STANDARD KEMAHIRAN PEKERJAAN KEBANGSAAN
(National Occupational Skills Standard)

IT-063-3:2014

AUDIO POST PRODUCTION

LEVEL 3

JABATAN PEMBANGUNAN KEMAHIRAN
KEMENTERIAN SUMBER MANUSIA

MULTIMEDIA DEVELOPMENT CORPORATION

Department of Skills Development (DSD)

Ministry of Human Resources

62530 PUTRAJAYA, MALAYSIA

STANDARD KEMAHIRAN PEKERJAAN KEBANGSAAN

(NATIONAL OCCUPATIONAL SKILLS STANDARD)

AUDIO POST PRODUCTION
LEVEL 3

First Published 2014

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STANDARD PRACTICE

NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS) FOR;

AUDIO POST PRODUCTION
LEVEL 3

1. INTRODUCTION

Overview

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 & Delivery, and Information Security.

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 government has strengthened ICT development through Economy Transformation Program (ETP) Chapter 13, Communications Content and Infrastructure. The Entry Point Project (EPP) of the Communication, Content and Infrastructure area 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, Gross Net Income (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.[1]

The Malaysian Economic Transformation Programme (ETP) promises rapid job-insertion in all job areas including Audio Post Production. The ETP is expected to create 10,326 employment opportunities by 2020. Talents are the core competitiveness of creative industries as the creative industry is people-oriented. To educate and cultivate a batch of creative talents are the prerequisite for the fast development of creative industries in future. The ICT Occupational Analysis which was carried out by MDeC in 2012 shows that audio post production is one of the critical jobs required by the industry. Hence, the development of the audio post production NOSS would increase the number of talents and could resolve the current gap in this job area.

This industry is becoming more lucrative as the expanding trend of audio post production and interactive media is now used widely in local films, web sites, cartoons and marketing campaigns. With the advent of incorporating digital creative

[1] *Economic Transformation Programme (ETP) Handbook, Chapter 13 (Communications, Content and Infrastructure)*

effects into most digital content, creative and up to date creative personnel is required.

The effort to develop the National Occupational Skills Standard (NOSS) for the audio post production job area followed by developing the training manuals is timely in order for the industry to grow further and enhance the competency standards of Malaysia's creative industry.

Occupational Outlook

Audio is defined as sound, especially when recorded, transmitted, or reproduced. Audio signal is an electrical representation in the form of a fluctuating voltage of current within the limits of equipment. The signal voltage of current fluctuates at exactly the same rate as an acoustical energy that it represents. Audio engineering is creative application of technology and engineering to produce audio/visual arts including sound, speech and music.[2]

Audio or sound is the product of mixed-up various types of sound or audio. Most video, film and animation makers usually use audio or music in their products in order to be entertaining and exciting. Therefore, audio post production demands creativity and versatility. In Malaysia, there are numerous companies which are currently active in audio post production fieldwork. Audio post production personnel usually work with audio equipment and software in order to produce good quality audio. As technology advances, new equipment emerges to meet audio post production needs. The most significant advancement in audio visual equipment has been in the final two decades of the 20th century, where digital technology has enhanced the versatility of audio video equipment and audio video production.

Therefore, the audio post production industry needs to cater for the advancement of audio equipment and software, hence the demand for skilful personnel.

Authority bodies

Authority and Regulatory bodies identified as being related to this job area are:

i. Ministry of Communications & Multimedia (MCM)
ii. Multimedia Development Corporation (MDeC)
iii. Malaysian Communication and Multimedia Commission (MCMC)
iv. National Film Development Corporation (FINAS)
v. Malaysian Technology Development Corporation (MTDC)
vi. Malaysian Intellectual Property Organisation (MIPO)
vii. Performers Rights and Interest Society of Malaysia (PRISM)
viii. Music Authors' Copyright Protection (MACP)

[2] *YAMAHA sound reinforcement book*

2. OCCUPATIONAL STRUCTURE

The Occupational Structure as shown below show the job titles available under the audio sub area where the entry level may start at Level 2 and 3 as an audio post production engineering personnel. In industry practice they are usually known as audio engineers, editor, mixer and etc. Due to certain requirements set by the Board of Engineers, the Occupational Structure in this document defines the Level 3 Audio Post Production personnel job titles as Audio Post Production Engineering Personnel. However, those competent in all Competency Units of this NOSS will be deemed to possess skills equivalent to audio engineers in the current market.

This NOSS provides first hand information for audio post production personnel. This NOSS also provides a career path and employment development for those involved in this industry. An existing Occupational Structure is shown in Table 1.1.

The Occupational Area Analysis is done so that the current job titles in the industry are translated into the job areas required of the personnel. In doing so, candidates will have better employment prospects as there will be no mismatch of job titles to expected job competencies. This is because different organisations use different job titles. Certification will also be able to reflect the job competencies correctly and avoid confusion of job scope based on job titles. The Occupational Area Structure as shown in Table 1.2 shows that the competencies at Level 3 for the audio post production area will embed the competencies required at level 2.

The pre requisites or minimum entry requirements for personnel pursuing the Level 3, Sijil Kemahiran Malaysia (SKM) or Malaysian Skills Certificate (MSC) for audio post production require candidates to have interest in music and sound, basic English communication & mathematical skills and have binaural hearing / listening abilities.

Table 1.1: Occupational Structure (OS) for Audio Visual Finalising area

SECTOR	INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)	
SUB SECTOR	CREATIVE MULTIMEDIA	
JOB AREA	AUDIO VISUAL FINALISING	
	AUDIO	VIDEO
LEVEL 5	Audio Visual Director	
LEVEL 4	Audio Engineering Supervisor	Senior CGI Video Editor
LEVEL 3	Audio Post Production Engineering Personnel	CGI Video Editor
LEVEL 2	Audio Post Production Engineering Personnel	*No Level*
LEVEL 1	No Level	

Table 1.2: Occupational Area Structure (OAS) for Audio Visual Finalising area

SECTOR	INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)	
SUB -SECTOR	CREATIVE MULTIMEDIA	
JOB AREA	AUDIO VISUAL FINALISING	
	AUDIO	VIDEO
LEVEL 5	Audio Visual Production	
LEVEL 4	Audio Post Production Operation	CGI Video Editing
LEVEL 3	Audio Post Production	CGI Video Editing
LEVEL 2	*Embedded to Level 3*	*No Level*
LEVEL 1	No Level	

3. DEFINITION OF COMPETENCY LEVEL

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.

Level 1	:	Competent in performing a range of varied work activities, most of which are routine and predictable.
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 require individual responsibility and autonomy.
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 is often required.
Level 4	:	Competent in performing a broad range of complex technical or professional work activities performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and allocation of resources is often present.
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. AWARD OF CERTIFICATION

The Director General shall award to any person upon successfully completing the NOSS Program, the following skills level qualifications:

a) Malaysian Skills Certificate/Sijil Kemahiran Malaysia (SKM) Level 1,2 & 3
b) Malaysian Skills Diploma/Diploma Kemahiran Malaysia (DKM) Level 4
c) Malaysian Skills Advanced Diploma/Diploma Lanjutan Kemahiran Malaysia (DLKM) Level 5
d) Statement of Achievement/Penyata Pencapaian (PC)

No person shall be awarded a Certificate unless he/she satisfies the requirements set by Malaysian Skills Certification System. Candidates after being competent verified and having fulfilled Malaysian Skill Certification requirements shall be awarded with Sijil Kemahiran Malaysia at Level 3 for this particular NOSS.

5. OCCUPATIONAL COMPETENCIES

The Audio Post Production (Level 3) NOSS personnel must be competent in performing the following fifth core competencies:

- Audio Production Media Preparation
- Audio Production Recording
- Audio Production Editing
- Audio Production Pre-Mixing
- Studio Setup and Maintenance

Optionally, Audio Post Production (Level 3) NOSS personnel are competent in performing the following elective competencies:

- Visual Media Preparation

6. WORKING CONDITIONS

The audio post production personnel may be required to do multitasking alone, or may work as part of a large group on the same project. As an audio editor, he/she is not likely to work regular hours in a studio environment and outside location and to meet deadlines. He/she will collaborate passionately with other talent and superior in appropriate studio ethics. The work of audio post production personnel is meticulous so as to produce content according to requirements. He/she will have to ensure that the work is completed to specifications as scheduled.

7. EMPLOYMENT PROSPECTS

The Economic Transformation Program has initiated 10 EPPs (Entry Point Projects) in Communication, Content and Infrastructure (CCI) to deliver RM16.6 billion incremental GNI by 2020. The first EPPs is to nurture Malaysia's creative content industry in services, distribution and broadcasting sectors which aim to transform Malaysia into a regional hub for digital content. Meanwhile, the fourth EPP is to establish E-Learning for students and professional training in a bid to establish a common knowledge platform for students and training into the same platform. With regard to these two themes under EPPs which promise abundance of job opportunities for those who are interested in audio post production.

