect ratio
	• Colour scheme
	iii. Graphic editing software
	  • Open source
	  • Licenced
	iv. Graphic editing tools (hardware), such as:
	  • Mouse
	  • Drawing tablet
	  • Touch pad
	  • Input devices (i.e.: scanner, camera)
	v. Job brief contents, such as:
	  • Project information
	  • Project's requirements:
	   - Graphic editing outline
	  • Deadline
	  • Client's information
	vi. Personalised graphic editing job milestones and planning
	  • Time management
	  • Gantt Chart
						described and determined
						v. Project work flow and Gantt Chart prepared

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	• Schedule vii. Peer-to-peer training viii. Workplace ergonomics practice ix. Adhere to Graphic Designer Code Of Professional Conduct (COPC) by wREGA					
		i. Identify type of editing project ii. Identify project technical setting iii. Determine graphic editing software iv. Determine graphic editing hardware v. Define personalised graphic editing job milestones	*Attitude:* i. Accuracy in determining project technical setting ii. Precise in identifying related graphic editing software and hardware iii. Adhere to Graphic Designer Code Of Professional Conduct (COPC) by wREGA	35 hours	Observation, Demonstration or Group Discussion	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			Safety/Environment: i. Adhere to workplace ergonomics practice			
2. Prepare graphic editing work	i. Project file cataloguing • Category (i.e.: references, file, extension, amendments/ drafts, final artwork) • Date stamp (i.e.: yyyy/mm/dd) ii. Graphic elements, such as: • Background • Shadow • Separator • Aggregator			20 hours	Lecture or Group Discussion	i. Graphic images for editing prepared ii. Graphic editing tools (hardware) selected iii. Graphic editing tools (software) selected iv. Graphic editing project setting (software) set up v. Relevant graphic elements organised
		i. Organise relevant graphic images for editing ii. Select graphic editing tools (hardware and software) iii. Prepare project setting (software) for graphic editing	*Attitude:* i. Systematic in organising relevant graphic images for editing ii. Detail in selecting graphic editing	50 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
		iv. Arrange relevant graphic elements	tools (hardware and software) iii. Precise in setting up technical setting (software) for graphic editing iv. Systematic in organising relevant graphic elements *Safety/Environment*: i. Adhere to workplace ergonomics practice			
3. Execute graphic editing	i. Graphic manipulation technique • Transformation (i.e.: resize, distortion, skew) • Crop • Masking ii. Layer effect, such as: • Multiply • Burn • Overlay • Intensity			60 hours	Lecture	i. Graphic manipulation techniques applied ii. Layer effect applied iii. Graphic element colour correction and enhancement carried out using colour correction techniques

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria

	• Hard light
	• Soft light
	iii. Colour concept
	   • Colour scheme (i.e.: warm, cool, monochrome)
	   • Colour theme (i.e.: pastel, vivid, earth)
	   • Colour output (i.e.: RGB, CMYK, Web)
	   • Colour adjustment (i.e.: black and white, brightness and contrast, colour curve)
	iv. Graphic composition
	   • Layering (i.e.: background, foreground, duplicate, grouping, layer masking, layer channel)
	   • Graphic layout arrangement (i.e.: line, perspective, balance, rule of
						iv. Graphic elements composed
						v. Final artwork produced

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	third, white space, positive and negative) v. Copyright Act 1987					
		i. Manipulate graphics and images ii. Select layer effect iii. Select colour theme iv. Carry out colour correction v. Arrange graphic elements vi. Create graphic effect vii. Apply graphic composition techniques viii. Create final artwork	*Attitude:* i. Precise in manipulating graphics and images ii. Accuracy in determining colour theme iii. Detail in composing graphic elements iv. Efficient in applying graphic composition techniques v. Adhere to Copyright Act 1987	150 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			Safety/Environment: i. Adhere to workplace ergonomics practice			
4. Carry out artwork documentation	i. Digital format: • File extensions (i.e.: .JPG, .PDF, .TIFF) ii. Documentation procedure, such as: • Indexing • Labelling • Archiving - Archiving medium (i.e.: network server, CD/DVD, cloud storage) iii. List of extracted jobs from job brief			6 hours	Lecture	i. Checklist on editing job (job brief) recorded ii. Project artworks categorised and recorded iii. Project artworks archived iv. Documentation procedure applied
		i. Update checklist on editing job (job brief) ii. Compile and organise project design file iii. Archive project file iv. Apply documentation procedure	*Attitude:* i. Systematic in compiling and organising project design files	14 hours	Demonstration or Project	