Foreign companies are most impressed with Malaysian's cultural diversity, creativity and strong work ethics. This has attracted numerous international companies to establish a presence in Malaysia. Likewise, a growing number of local companies are engaged for outsourced audio and post production work.

Currently, the industry is experiencing great prospects of growth in audio content development; particularly in Malaysia and the world. Demand for creative talents far outpaces the supply to the industry's urgent needs. The local audio post production industry consists of large and small scale production studios.

The Audio Post Production (Level 3) Certificate holder has a high employment prospect locally and internationally as Malaysia has become ICT and creative media hub. Furthermore, MSC Malaysia gives focus on the fundamentals of Creative Multimedia by investing in the long term prospect; namely by giving access to funding, discovering new talent, opening market opportunities and access; providing development infrastructure, policy intervention and also by forming strategic alliances with other companies due to the vast potential in the Creative Multimedia industry in this country.

i. Employment Opportunities

Other related occupations with respect to employment opportunities are:

- Audio operator
- Recording engineer
- Foley artist
- Field recordist
- Studio technical assistant
- Sound designer
- Audio editor

ii. List of Industries

Other related industries with respect to employment opportunities are:

- Hospitality & Tourism
- Forensic
- Entertainment
  - Games/Art application
  - Film/TV
- Archiving
  - Restoration of audio material
- Media & Communication
- Surveillance
- Advertising
- Security
- Education & Training

8. CAREER ADVANCEMENT

i. Training

The personnel in the industry are recognised by members of the industry in Malaysia. The advancement for this level is to acquire the Malaysian Skills Diploma, Level 4 and Malaysian Skills Advanced Diploma at Level 5.

ii. Industrial / Professional Recognition:

Professional recognition for this particular job title is given by the industry itself. But at this moment, there is no standard reference of professional qualification with respect to this particular job title. However, the expert panel of this workshop suggested associations with the following bodies to substantiate personal recognition in this field:

a) Malaysian:

- Member of Audio Engineer Society (AES), Malaysian Chapter
- Creative Content Industry Guild (CCIG) Malaysia
- *Persatuan Pekerja-pekerja Filem Malaysia (PROFIMA)*
- *Persatuan Karyawan Malaysia (Karyawan)*
- Recording Industry Association of Malaysia (RIM)
- Music Authors' Copyright Protection (MACP)
- Performers Rights and Interest Society of Malaysia (PRISM)
- Recording Performers Malaysia (RPM)
- Public Performers Malaysia (PPM)
- Malaysian Standard (MS)
- Audio Engineering Society (AES)

b) International

- National Association of Music Merchants (NAMM)
- AES/European Broadcasting Union (EBU)
- Trailer Audio Standard Association
- Motion Pictures Association of America (MPAA)
- British Broadcasting Corporation (BBC)
- World Studio Group

9. SOURCES OF ADDITIONAL INFORMATION

i. Multimedia Development Corporation (MDeC)
MSC Malaysia Headquarters,
Persiaran APEC, 63000, Cyberjaya, Selangor,

Telephone**: 1-800-88-8338,**
Fax**:** +6**03-83153115**
www.mscmalaysia.my

ii. National IT Council (NITC) Secretariat
c/o The Ministry Of Science, Technology and Innovation (MOSTI)
Aras 1-7, Blok C4 dan C 5,
Pusat Pentadbiran Kerajaan Persekutuan,
62662 Putrajaya, Wilayah Persekutuan.

Telephone: +603-88858000
www.mosti.gov.my

iii. Suruhanjaya Komunikasi dan Multimedia Malaysia (SKMM)
Off Persiaran Multimedia,
63000 Cyberjaya, Selangor Darul Ehsan.

Telephone: +603-86888000
Fax: +603-86881000
www.skmm.gov.my

iv. Persatuan Industri Komputer dan Multimedia Malaysia (PIKOM)
The National ICT Association of Malaysia,
1106 and 1107, Block B, Phileo Damansara II,
No. 15, Jalan 16/11, 46350 Petaling Jaya,
Selangor Darul Ehsan, Malaysia.

Telephone**:** +603-7955 2922,
Fax**:** +603-7955 2933
www.pikom.org.my

v. **Persatuan Animasi Malaysia (ANIMAS)**
No.17-2, Jalan PJS 3/34,
Taman Sri Manja,
46000 Petaling Jaya, Selangor.

Tel: 03-77701160
Fax: 03-77701160

vi. **Perbadanan Kemajuan Filem Nasional Malaysia (FINAS)**
Perbadanan Kemajuan Filem Nasional Malaysia,
Kompleks Studio Merdeka, Jalan Hulu Kelang,
68000 Ampang, Selangor, Malaysia.

No. Tel: 603-41041300
No. Fax: 603-41075216
Emel: am@finas.gov.my

10. ACKNOWLEDGEMENT

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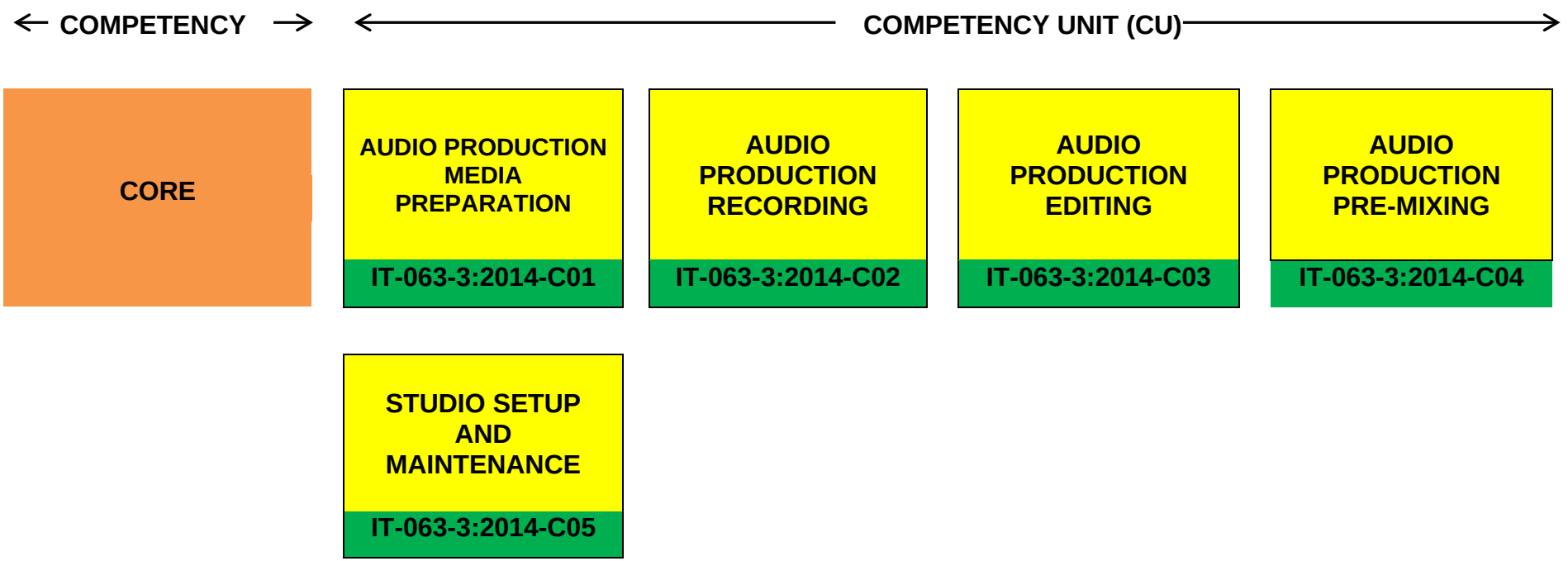
i. Puan Noraizah Mohammad
ii. Encik Raja Ahmad Shaidaley Raja Ahmad Sheridan
iii. Encik Amirudin Syawal Abdul Latip
iv. Encik Brian Kang
v. Encik Siok Aik Wee
vi. Encik Junaidi Asmara Rosly

11. NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS) DEVELOPMENT COMMITTEE MEMBERS

COMMITTEE MEMBERS FOR AUDIO POST PRODUCTION (LEVEL 3)		
PANEL		
1	Ahmad Faudzi bin Musib	Senior Lecturer, University Putra Malaysia (UPM)
2	Fariz Reza bin Abdul Ghani	Audio Engineer, Erama Creative Sdn Bhd
3	Hamdan bin Adnan	Lecturer, National Culture, Arts and Heritage Academy (ASWARA)
4	Lim Wing Soon	Head of Production, Erama Music & Media Academy
5	Megat Sazali bin Rohimi	Studio Engineer, Scifi Studio
6	Mohd Asrol Sani bin Othman	Post-Production Director, Anithink Studio Sdn Bhd
7	Muhammad Faisal bin Ghazali	Managing Director/Mastering Engineer, Pro-DG Projects Sdn Bhd
8	Reza Ramsey	Music Director, Scifi Studios
9	Rizal bin Busu	Managing Director, Ribu Production
10	Zul Affan bin Ramli	Creative Producer/Engineer, Pro-DG Projects Sdn Bhd
FACILITATOR		
11	Dr. Amiron bin Ismail	Professional & Technical Academy Sdn. Bhd
12	Norfadilah binti Ithnin	Professional & Technical Academy Sdn. Bhd

COMPETENCY PROFILE CHART (CPC)

SECTOR	**INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**		
SUB SECTOR	**CREATIVE MULTIMEDIA**		
JOB AREA	**AUDIO VISUAL FINALISING**		
NOSS TITLE	**AUDIO POST PRODUCTION**		
JOB LEVEL	**THREE (3)**	**NOSS CODE**	**IT-063-3:2014**



ELECTIVE	**VISUAL MEDIA PREPARATION** **IT-064-3:2014-C01**

COMPETENCY PROFILE (CP)

SECTOR	**INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**		
SUB SECTOR	**CREATIVE MULTIMEDIA**		
JOB AREA	**AUDIO VISUAL FINALISING**		
NOSS TITLE	**AUDIO POST PRODUCTION**		
LEVEL	**THREE (3)**	**NOSS CODE**	**IT-063-3:2014**

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
1. Audio Production Media Preparation	IT-063-3:2014-C01	Audio production media preparation is an administration and management of project files The person who is competent in this Competency Unit (CU) shall be able to receive (incoming) audio/video files, deliver (outgoing) audio/video project files and carry out archiving process The outcome of the CU is to ensure the audio production media preparation enables the project media to be systematically organised so that project files are transferred efficiently between relevant production departments and documented according to	1. Receive (incoming) audio/video files 2. Deliver (outgoing) audio/video project files 3. Carry out archiving process	1.1 Audio/video files checked 1.2 File format for the project determined 1.3 Audio/video files imported 1.4 Readability and media validity of audio/video files reported to superior 1.5 Audio/video files organised according to recording and editing session 2.1 Outgoing project determined 2.2 Audio/ Video file outgoing format determined 2.3 Target project rendered 2.4 Project files transferred according to project requirement 3.1 Archive/storage medium and metadata determined 3.2 Project files transferred to archive

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		organisation SOP		medium 3.3 Archived material(s) presented
2. Audio Production Recording	IT-063-3:2014-C02	Audio production recording is a process to capture sound sources and material to be used for playback and/or re-production The person who is competent in this Competency Unit (CU) shall be able to identify audio production requirement, prepare audio tools and equipment, carry out sound recording and present recorded material The outcome of the CU is to ensure audio production recording procedures and techniques are performed according to AES/EBU (Audio Engineering Society/European Broadcasting Union) Standard	1. Identify audio production requirement 2. Prepare audio tools and equipment 3. Carry out sound recording 4. Present recorded material	1.1 Audio sound source determined 1.2 Audio source types determined 1.3 Recording location determined 1.4 Recording technique determined according to location, environment and source types 2.1 Recording tools and equipment determined 2.2 Recording tools and equipment tested 2.3 Recording tools and equipment calibrated according to Audio Engineering Standard (AES) 2.4 Recording tools and equipment setup 3.1 Sound check performed 3.2 Adjusting and monitoring of input signal to optimum level performed 3.3 Sound sources captured according to recording requirement 4.1 Recorded material characteristics achieved according to assigned

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				project 4.2 Recorded audio playback executed 4.3 Sound recording report submitted to superior
3. Audio Production Editing	IT-063-3:2014-C03	Audio production editing is a process to organise and manipulate audio or recorded materials to alter its length, speed, volume, pitch, quality or dynamic and to correct or to clean up recorded materials The person who is competent in this Competency Unit (CU) shall be able to perform recorded material compilation, detect sound/technical fault, perform audio clean-up/modification, carry out audio clip consolidation and perform audio track for premix The outcome of the CU is to prepare sound materials for next stage of production and premix	1. Perform audio files compilation 2. Detect sound/technical fault 3. Perform audio/sound effects (SFX) editing 4. Carry out audio clip consolidation	1.1 Audio/video files selected from field recording and/or sound effects (EFX) library 1.2 Audio tracks imported 1.3 Audio tracks synchronised 2.1 Contents of cue sheet interpreted 2.2 Playback to test readability and validity of media audio/video files performed 2.3 Types of sound/technical fault determined 2.4 Sound character determined 3.1 Sound clips acquired 3.2 Editing techniques selected 3.3 Clean-up/modification method explained and demonstrated 3.4 DAW software editing application described and demonstrated 4.1 Separated audio clips selected 4.2 Separated audio clips merged 4.3 Audio/video files organised

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				4.4 Cue sheet and job sheet completed
			5. Perform audio track for premix	5.1 Audio tracks named/renamed according to sound clips 5.2 Audio tracks prepared for pre-mixing/exported for delivery
4. Audio Production Pre-Mixing	IT-063-3:2014-C04	Audio production pre-mixing is a process to organise, manage, optimise levels and frequencies according to project requirements The person who is competent in this Competency Unit (CU) shall be able to perform levelling/balancing of audio track, carry out dynamic processing, carry out sound effect (SFX) processing and carry out automation processing The outcome of the CU is to enable enhancement of audio quality according to AES/EBU (Audio Engineering Society/European Broadcasting Union) Standard	1. Perform levelling/balancing of audio track	1.1 Reference level adjusted 1.2 Sound placement & panoramic imaging determined 1.3 Audio tracks organised
			2. Carry out dynamic processing	2.1 Sound sources rectified 2.2 Sound sources character established 2.3 Sound sources dynamic range controlled
			3. Carry out sound effect (SFX) processing	3.1 Sound effect determined 3.2 Sound sources impression emphasised according to project requirements 3.3 Sound source is enriched with audio effects according to project requirements
			4. Carry out automation processing	4.1 Automation parts determined 4.2 Tracks function/features assigned 4.3 Automation optimisation

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				executed
5. Studio Setup and Maintenance	IT-063-3:2014-C05	Studio setup and maintenance is a discipline practiced in sound studio, in order to ensure acoustics and equipment functionalities of the studio are according to industry practice. The person who is competent in this Competency Unit (CU) shall be able to identify studio acoustic and sound proof/isolation requirement, configure equipment and system routing, carry out the equipment testing and carry out troubleshooting The outcome of the CU is to provide first level technical support, to ensure continuous operation of the studio.	1. Identify studio acoustic and sound proof/isolation requirement 2. Configure equipment and system routing 3. Carry out the equipment testing 4. Carry out troubleshooting	1.1 Room characteristic determined 1.2 Studio monitor position determined 1.3 Application of Sound Transmission Coefficient (STC) chart and Sound Absorption Coefficient (SAC) chart determined 2.1 System configuration setup and routing determined 2.2 Patching connection and termination of cables inspected 2.3 Audio signal flow checked 3.1 Studio setup and configuration performed 3.2 Computer Operating System setup performed 3.3 Configuration of Digital Audio Workstation(DAW) performed 3.4 System setup calibrated 4.1 Hardware/ software issues determined 4.2 Hardware/ software issues troubleshooting performed

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				4.3 Troubleshooting checklist documented
6. Visual Media Preparation	IT-064-3:2014-C01	Visual media preparation is a pre-editing process where raw/referenced visual materials are analysed, compiled, converted and organised in an effective manner at a specific storage location The person who is competent in this competency shall be able to determine project requirements, organise project folder and compile project rushes material The outcome of this competency is to should be able to carry out visual media preparation, a pre-editing process where raw/referenced visual materials are analysed, compiled, converted and organised in an effective manner at a specific storage location. The outcome of this competency is to ensure the workflow process of offline and online editing can be managed efficiently	1. Determine project requirements 2. Organise project folder	1.1 Content of project brief interpreted 1.2 Project technical specifications interpreted from project brief 1.3 The project concept art and treatment style interpreted based on script and storyboard 1.4 Alternative enhancement method suggested to superior 1.5 Scheduling and deadline for project completion identified based on project brief 1.6 Requirement of additional time, manpower and resources determined based on complexity of project 2.1 Storage locations identified according to storage capacity 2.2 Project folder created in the respective storage location 2.3 Folder and file naming convention developed 2.4 Raw materials arranged accordingly in respective folders 2.5 Final work flow communicated to other editors/co-worker using

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				clear communication skills
			3. Compile project rushes material	3.1 Raw materials ingested from hard disk based on project requirement 3.2 Raw materials digitised from tape based on correct specifications 3.3 Raw materials transferred from data server based on project requirement 3.4 Sources file format identified based on format specification 3.5 Recorded project rushes converted to correct editing format based on format specification

CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR	**INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**						
SUB SECTOR	**CREATIVE MULTIMEDIA**						
JOB AREA	**AUDIO VISUAL FINALISING**						
NOSS TITLE	**AUDIO POST PRODUCTION**						
COMPETENCY UNIT TITLE	**AUDIO PRODUCTION MEDIA PREPARATION**						
LEARNING OUTCOMES	The outcome of this competency is to ensure the audio production media preparation enables the project media to be systematically organised so that project files are transferred efficiently between relevant production departments and documented according to organisation SOP. Upon completion of this competency unit, the trainee will be able to: • Receive (incoming) audio/video files • Deliver (outgoing) audio/video project files • Carry out archiving process						
PRE-REQUISITES (if applicable)	CU Studio Setup And Maintenance						
COMPETENCY UNIT ID	IT-063-3:2014-C01	**LEVEL**	Three (3)	**TRAINING DURATION**	100 Hours	**CREDIT VALUES**	10

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
1. Receive (incoming) audio/video files	i. Introduction to media art, such as: • Definition of sound • Definition of audio/visual • Sound appreciation in relation to visual ii. Types of encoded media, such as: • DVD	i. Obtain audio/video files ii. Inspect audio/video files iii. Load audio/video files into the system iv. Identify audio/video files v. Open related audio/video files vi. Execute playback to test readability and	*Attitude:* i. Meticulous when interpreting content of material and procedures for carrying out work ii. Focus and committed during	*Related Knowledge:* 10	*Related Knowledge*: • Lecture • Group Discussion	i. Aesthetics of sound interpreted and explained ii. Encoded audio/video files and format listed and explained iii. Operation of Digital Audio

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Hard disk • Thumb drive • Cloud • Players • Mobile devices iii. Types of audio/video files, such as: • Content description • Size • Format • Duration • Medium • Condition iv. Information Technology (IT) system and application v. Characteristic of readable media, such as: • Files condition • Physical media condition • Distortion • Unbalanced • Noise vi. Characteristic of files validity, which include: • Compliance with submission description	media validity of audio/video files vii. Fill in studio job sheet viii. Organise audio/video files according to recording and editing session	progress monitoring <u>Safety:</u> i. Handle materials with care ii. Avoid physical threats to files (e.g. shock, extreme heat and humidity) iii. Ensure files are free of virus or related media threats	*<u>Related Skills:</u>* 25	<u>Related Skills:</u> • Demonstration • Case Study • Mentoring	Workstation (DAW) demonstrated iv. Readability and media validity of audio/video files explained and demonstrated v. Audio/video files organised according to recording and editing session

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Audio standard(s) vii. Contents of studio job sheet, which include: • Project title • Client's name • Producer • Engineers • Media storage • File format • Dateline • Studio location • Duration of usage					
2. Deliver (outgoing) audio/video project files	i. Contents of studio job sheet, which include • Project title • Client's name • Producer • Engineers • Storage medium • File format • Deadline • Studio location • Duration of studio usage ii. Types of audio/video files, such as: • Content description • Size • Format	i. Identify project status ii. Verify audio/video files format iii. Prepare audio/video files iv. Transfer audio/video files v. View/listen transferred files	Attitude: i. Meticulous when interpreting content of material and procedures for carrying out work ii. Focus and committed during progress monitoring	*Related Knowledge:* 10 *Related Skills:* 25	*Related Knowledge*: • Lecture • Group Discussion *Related Skills:* • Demonstration • Field work • Studio work • Case Study • Mentoring	i. Audio/video file formats listed and explained ii. Operation of DAW demonstrated iii. Readability and validity of audio/video files explained and demonstrated according to project requirements

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Duration • Medium • Condition iii. Information Technology (IT) System & Application iv. Types of storage medium, such as: • Optical disc • Hard disk • Flash drive • Cloud storage • Central storage • Mobile devices v. Characteristics of file validity, which include: • Compliance with submission description • Audio standard		<u>Safety:</u> i. Handle materials with care from extreme heat and humidity ii. Meticulous when producing material			
3. Carry out archiving process	i. Information Technology (IT) System & Application ii. Types of metadata, which includes: • Structure metadata (Discovering & Identification) • Administrative metadata (Data	i. Obtain metadata ii. Organise metadata iii. Execute archiving process iv. Verify metadata v. Fill in archiving record	<u>Attitude:</u> i. Meticulous when interpreting content of material and procedures for carrying out work ii. Focus and committed	<u>*Related Knowledge*</u>: 10	<u>*Related Knowledge*</u>: • Lecture • Group Discussion	i. Archive/Storage medium types listed and explained ii. Types of metadata listed and explained iii. Operation of archiving equipment explained and demonstrated

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	created/modified) iii. Metadata information, such as: • Title • Subject or content • Archive person / creator • Contributor • Date • Type/format • Rights iv. Types of storage medium, such as: • Optical disc • Hard disk • Cloud storage • Central storage		during progress monitoring of metadata iii. Consistency in content labelling and metadata format <u>Safety:</u> i. Handle materials with care from extreme heat and humidity	<u>*Related Skills:*</u> 20	<u>*Related Skills*:</u> • Demonstration • Case Study • Mentoring • E-Learning	iv. Archived material(s) presented and explained

Core Abilities	Social Skills
01.01 Identify and gather information. 01.02 Document information procedures or processes. 02.01 Interpret and follow manuals, instructions and SOP's. 02.02 Follow telephone/telecommunication procedures. 02.03 Communicate clearly. 02.04 Prepare brief reports and checklist using standard forms. 03.01 Apply cultural requirement to the workplace. 03.02 Demonstrate integrity and apply practical practices. 03.03 Accept responsibility for own work and work area. 03.04 Seek and act constructively upon feedback about work performance. 06.01 Understand tool, equipment and materials. 06.02 Comply with and follow chain of command. 06.04 Adapt competencies to new situations 04.03 Organize and maintain own workplace. 04.05 Demonstrate initiative and flexibility. 01.07 Utilize database applications to locate a process information. 01.08 Utilize spreadsheets applications to locate and process information. 01.10 Apply a variety of mathematical techniques. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.15 Liaise to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress.	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritizing 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Computer workstation	1:1
• Office Productivity Database software	1:5
2. Digital Audio Workstations	
• Active speakers	
• Mixer	
• Video Editing Software	1:1
• Audio Editing software	
• Video / Audio editing and labelling software	
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CURRICULUM OF COMPETENCY UNIT (COCU)

SECTOR	**INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**						
SUB SECTOR	**CREATIVE MULTIMEDIA**						
JOB AREA	**AUDIO VISUAL FINALISING**						
NOSS TITLE	**AUDIO POST PRODUCTION**						
COMPETENCY UNIT TITLE	**AUDIO PRODUCTION RECORDING**						
LEARNING OUTCOME	The outcome of this competency is to ensure audio production recording procedures and techniques are performed according to AES/EBU (Audio Engineering Society/European Broadcasting Union) Standard. Upon completion of this competency unit, the trainee will be able to: • Identify audio production requirement • Prepare audio tools and equipment • Carry out sound recording • Present recorded material						
PRE-REQUISITES (if applicable)	CU Audio Production Media Preparation CU Studio Setup And Maintenance						
COMPETENCY UNIT ID	IT-063-3:2014-C02	**LEVEL**	Three (3)	**TRAINING DURATION**	250 Hours	**CREDIT VALUES**	25

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
1. Identify audio production requirement	i. Introduction to media art, such as: • Definition of sound • Definition of audio/visual • Sound appreciation in relation to visual ii. Project requirement, such as: • Types of	i. Interpret project requirements ii. Determine types of sound sources iii. Determine types of audio sources iv. Determine location of recording v. Determine techniques of recording	*Attitude:* i. Meticulous when determining sound and audio sources	*Related Knowledge:* 10 *Related Skills:* 30	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration	i. Aesthetics of sound interpreted and explained ii. Types of sound sources listed and explained iii. Types of audio sources listed and explained

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	production • Final format for recording deliverables iii. Sound level parameters and measurement iv. Types of sound sources, such as: • Musical instrument - Electronic - Acoustic • Foley • Voice • Sample sound v. Types of audio sources, such as: • Live • Recorded vi. Location of recording, such as: • Indoor - Auditorium - Recording studio • Outdoor - Field recording vii. Techniques of recording, such as: • Mono • Stereo • Multitrack • Miking (microphone placement) viii. Audio Engineering				• Case Study • Mentoring • E-Learning	iv. Location of recording listed and explained v. Techniques of recording listed and explained according to sound sources, audio sources and location