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Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			Safety/Environment: i. Adhere to workplace ergonomics practice			

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information	1. Communication skills
01.04 Analyze information	2. Conceptual skills
01.05 Utilize the internet to locate and gather information	3. Interpersonal skills
01.11 Apply thinking skills and creativity	4. Learning skills
02.01 Interpret and follow manuals, instructions and SOP's	5. Leadership skills
02.04 Prepare brief reports and checklists using standard forms	6. Multitasking and prioritizing
02.05 Read / interpret flowcharts and pictorial information	7. Self-discipline
02.07 Utilize local area network (LAN) Internet to exchange information	8. Teamwork
02.08 Prepare pictorial and graphic information	
02.09 Prepare flowcharts	
02.10 Prepare reports and instructions	
02.11 Convey information and ideas to people	
03.01 Apply cultural requirements to the workplace	
03.04 Seek and act constructively upon feedback about performance	
03.05 Demonstrate safety skills	
03.06 Respond appropriately to people and situations	
03.07 Resolve interpersonal conflicts	
03.08 Develop and maintain a cooperation within work group	
03.12 Provide coaching/on-the job training	

03.13 Develop and maintain team harmony and resolve conflicts 03.14 Facilitate and coordinate teams and ideas 03.15 Liaise to achi.e.ve identified outcomes 03.16 Identify and assess client / customer needs 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.04 Apply problem-solving strategies 04.05 Demonstrate initiative and flexibility 04.06 Allocate work 04.07 Negotiate acceptance and support for objectives and strategies 05.01 Implement project / work plans 05.02 Inspect and monitor work done and / or in progress 06.01 Understand systems 06.02 Comply with and follow chain and command 06.03 Identify and highlight problems 06.04 Adapt competencies to new situations / systems	

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM: Trainees)
1. Computer	1:1
2. Drawing tablet (optional)	1:1
3. Graphic editing software	1:1
4. Printer	1:25
5. Sample of graphic editing job brief	1:5
6. Sample of graphic editing final outcome	1:5
7. Scanner	1:25
8. Stationaries	1:1

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CURRICULUM of COMPETENCY UNIT (CoCU)

Sub Sector	CREATIVE MULTIMEDIA
Job Area	GRAPHIC DESIGN (DIGITAL)
NOSS Title	GRAPHIC DESIGN (DIGITAL)
Competency Unit Title	GRAPHIC ANIMATION
Learning Outcomes	The person who is competent in this CU shall be able to produce basic graphic animation that will be applied to graphic elements in accordance with job brief specification. Upon completion of this competency unit, trainees will be able to: • Determine graphic animation job requirements • Create graphic animation workspace • Create graphic animation composition • Carry out graphic animation • Carry out graphic animation documentation

Competency Unit ID	IT-058-3:2014-E01	Level	Three (3)	Training Duration	300 Hours	Credit Hours	30

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
1. Determine graphic animation job requirements	i. Animation for graphic design, trend and style • Graphic animation evolution and trend • Graphic animation style • Graphic animation approach ii. Graphic animation types, such as: • Web banner • Digital advertising			13 hours	Lecture or Group Discussion	i. Graphic animation job extracted from job brief ii. Type of graphic animation defined iii. Graphic animation technical specification for mobile