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	Standard (AES)					
2. Prepare audio tools and equipment	i. Recording tools and equipment, such as: • Microphone • Mixer • Media storage • Cables and connectors • Booms and stand • Electronic and physical Filters ii. Audio signal flow iii. Meter reading, such as: • Sound Pressure Level (SPL) • Peak Program Meter (PPM) • Volume Unit (VU) • Decibel (dB) Meter • Phase Meter (ø) iv. Techniques of calibration, such as: • Electrical AES frequency standard - 100 Hz - 500 Hz - 1 kHz - 8 kHz - 10 kHz - 16 kHz • Mechanical - Azimuth - Zenith	i. Determine microphone types, specification and usage ii. Determine mixer configurations and functionalities iii. Determine time and space storage iv. Determine cables and connectors v. Determine booms and stand vi. Determine filters application vii. Interpret meter readings viii. Conduct electrical and mechanical calibration ix. Setup audio tools and equipment x. Setup visual tools and equipment as required	*Attitude:* i. Focus and committed during progress monitoring ii. Proactive when preparing audio tools and equipment Safety: i. Handle materials with care	*Related Knowledge:* 20 *Related Skills:* 50	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	i. Audio signal flow explained and demonstrated ii. Meter reading described iii. Calibration techniques demonstrated iv. Audio tools and equipment setup demonstrated v. Visual tools and equipment setup demonstrated

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
3. Carry out sound recording	i. Equal loudness contour requirement (Fletcher & Munson curve) ii. Reference level of gain structure and output iii. Sound recording process, such as: • Line check • Sound check iv. Digital Audio Workstation (DAW) Operation v. Sound envelope, such as: • Attack • Decay • Sustain • Release	i. Apply equal loudness contour requirement during input gain structure ii. Determine input gain to required level iii. Place channel / master fader at nominal level iv. Adjust output volume v. Determine microphone placement/position vi. Apply miking technique vii. Apply filters and equalisation viii. Adjust and monitor input signal to optimum level ix. Execute recording process	*Attitude:* i. Meticulous in applying equal loudness contour ii. Adhere to company SOP Safety: i. Handle materials with care *Environmental:* i. Follow equal loudness contour requirement	*Related Knowledge:* 25 *Related Skills:* 80	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	i. Equal loudness contour interpreted and explained ii. Input gain structure explained and demonstrated iii. Placement of channel / master fader at nominal level demonstrated iv. Adjustment of output volume demonstrated x. Microphone placement/ position determined and described xi. Miking technique, filters and equalisation adjusted xii. Adjusting and monitoring of input signal to optimum level demonstrated v. Recording process explained and demonstrated

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
4. Present recorded material	i. Client requirements ii. Studio schedule iii. Format of sound recording report iv. Presentation Standard Operation Procedure (SOP)	i. Prepare for playback preview ii. Follow presentation SOP iii. Request Producer's attendance iv. Execute recorded material playback v. Prepare sound recording report vi. Submit sound recording report to superior	*Attitude:* i. Meticulous in preparing sound recording report ii. Adhere to company SOP	*Related Knowledge:* 10 *Related Skills:* 25	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • E-Learning	i. Presentation SOP explained ii. Recorded audio playback demonstrated and submitted iii. Sound recording report presented and submitted

Core Abilities	Social Skills
01.01 Identify and gather information. 01.02 Document information procedures or processes. 02.01 Interpret and follow manuals, instructions and SOP's. 02.02 Follow telephone/telecommunication procedures. 02.03 Communicate clearly. 02.04 Prepare brief reports and checklist using standard forms. 03.01 Apply cultural requirement to the workplace. 03.02 Demonstrate integrity and apply practical practices. 03.03 Accept responsibility for own work and work area. 03.04 Seek and act constructively upon feedback about work performance. 06.01 Understand tool, equipment and materials. 06.02 Comply with and follow chain of command. 06.04 Adapt competencies to new situations 04.03 Organize and maintain own workplace. 04.05 Demonstrate initiative and flexibility. 01.07 Utilize database applications to locate a process information. 01.08 Utilize spreadsheets applications to locate and process information. 01.10 Apply a variety of mathematical techniques. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.15 Liase to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress.	9. Communication skills 10. Conceptual skills 11. Interpersonal skills 12. Learning skills 13. Leadership skills 14. Multitasking and prioritizing 15. Self-discipline 16. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Analogue & Digital audio mixer/Console	1:10
2. Digital Audio Workstation (DAW) computer & internet capabilities	1:1
3. Audio editing software	1:1
4. Audio I/O interfaces	1:1
5. Portable sound recorders	1:1
6. Studio Monitors/Speakers	1:1
7. Headphones	1:1
8. Studio microphone	1:1
9. Boom microphone	1:1
10. Microphone stand	1:1
11. Boom stand	1:1
12. Wind screen	1:1
13. Pop Filter	As required
14. Cables/Connectors/Adapters	1:1
15. Direct Injection (D.I.) Box	1:1
16. Portable power supply	1:1
17. Sound Isolator	1:25
18. Projector and Screen	1:1
19. Sound effects library	1:1
20. Sample of report and format	1:5
21. Stationery	
22. Isolated and acoustically treated recording studio (Control room & Live room)	1:5
23. Wireless transmitter and receiver	

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CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR	**INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**						
SUB SECTOR	**CREATIVE MULTIMEDIA**						
JOB AREA	**AUDIO VISUAL FINALISING**						
NOSS TITLE	**AUDIO POST PRODUCTION**						
COMPETENCY UNIT TITLE	**AUDIO PRODUCTION EDITING**						
LEARNING OUTCOME	The outcome of this competency is to prepare sound materials for the next stage of production and premix. Upon completion of this competency unit, the trainee will be able to: • Perform audio files compilation • Detect sound/technical fault • Perform audio/sound effects (SFX) editing • Carry out audio clip consolidation • Perform audio track for premix						
PRE-REQUISITES (if applicable)	CU Audio Production Media Preparation CU Studio Setup And Maintenance						
COMPETENCY UNIT ID	IT-063-3:2014-C03	**LEVEL**	Three (3)	**TRAINING DURATION**	250 Hours	**CREDIT VALUES**	25

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
1. Perform audio files compilation	i. Introduction to media art, such as: • Definition of sound • Definition of audio/visual • Sound appreciation in relation to visual ii. Types of audio sources, such as: • Audio files	i. Interpret project requirements ii. Determine audio/video files iii. Check suitability of audio files iv. Apply sound appreciation v. Obtain audio/video files vi. Import audio/video files	*Attitude:* i. Meticulous when importing audio files ii. Focus and committed during progress monitoring iii. Precise in synchronising	*Related Knowledge:* 10	*Related Knowledge:* • Lecture • Group Discussion	i. Aesthetics of sound interpreted and explained ii. Selected audio/video files from field recording and/or sound effects (EFX) library listed according to

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Recorded audio files • Video files • Sound effects (SFX) library iii. Project requirements, such as: • Specified audio files • Specified sound effects (SFX) iv. Standard Operating Procedure (SOP) for handover of audio/video compilation list and files v. Types of audio/video files, such as: • Content description • Size • Format • Duration • Medium • Condition vi. Time code formats • Society of Motion Pictures & Television Engineers (SMPTE) • Musical Instrument Digital Interface (MIDI) Time code • Frequency Shift Keying (FSK)	• Load audio/video files into the system • Identify audio/video files • Open related audio/video files vii. Synchronise audio tracks to video clips • Import video to software • Synchronize audio to video using time code viii. Fill in studio job sheet	sound with scene elements *Safety:* i. Handle materials with care ii. Avoid physical threats to files (e.g. shock, extreme heat and humidity) iii. Ensure files are free of virus or related media threats	*Related Skills:* 20	*Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	project cue sheet requirements iii. Audio files suitability confirmed with superior iv. Operation of Digital Audio Workstation (DAW) related to selection, importing and synchronization of audio/video files demonstrated v. Time code formats described vi. Data of studio job sheet filled-in explained

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Song Position Pointer • Linear Time Code • Vertical Interval Time Code • AES-EBU embedded time code. vii. Contents of studio job sheet, which include: • Project title • Client's name • Producer • Engineers • Media storage • File format • Dateline • Studio location • Duration of usage					
2. Detect sound/ technical fault	i. Cue sheet ii. Types of sound/technical faults, such as: • No waveform recorded behind cursor • Clipping • Recording jitters • Left/right channels of recording are not balanced • Periodic noise • Poor quality of	i. Obtain cue sheet ii. Execute playback to test readability and validity of media audio/ video files iii. Determine audio faults through aural and visual cues iv. Determine sound character	*Attitude:* i. Meticulous when identifying sound/technical fault ii. Proactive when determining sound/technical fault iii. Follow company SOP	*Related Knowledge:* 10 *Related Skills:* 20	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study	i. Contents of cue sheet listed and explained ii. Playback to test readability and validity of media audio/video files demonstrated iii. Sound/technical faults determined and described

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	overdubs • Overdubbed recordings drifts out of sync • Stereo channels swap over • Speed variations iii. Determinants of sound characteristics, which include: • Pitch • Tone Quality • Loudness				• Mentoring • E-Learning	iv. Determinants of sound characters explained
3. Perform audio/sound effects (SFX) editing	i. DAW software editing application, such as: • Splice • Cut • Trim • Layer • Bounce • Fade in/out ii. Audio/sound effects (SFX)/music editing techniques, such as: • Clean-up • Modification • Synchronising	i. Obtain sound clips ii. Determine editing techniques iii. Execute editing techniques iv. Fill in cue sheet	*Attitude:* i. Meticulous when performing audio clean-up/modification ii. Handle equipment with care iii. Follow company SOP	*Related Knowledge:* 15 *Related Skills:* 45	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	i. Sound clips acquired ii. Editing techniques described iii. Clean-up/modification method explained and demonstrated iv. DAW software editing application described and demonstrated

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
4. Carry out audio clip consolidation	i. DAW editing software's & application ii. Types of audio/video files, such as: • .Wav • .AIFF • .AVI • .Mov iii. Sound files, such as: • Mono • Stereo • Multi-tracks iv. Consolidated audio/video files	i. Obtain audio/video files ii. Load audio/video files into the system iii. Inspect audio/video files iv. Identify audio/video files v. Open related audio/video files vi. Execute consolidation of audio/video files to required length vii. Report file status to superior viii. Organise audio/video files ix. Determine outgoing format x. Fill in cue sheet	*Attitude:* i. Meticulous when executing consolidation of audio/video files ii. Follow SOP company *Safety:* i. Handle equipment with care	*Related Knowledge:* 15 *Related Skills:* 50	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	i. Usage and operation of DAW described and demonstrated ii. Consolidation techniques demonstrated iii. Audio/video files listed and explained iv. File status reported to superior v. Audio/video files organisation demonstrated vi. Cue sheet completed and described

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
5. Perform audio track for premix	i. DAW Editing software's & application ii. Techniques and SOP of naming files iii. Consolidated audio/video files iv. Sound Files format, such as: • Mono • Stereo • Multi-tracks • Audio stem	i. Identify consolidated audio files ii. Compile consolidated audio files iii. Perform techniques of naming files iv. Rename consolidated audio files v. Fill in cue sheet and job sheet	*Attitude:* i. Meticulous when compiling audio files ii. Follow company SOP *Safety:* i. Handle equipment with care	*Related Knowledge:* 15 *Related Skills:* 50	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	i. Audio files explained and presented ii. File format for the project explained iii. Techniques of naming files applied according to SOP iv. Renaming of consolidated audio files demonstrated v. Cue sheet and job sheet completed

Core Abilities	Social Skills
01.01 Identify and gather information. 01.02 Document information procedures or processes. 02.01 Interpret and follow manuals, instructions and SOP's. 02.02 Follow telephone/telecommunication procedures. 02.03 Communicate clearly. 02.04 Prepare brief reports and checklist using standard forms. 03.01 Apply cultural requirement to the workplace. 03.02 Demonstrate integrity and apply practical practices. 03.03 Accept responsibility for own work and work area. 03.04 Seek and act constructively upon feedback about work performance. 06.01 Understand tool, equipment and materials. 06.02 Comply with and follow chain of command. 06.04 Adapt competencies to new situations 04.03 Organize and maintain own workplace. 04.05 Demonstrate initiative and flexibility. 01.07 Utilize database applications to locate a process information. 01.08 Utilize spreadsheets applications to locate and process information. 01.10 Apply a variety of mathematical techniques. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.15 Liase to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress.	17. Communication skills 18. Conceptual skills 19. Interpersonal skills 20. Learning skills 21. Leadership skills 22. Multitasking and prioritizing 23. Self-discipline 24. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Server system	1:25
2. Media Storage/Hard disk/Pen Drive	As required
3. Power stabilizer/Voltage regulator	1:25
4. Word Clock	1:1
5. Analogue audio mixer/Console	1:10
6. Digital Audio Workstation (DAW) computer & internet capabilities	1:1
7. Audio editing software	1:1
8. Audio I/O interfaces	1:1
9. Studio Monitors/Speakers	1:1
10. Headphones	1:1
11. Cables/Connectors/Adapters	As required
12. Portable power supply	1:1
13. Projector and Screen	1:25
14. Sound effects library	1:25
15. Sample of report and format	1:1
16. Stationery	1:1

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CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR	**INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**						
SUB SECTOR	**CREATIVE MULTIMEDIA**						
JOB AREA	**AUDIO VISUAL FINALISING**						
NOSS TITLE	**AUDIO POST PRODUCTION**						
COMPETENCY UNIT TITLE	**AUDIO PRODUCTION PRE-MIXING**						
LEARNING OUTCOME	The outcome of this competency is to enable enhancement of audio quality according to AES/EBU (Audio Engineering Society/European Broadcasting Union) Standard. Upon completion of this competency unit, the trainee will be able to: • Perform levelling/balancing of audio track • Carry out dynamic processing • Carry out sound effect (SFX) processing • Carry out automation processing						
PRE-REQUISITES (if applicable)	CU Audio Production Media Preparation CU Studio Setup And Maintenance						
COMPETENCY UNIT ID	IT-063-3:2014-C04	**LEVEL**	Three (3)	**TRAINING DURATION**	250 Hours	**CREDIT VALUES**	25

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
1. Perform levelling/ balancing of audio track	i. Introduction to media art, such as: • Definition of sound • Definition of audio/visual • Sound appreciation in relation to visual ii. Standard Operating Level (SOL) requirements, which	i. Interpret project requirements ii. Determine Standard Operating Level (SOL) iii. Execute audio tracks level balancing iv. Identify recorded audio tracks v. Arrange audio tracks	*Attitude:* i. Focus and committed during progress monitoring ii. Meticulous when interpreting job sheet	*Related Knowledge:* 15	*Related Knowledge:* • Lecture • Group Discussion	i. Aesthetics of sound interpreted and explained ii. Standard Operating Level (SOL) explained iii. Types of mixing format explained and

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	includes: • Broadcast • Professional • Semi-Pro • Domestic iii. Types of mixing format, which include: • Mono • Stereo • Surround iv. Types of sound source, such as: • Musical Instruments • Voice Over • Foley • Sound Effects v. Digital Audio Workstation application, such as: • Track naming & grouping • Levelling • Panning			*Related Skills:* 40	*Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	presented iv. Operation of Digital Audio Workstation (DAW) described and demonstrated v. Types of sound source listed and explained vi. Audio tracks level balancing demonstrated vii. Arranging of recorded audio tracks demonstrated
2. Carry out dynamic processing	i. Dynamic characteristic of sound sources, such as: • Poor level • Over modulating • Noise ii. Types of dynamic processor, such as: • Compressor • Expander	i. Identify sound sources ii. Rectify sound characteristics iii. Apply dynamic range control iv. Check required processed signal	*Attitude:* i. Meticulous when interpreting content of material and procedures for carrying out work	*Related Knowledge:* 15	*Related Knowledge:* • Lecture • Group Discussion	i. Operation of dynamic processors listed, described and demonstrated ii. Sound characteristics described iii. Dynamic range

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Limiter • Gate • De-esser (sibilance) iii. Application of dynamic processors, such as: • Compressor • Expander • Limiter • Gate • De-esser (sibilance)		ii. Focus and committed during progress monitoring iii. Meticulous when producing material	*Related Skills:* 40	*Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	described and demonstrated through playback devices iv. Checking of required processed signal demonstrated
3. Carry out sound effect (SFX) processing	i. Types of sound effects, such as: • Ambience • Soundscape • Foley • Designed sound ii. Function of sound effects, such as: • Expressive • Decorative • Mood iii. Tools of sound enhancement, such as: • Equalizer • Dynamic Processor • Imager • Modulator • Pitch Shifter	i. Identify sound effects types ii. Determine sound effects function iii. Execute sound effects processing iv. Determine sound effects level and panoramic position v. Apply sound effects levelling and panning	*Attitude:* i. Meticulous when interpreting content of material and procedures for carrying out work ii. Focus and committed during progress monitoring iii. Precise in synchronising and merging sound with scene elements	*Related Knowledge:* 20 *Related Skills:* 65	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	i. Panoramic Image for sound effects described and demonstrated ii. Operation of enhancing tools explained and demonstrated iii. Sound effects processing demonstrated iv. Sound effects level and panoramic position determined and explained v. Sound effects levelling and panning demonstrated