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Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	banner • Slide presentation iii. Graphic animation application and technical specification, such as: • Mobile • Website • Video • Interactive iv. Digital software and tools v. Job brief contents, such as: • Project information • Project's requirements: - Graphic editing outline • Deadline • Client's information vi. Personalised graphic animation job milestones and planning • Time management • Gantt Chart • Schedule vii. Peer-to-peer training					application, website, video and interactive media determined iv. Digital software and tools selected v. Graphic elements requirements identified vi. Project work flow and Gantt Chart prepared

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	viii. Workplace ergonomics practice ix. wREGA Graphic Designer Code Of Professional Conduct (COPC)					
		i. Determine types of graphic animation ii. Identify graphic animation technical specification iii. Identify digital software and tools iv. Identify graphic elements requirement v. Define personalised graphic animation job milestones	*Attitude:* i. Detail in determining type of graphic animation ii. Meticulous in determining graphic animation technical specification iii. Accuracy in identifying digital software and tools iv. Detail in identifying graphic elements requirement v. Adhere to Graphic Designer Code	32 hours	Observation, Demonstration or Group Discussion	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			Of Professional Conduct (COPC) by wREGA *Safety/Environment*: i. Adhere to workplace ergonomics practice			
2. Create graphic animation workspace	i. Graphic animation timing • Frame rate per second (FPS) • Space • Movement and speed ii. Graphic animation stage specification, such as • Size (i.e.: web banner, digital advertising banner, slide presentation) • Aspect ratio • Background colour iii. Graphic animation layout • Guide line			5 hours	Lecture or Group Discussion	i. Graphic animation project type described ii. Graphic animation frame rate per second (FPS) set up iii. Graphic animation stage specification set iv. Animation stage guide lines prepared v. Animation tools applied based on animation project requirement

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria

	• Grid
	iv. Digital animation tools, such as:
	   • Drawing tools (i.e.: shape, line, pen)
	   • Colour tools (i.e.: colour picker, gradient colour)
	   • Selection tools (i.e.: transform tools, anchor point)
	v. Timeline set-up, such as:
	   • Layering
	   • Frame
	   • Guide layer
	   • Mask layer
						vi. Graphic animation timeline established

		i. Select graphic animation project type ii. Prepare graphic animation frame rate per second (FPS) iii. Prepare graphic animation stage size and aspect ratio iv. Produce animation stage guide lines v. Select animation	*Attitude:* i. Meticulous in selecting graphic animation project type ii. Accuracy in setting up graphic animation frame rate (FPS) iii. Precise in setting up graphic	10 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
		tools vi. Set up graphic animation timeline	animation stage size and aspect ratio iv. Detail in creating animation stage guide lines v. Detail in setting up graphic animation timeline *Safety/Environment*: i. Adhere to work area ergonomics practice			
3. Create graphic animation composition	i. Type of graphic animation element, such as: • Picture (i.e.: photo, icon, vector, button) • Sound (i.e.: voice over, background music, sound effect, sound format (.wav, .mp3, .acm, etc)) • Video format (i.e.: .mp4, .avi, .mov) • Text (i.e: title,			20 hours	Lecture or Group Discussion	i. Animation library set up ii. Multiple layer inside timeline set up iii. Graphic element imported to the layer

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	content, paragraph, heading, footer, drop-down menu) ii. Graphic animation library set up • Folder • File (i.e.: Image, sound, video, template) • Graphic animation composition • Background • Foreground • Layout and alignment iii. Copyright Act 1987					
		i. Prepare animation library ii. Prepare multiple layer inside timeline iii. Insert graphic element to the layer iv. Arrange graphic element inside the stage	*Attitude:* i. Systematic in setting up animation library ii. Be efficient and accurate in importing graphic element to the layer iii. Detail in composing graphic element inside the	40 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			animation stage iv. Adhere to Copyright act 1987 *Safety/Environment*: i. Adhere to work area ergonomics practice			
4. Carry out graphic animation	i. Animation techniques • Keyframe • Tweening animation (i.e.: shape tweening, motion tweening) • Frame by frame animation (i.e.: gif animation, flash animation, sprite animation) ii. Animation effects • Colour • Alpha • Blur • Brightness and contrast iii. Publish setting • Export format			60 hours	Lecture or Group Discussion	i. Animation effects created ii. Tweening animation produced iii. Frame by frame animation produced iv. Graphic animation published