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
4. Carry out automation processing	i. Types of automation, which includes: • Level • Panning • Signal Processor ii. Function of automation in DAW application	i. Determine required part for automation ii. Execute automation optimisation iii. Fill in cue sheet and job sheet iv. Preview premix to superior v. Handover premix audio files to superior	*Attitude:* i. Meticulous when interpreting content of material and procedures for carrying out work ii. Focus and committed during progress monitoring	*Related Knowledge:* 15 *Related Skills:* 40	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • Mentoring	i. Operation of automation function explained and demonstrated ii. Automation optimisation described and demonstrated iii. Cue sheet and job sheet completed iv. Previewing of premix to superior demonstrated v. Premix audio files submitted to superior

Core Abilities	Social Skills
01.01 Identify and gather information. 01.02 Document information procedures or processes. 02.01 Interpret and follow manuals, instructions and SOP's. 02.02 Follow telephone/telecommunication procedures. 02.03 Communicate clearly. 02.04 Prepare brief reports and checklist using standard forms. 03.01 Apply cultural requirement to the workplace. 03.02 Demonstrate integrity and apply practical practices. 03.03 Accept responsibility for own work and work area. 03.04 Seek and act constructively upon feedback about work performance. 06.01 Understand tool, equipment and materials. 06.02 Comply with and follow chain of command. 06.04 Adapt competencies to new situations 04.03 Organize and maintain own workplace. 04.05 Demonstrate initiative and flexibility. 01.07 Utilize database applications to locate a process information. 01.08 Utilize spreadsheets applications to locate and process information. 01.10 Apply a variety of mathematical techniques. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.15 Liase to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress.	25. Communication skills 26. Conceptual skills 27. Interpersonal skills 28. Learning skills 29. Leadership skills 30. Multitasking and prioritizing 31. Self-discipline 32. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Server system	1:25
2. Media Storage/Hard disk/Pen Drive	As required
3. Power stabilizer/Voltage regulator	1:25
4. Word Clock	1:1
5. Analogue audio mixer/Console	1:10
6. Digital Audio Workstation (DAW) computer & internet capabilities	1:1
7. Audio editing software	1:1
8. Audio I/O interfaces	1:1
9. Studio Monitors/Speakers	1:1
10. Headphones	As required
11. Cables/Connectors/Adapters	1:1
12. Portable power supply	1:25
13. Projector and Screen	1:25
14. Sound effects library	1:1
15. Sample of report and format	1:1
16. Stationery	1:1
17. Isolated and acoustically treated recording studio (Control room & Live room)	1:5

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CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR	**INFORMATION AND COMMUNICATION TECHNOLOGY**						
SUB SECTOR	**CREATIVE MULTIMEDIA**						
JOB AREA	**AUDIO VISUAL FINALISING**						
NOSS TITLE	**AUDIO POST PRODUCTION**						
COMPETENCY UNIT TITLE	**STUDIO SETUP AND MAINTENANCE**						
LEARNING OUTCOME	The outcome of this competency is to provide first level technical support, to ensure continuous operation of the studio. Upon completion of this competency unit, the trainee will be able to: • Identify studio acoustic and sound proof/isolation requirement • Configure equipment and system routing • Carry out the equipment testing • Carry out troubleshooting						
PRE-REQUISITES (if applicable)	NIL						
COMPETENCY UNIT ID	IT-063-3:2014-C05	**LEVEL**	Three (3)	**TRAINING DURATION**	250 Hours	**CREDIT VALUES**	25

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
1. Identify studio acoustic and sound proof/isolation requirement	i. Introduction to media art, such as: • Definition of sound • Definition of audio/visual • Sound appreciation in relation to visual ii. Room characteristics and acoustic treatment, such as: • Reverberation Time (RT60)	i. Determine room characteristic ii. Determine acoustic requirement iii. Determine monitoring position	*Attitude:* i. Focus and committed when identifying requirements	*Related Knowledge:* 15	*Related Knowledge:* • Lecture • Group Discussion	i. Aesthetics of sound interpreted and explained ii. Room characteristics described iii. Studio monitor placement explained and demonstrated iv. Application of Sound

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Bass Trapping • Bass Response • Phasing • Absorption • Diffusion • Reflection • Standing Wave • Sound Proofing & Noise Isolation iii. Monitoring placement, such as: • Stereo Near field • Subwoofer • Surround iv. Acoustic panel, such as: • Bass traps • Diffuser • Isolation pad • Absorber v. Sound Absorption Coefficient (SAC)			*Related Skills*: 30	*Related Skills*: • Demonstration • Case Study • Mentoring • E-Learning	Transmission Coefficient (STC) chart shown and described v. Application of Sound Absorption Coefficient (SAC) chart shown and described
2. Configure equipment and system routing	i. Computer system installation procedure, such as: • CPU knowledge • RAM (memory) • Power Supply Unit • Hard Disk • Connections • Graphic Card • Audio Interface	i. Determine system configuration setup and routing requirement ii. Obtain Digital Audio Workstation specification iii. Install Digital Audio Workstation and relevant software	*Attitude:* i. Focus and committed during configuration process ii. Proactive when preparing audio tools and	*Related Knowledge:* 15	*Related Knowledge:* • Lecture • Group Discussion	i. System configuration setup and routing requirement determined and explained ii. Operation of multi-meter demonstrated iii. Installation and configuration of

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	ii. Digital Audio Workstation installation specification and configuration iii. Signal flow iv. Types of Cables and Connectors, such as: • Exchanging Line Receptacle (XLR) • Radio Corporation of America (RCA) • Tip Ring Sleeve (TRS) • Bantam • Digital – Sony Philips digital Interface Format (SPDIF), AES/EBU, Optical • IT – FW400/FW800, USB, Thunderbolt v. Cabling tools vi. Multi meter vii. Soldering set	iv. Simulate signal flow of the system configuration setup and routing v. Install connection routing and patching vi. Check connection routing and patching vii. Fill in configuration checklist	equipment <u>Safety:</u> i. Handle audio tools and equipment with care ii. Wear appropriate Personnel Protective Equipment (PPE)	*<u>Related Skills:</u>* 45	*<u>Related Skills:</u>* • Demonstration • Case Study • Mentoring • E-Learning	Digital Audio Workstation explained and demonstrated iv. Cable terminals determined v. Audio signal passed through confirmed vi. Quality of connection routing and patching confirmed vii. Computer system installation, connection routing and patching explained and demonstrated viii. Configuration list completed according to project requirement

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
3. Carry out the equipment testing	i. Types of studio Equipment, such as: • Digital Audio Workstation • Computer System • Studio Monitor • Microphones • Cables • Talkback System • Mixer • Controller • Microphone Preamp ii. Use of testing tool, such as: • Oscilloscope • Multi-meter • Cable tester	i. Obtain Digital Audio Workstation (DAW) specification ii. Set up digital audio workstation and system iii. Calibrate recording system iv. Fill in equipment test checklist	*Attitude:* i. Meticulous and thorough throughout equipment testing process ii. Proactive when preparing audio tools and equipment Safety: i. Handle audio and testing tools & equipment with care	*Related Knowledge:* 15 *Related Skills:* 50	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	i. Studio equipment listed and explained ii. Studio setup and configuration demonstrated iii. Operation of oscilloscope demonstrated iv. Computer System and Parts listed and explained v. Computer Operating System reformat and software installation demonstrated vi. Digital Audio Workstation listed and explained vii. Configuration of Digital Audio Workstation explained and demonstrated viii. Cable patching and soldering demonstrated ix. Operation of

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
						multi-meter demonstrated x. Signal Flow testing demonstrated xi. Equipment test checklist completed according to project requirements
4. Carry out troubleshooting	i. Studio equipment, such as: • Digital Audio Workstation • Computer System • Studio Monitor • Microphones • Cables • Talkback System • Mixer • Controller • Microphone Preamp ii. Principals of electrical and electronics, such as: • Calculation of Voltage input and output • Power Supply Unit • Parts iii. Use of testing tool, such as:	vi. Determine types of fault vii. Identify source of faults viii. Determine level of service and support required ix. Troubleshoot hardware/software issues x. Prepare troubleshooting report xi. Submit troubleshooting report to superior	*Attitude:* i. Analytical and logical when troubleshooting *Safety*: i. Handle audio tools and equipment with care	*Related Knowledge:* 20 *Related Skills:* 60	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Case Study • Mentoring • E-Learning	i. Studio equipment listed and explained ii. Operation of testing tool demonstrated iii. Hardware/ software issues troubleshooting demonstrated iv. Troubleshooting checklist documented in troubleshooting report v. Possible solution suggested and explained in report vi. Troubleshooting report

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Oscilloscope • Multi-meter • Cable tester iv. Content of troubleshooting report, which include: • Date • Problem • Solution v. DAW software operation					submission demonstrated