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
	(i.e.: video, picture, sound • Graphic animation preview					
		i. Prepare total animation duration inside timeline ii. Generate keyframe inside individual layer iii. Generate frame by frame animation iv. Generate tweening animation v. Apply animation effects vi. Test and publish graphic animation to relevant format	*Attitude:* i. Accuracy in setting up total animation duration inside timeline ii. Detail in generating keyframe inside individual layer iii. Detail in generating tweening animation iv. Detail in generating frame by frame animation *Safety/Environment*: i. Adhere to work area ergonomics practice	120 hours	Demonstration or Project	

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			ii. Adhere to Copyright act 1987			
5. Carry out graphic animation documentation	i. Digital format: • File extensions (i.e.: .JPG, .PDF, .TIFF) ii. Documentation procedure, such as: • Indexing • Labelling • Archiving - Archiving medium (i.e.: network server, CD/ DVD, cloud storage) iii. List of extracted jobs from job brief					i. Checklist on graphic animation job (job brief) recorded ii. Graphic animation artworks categorised and recorded iii. Graphic animation artworks archived iv. Documentation procedure applied
		i. Update checklist on graphic animation job (job brief) ii. Compile and organise graphic animation file iii. Archive project file iv. Apply documentation procedure	*Attitude:* i. Systematic in compiling and organising project design files			

Work Activities	Related Knowledge	Related Skills	Attitude / Safety / Environment	Training Hours	Delivery Mode	Assessment Criteria
			Safety/Environment: i. Adhere to workplace ergonomics practice			

Employability Skills

Core Abilities	Social Skills
01.03 Utilize basic IT applications	1. Communication skills
01.04 Analyze information	2. Conceptual skills
01.05 Utilize the internet to locate and gather information	3. Interpersonal skills
01.09 Utilize business graphic application to process information	4. Learning skills
01.11 Apply thinking skills and creativity	5. Leadership skills
02.03 Communicate clearly	6. Multitasking and prioritizing
02.04 Prepare brief reports and checklists using standard forms	7. Self-discipline
02.05 Read / interpret flowcharts and pictorial information	8. Teamwork
02.07 Utilize local area network (LAN) Internet to exchange information	
02.08 Prepare pictorial and graphic information	
02.09 Prepare flowcharts	
02.11 Convey information and ideas to people	
03.03 Accept responsibility for own work and work area.	
03.04 Seek and act constructively upon feedback about performance	
03.08 Develop and maintain a cooperation within work group	
03.13 Develop and maintain team harmony and resolve conflicts	

03.14 Facilitate and coordinate teams and ideas	
03.15 Liaise to achieve identified outcomes	
03.16 Identify and assess client / customer needs	
04.01 Organize own work activities	
04.02 Set and revise own objectives and goals	
04.03 Organize and maintain own workplace	
04.04 Apply problem-solving strategies	
04.05 Demonstrate initiative and flexibility	
04.06 Allocate work	
04.07 Negotiate acceptance and support for objectives and strategies	
05.01 Implement project / work plans	
05.02 Inspect and monitor work done and / or in progress	
06.01 Understand systems	
06.02 Comply with and follow chain and command	
06.03 Identify and highlight problems	
06.04 Adapt competencies to new situations / systems	

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM: Trainees)
1. Computer	1:1
2. Drawing tablet (optional)	1:1
3. 2D animation software	1:1
4. Graphic design software	1:1
5. Printer	1:25
6. Sample of graphic animation job brief	1:5
7. Sample of graphic animation final outcome	1:5
8. Scanner	1:25

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GLOSSARY

TERMS	DESCRIPTION
.AI	Proprietary file format developed by Adobe Systems for representing single-page vector-based drawings in either the EPS or PDF formats. The **.ai** filename extension is used by Adobe Illustrator.
.EPS	DSC-conforming PostScript document with additional restrictions which is intended to be usable as a graphics file format. In other words, EPS files are more or less self-contained, reasonably predictable PostScript documents that describe an image or drawing and can be placed within another PostScript document.
.JPG	Abbreviation for Joint Photographic Experts Group. File format for full-color and black-and-white graphic images. JPEG images allow for more colors than GIF images and are usually smaller in size. Leading/ Line-height.
.PDF	Stands for Portable Document Format created by Adobe Systems in its software program Adobe Acrobat as a universal browser.
Aggregator	A web site or computer software that aggregates a specific type of information from multiple online sources.
Anchor point	The point that remains stationary when you stretch, scale, mirror, or skew an object. Anchor points correspond to the eight handles that display when an object is selected**.**
Animation	The illusion of visual motion created by the rapid projection of still images in two- or three-dimensional space.
Artwork	All illustrated material, ornamentation, photos and charts, etc. that is prepared for reproduction.
Bitmap Image	A graphic image stored as a specific arrangement of screen dots, or pixels also known as raster graphics. Common types of bitmap graphics are GIF, JPEG, Photoshop, PCX, TIFF, Macintosh Paint, Microsoft Paint, PNG, FAX formats, and TGA.
CMYK	Stands for the colors Cyan-Magenta-Yellow-Black. In print design, colors are defined as a percentage of each of these 4 colors. For example, the CMYK abbreviation for the color black would be 0-0-0-100. In contrast, display devices (i.e. computer monitors) typically define colors using RGB.
Collage	The combination of several images to a single surface to create a piece of art. Can be done with original images or in a digital format.
Color Channel	An 8-bit grayscale version of an image. Each channel represents one level of color in the image; for example, RGB has three color channels, while CMYK

TERMS	DESCRIPTION
	has four. When all the channels are printed together, they produce the entire range of colors in the image.
Color Separation	The process of creating separate negatives and plates for each color of ink (cyan, magenta, yellow, and black) that will be used in the publication.
Color Spacing	The addition of spaces to congested areas of words or word spacing to achieve a more pleasing appearance after the line has been set normally.
DPI	The unit of measurement used to describe the resolution of printed output. The most common desktop laser printers output a 300 dpi. Medium-resolution printers output at 600 dpi. Image setters output at 1270-2540 dpi.
Font Family	Also known as family. The collection of faces that were designed together and intended to be used together. For example, the Garamond font family consists of roman and italic styles, as well as regular, semi-bold, and bold weights. Each of the style and weight combinations is called a face.
Frame Rate Per Second (FPS)	Frequency (rate) at which an imaging device produces unique consecutive images called frames. The term applies equally well to film and video cameras, computer graphics, and motion capture systems. Frame rate is most often expressed in frames per second (FPS) and is also expressed in progressive scan monitors as hertz (Hz).
Glyph	The word glyph is used differently in different contexts. In the context of modern computer operating systems, it is often defined as a shape in a font that is used to represent a character code on screen or paper. The most common example of a glyph is a letter, but the symbols and shapes in a font like ITC Zapf Dingbats are also glyphs. Also see character, character encoding, and keyboard layout.
Kerning	The adjustment of horizontal space between individual characters in a line of text. Adjustments in kerning are especially important in large display and headline text lines. Without kerning adjustments, many letter combinations can look awkward. The objective of kerning is to create visually equal spaces between all letters so that the eye can move smoothly along the text.
Keyframe	A drawing that defines the starting and ending points of any smooth transition. The drawings are called "frames" because their position in time is measured in frames on a strip of film. A sequence of keyframes defines *which* movement the viewer will see, whereas the position of the keyframes on the film, video or animation defines thetiming of the movement.
Mask	A photo negative or positive used in the color separation process to color correct.
Organic Line	A mark with length and direction that forms an irregular shape or one that might be found in nature, rather than a regular, mechanical shape.

TERMS	DESCRIPTION
Overlay	A transparent sheet placed over artwork, in register with the work it covers; this is used to call out other color components of the work, instructions or corrections.
Resolution	Display resolution or screen resolution of a computer display typically refers to the number of distinct pixels in each dimension that can be displayed. Image resolution describes the detail an image holds. The term applies equally to digital images, film images, and other types of images. Higher resolution means more image detail.
RGB	A color mode in which the three colors of light (red, green, and blue) are combined in varying intensities to produce all other colors. A value between 0 and 255 is assigned to each channel of red, green and blue. Monitors, scanners, and the human eye use RGB to produce or detect color.
Sidebar	In newsletter/magazine layout, a related story or block of information that is set apart from the main body text, usually boxed and/or screened.
Skew	To slant an object vertically, horizontally, or both.
Sprite Animation	A technique used to create the illusion of movement using static images. This article describes how to create animations with libGdx.
Thumbnail	Reduced-size versions of pictures, used to make it easier to scan and recognize them, serving the same role for images as a normal text index does for words.
Tracking	The average space between characters in a block of text. Sometimes also referred to as letter spacing.
Truncated	Something is to shorten it, or cut part of it off. In computer science, the term is often used in reference to data types or variables, such as floating point numbers and strings.
Tweening	Key process in all types of animation, including computer animation. Sophisticated animation software enables you to identify specific objects in an image and define how they should move and change during the tweening process.
Typeface	The letters, numbers, and symbols that make up a design of type. A typeface is often part of a type family of coordinated designs. The individual typefaces are named after the family and are also specified with a designation, such as italic, bold or condensed.
Typography	In typography, a typeface is a set of one or more fonts designed with stylistic unity, each comprising a coordinated set of glyphs. A typeface usually comprises an alphabet of letters, numerals, and punctuation marks; it may

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TERMS	DESCRIPTION
	also include ideograms and symbols, or consist entirely of them.
Vector Graphics	An image generated from mathematical descriptions that determine the position, length, and direction in which lines are drawn. Vector graphics are created as collections of lines rather than as patterns of individual dots or pixels.

SUMMARY OF TRAINING DURATION FOR GRAPHIC DESIGN (DIGITAL) - IT-058-3:2014

CU ID	COMPETENCY UNIT TITLE	WORK ACTIVITIES	RELATED KNOWLEDGE (A)	RELATED SKILLS (B)	HOURS (A) + (B)	TOTAL (HRS)
IT-058-3:2014-C01	GRAPHIC VISUALISATION	1. Interpret graphic visualisation job brief	15	35	50	350
		2. Generate design/concept idea	40	100	140	
		3. Execute idea visualisation	40	100	140	
		4. Carry out graphic visualisation documentation	6	14	20	
IT-058-3:2014-C02	VECTOR GRAPHICS DESIGN	1. Interpret vector graphics design job brief	15	30	45	300
		2. Execute vector design	72	168	240	
		3. Carry out vector designs documentation	5	10	15	
IT-058-3:2014-C03	TYPOGRAPHY DESIGN	1. Interpret typography design job brief	15	30	45	300
		2. Carry out typography design	72	168	240	
		3. Perform typographic design documentation	5	10	15	
IT-058-3:2014-C04	DIGITAL LAYOUT DESIGN	1. Interpret layout design job brief	15	30	45	300
		2. Prepare layout design work	18	42	60	
		3. Compose layout Design	54	126	180	
		4. Carry out layout design documentation	5	10	15	
IT-058-3:2014-C05	GRAPHIC EDITING	1. Interpret graphic editing job brief	15	35	50	350
		2. Prepare graphic editing work	20	50	70	
		3. Execute graphic editing	60	150	210	
		4. Carry out artwork documentation	6	14	20	
IT-058-3:2014-E01	GRAPHIC ANIMATION	1. Determine graphic animation job requirements	13	32	45	300
		2. Create graphic animation workspace	5	10	15	
		3. Create graphic animation composition	20	40	60	
		4. Carry out graphic animation	50	100	150	
		5. Carry out graphic animation documentation	10	20	30	
TOTAL HOURS (Core Competencies)			**576**	**1324**	**1900**	**1900**