Core Abilities	Social Skills
01.01 Identify and gather information. 01.02 Document information procedures or processes. 02.01 Interpret and follow manuals, instructions and SOP's. 02.02 Follow telephone/telecommunication procedures. 02.03 Communicate clearly. 02.04 Prepare brief reports and checklist using standard forms. 03.01 Apply cultural requirement to the workplace. 03.02 Demonstrate integrity and apply practical practices. 03.03 Accept responsibility for own work and work area. 03.04 Seek and act constructively upon feedback about work performance. 06.01 Understand tool, equipment and materials. 06.02 Comply with and follow chain of command. 06.04 Adapt competencies to new situations 04.03 Organize and maintain own workplace. 04.05 Demonstrate initiative and flexibility. 01.07 Utilize database applications to locate a process information. 01.08 Utilize spreadsheets applications to locate and process information. 01.10 Apply a variety of mathematical techniques. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.15 Liase to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress.	33. Communication skills 34. Conceptual skills 35. Interpersonal skills 36. Learning skills 37. Leadership skills 38. Multitasking and prioritizing 39. Self-discipline 40. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Audio Maintenance Tool Set • Screwdriver set (various sizes) • Adjustable spanner • Test Pen • Cable tester • Clamp	1:1
2. Multimeter	1:3
3. Soldering Iron	1:1
4. Oscilloscope	1:1
5. dB meter	1:10
6. Spectrum Analyzer	1:25
7. Real Time Analyser (RTA) Microphone	1:1
8. Oscilloscope/Spectrum Analyzer/db meter software	1:1
9. CAD Software	1:1
10. Work Bench with clamp	1:1

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CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR	**INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**						
SUB SECTOR	**CREATIVE MULTIMEDIA**						
JOB AREA	**POST PRODUCTION-VIDEO FINALISING**						
NOSS TITLE	**CGI VIDEO EDITING**						
COMPETENCY UNIT TITLE	**VISUAL MEDIA PREPARATION**						
LEARNING OUTCOME	The person who is competent in this CU should be able to carry out visual media preparation, a pre-editing process where raw/referenced visual materials are analysed, compiled, converted and organised in an effective manner at a specific storage location. The outcome of this competency is to ensure the workflow process of offline and online editing can be managed efficiently. Upon completion of this competency unit, the trainee will be able to: • Determine project requirements • Organise project holder • Compile project rushes material						
PRE-REQUISITES (if applicable)	NIL						
COMPETENCY UNIT ID	IT-064-3:2014-C01	**LEVEL**	Three (3)	**TRAINING DURATION**	200 Hours	**CREDIT VALUES**	20

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
1. Determine project requirements	i. Types of project checklist/ brief : • Script • Storyboard • Project schedule ii. Types of project technical specifications such as: • Video Format • Aspect ratio	i. Identify contents of project brief ii. Identify project technical specifications iii. Identify project concept art iv. Identify project treatment style v. Determine alternative	*Attitude:* i. Analytical and meticulous in identifying contents of project brief and technical specifications ii. Meticulous, organised and	*Related Knowledge:* 24 *Related Skills:* 56	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration	i. Types and content of project brief ascertained ii. Details of video format, aspect ratio, frame rate described from project briefs

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Frame rate iii. Elements of concept art such as: • Colour • Themes • Style • Culture iv. Details of treatment style such as: • Story flow • Editing flow • Mood of presentation v. Project scheduling including: • Workload (manpower, equipment) • Timesheet • Milestone (work in progress)	enhancement method (if any) vi. Identify scheduling and deadline for project completion vii. Determine requirement of additional time, manpower and resources (if any	creative in identifying project concept art, project treatment style and alternative enhancement iii. Compliance when identifying scheduling and deadline for project completion iv. Rational, justified and polite when determining requirement of additional time, manpower and resources <u>*Safety:*</u> i. Safe handling of electrical appliances ii. Comfortable working area with proper lighting		• Simulation	iii. Elements of concept art ascertained iv. Story flow, editing flow and mood of presentation verified v. Alternative details of treatment style verified vi. Details of workload, timesheet and milestone verified vii. Recommendation for additional time, manpower and resources justified

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
			iii. Ergonomic seat and table			
2. Organise project folder	i. Storage location: • Size • Types of storage (internal/ external) ii. Folder and file naming convention such as: • Generic Example: Project_episode_scene number _####.formats • Example: MDEC_EP01_SC01_0001.jpg number _####.formats iii. Type of project folder names such as: • Pre-production • Edit file • Asset • Audio iv. Communication procedure: • Verbal • Non verbal • checklist	i. Identify storage locations ii. Develop folder and file naming convention iii. Arrange raw materials iv. Communicate final work flow to other editors/co-worker	*Attitude:* i. Resourceful, compliance and systematic when identifying storage locations and developing folder and file naming convention ii. Meticulous when arranging raw materials iii. Show respect and accurate when communicating final workflow to other editors/co-worker Safety i. Safe handling of electrical	*Related Knowledge:* 18 *Related Skills:* 42	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Demonstration • Project Observation • Scenario Based Training	i. Size and types of storage ascertained ii. Required types of project folders created in identified storage areas iii. Folder and file naming convention applied iv. Raw materials organised into appropriate project folders v. Required communication procedure for final workflow explanation applied

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
			appliances ii. Comfortable working area with proper lighting iii. Ergonomic seat and table			
3. Compile project rushes material	i. Types of raw materials: • .MXF • .RED • .AVCHD ii. Hard disk format: • NTFS • FAT32 • HFS+ iii. Type of tapes: • HDCAM • Digital BetaCAM (L4) iv. Type of connections • USB • Firewire • Thunderbolt v. Compressing/ Decompressing into formats (CODEC): • Types • platform compatibility vi. Digitising technique:	i. Ingest raw materials from hard disk ii. Digitise raw materials from tape iii. Transfer raw materials from data server iv. Identify source file format v. Convert recorded project rushes into correct editing format	*Attitude:* i. Meticulous, detailed and self-reliance when ingesting raw materials from hard disk, digitising raw materials from tape and transferring raw materials from data server ii. Accurate and focused when identifying source file format iii. Timeliness, attentive and diligent when converting	*Related Knowledge:* 18 *Related Skills:* 42	*Related Knowledge:* • Lecture • Group Discussion *Related Skills:* • Observation • Simulation • Practical/ Project	i. Types of raw materials, hard disk formats and connections described when extracting from hard disk ii. Types of tapes, CODEC and digitising technique applied iii. Material transfer procedure carried out iv. Types of source file formats ascertained v. Conversion into

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	• Access time code via RS422/ firewire • Login time code into software (L4) vii. Material transfer procedure: • Login • Drag and drop • Copy and paste viii. Types of source file format • Video (.MOV, .MP4) • Image sequence (.TGA, .PNG) ix. Conversion technique: • Optimised format (high resolution) • Proxy format (low resolution)		recorded project rushes into correct editing format *<u>Safety:</u>* i. Comfortable working area with proper lighting ii. Ergonomic seat, position and table iii. Comply to electrical /equipment safety procedure iv. Maintain safe eye distance from monitor			optimised or proxy format applied as editing format

Employability Skills

Core Abilities		Social Skills
01.01	Identify and gather information	41. Communication skills
01.02	Document information, procedures or processes	42. Conceptual skills
01.03	Utilize basic IT applications	43. Interpersonal skills
01.04	Analyze information	44. Learning skills
01.05	Utilize the Internet to locate and gather information	45. Leadership skills
01.06	Utilize word processor to process information	46. Multitasking and prioritizing
01.08	Utilize spreadsheets applications to locate and process information	47. Self-discipline
01.11	Apply thinking skills and creativity	48. Teamwork
02.03	Communicate clearly	
02.04	Prepare brief reports and checklists using standard forms	
02.05	Read/interpret flowcharts and pictorial information	
02.07	Utilize Local Area Network (LAN)/Intranet to exchange information	
02.09	Prepare flowcharts	
02.11	Convey information and ideas to people	
03.03	Accept responsibility for own work and work area	
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 facilitate 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	
04.06	Allocate work	
05.01	Implement project/work plans	
06.01	Understand systems	
06.02	Comply with and follow chain of command	

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. 1000BT Network system with data server	As required
2. DSLR Camera	1 : 5
3. External hard disk drive	1 : 1
4. HD Projector with White Screen	1 : 25
5. High Definition (HDV) Camera	1 : 5
6. IT Equipment (Computer/Laptop, speaker, mouse, keyboard, HD monitor)	1 : 1
7. Memory card	1 : 1
8. Stationery (White board etc.)	As required
9. USB / firewire connection cable	1 : 1

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SUMMARY OF TRAINING DURATION FOR AUDIO PRODUCTION (LEVEL 3)

NO ID	COMPETENCY UNIT TITLE	WORK ACTIVITIES	RELATED KNOWLEDGE (A)	RELATED SKILL (B)	HOURS (A) + (B)	TOTAL (HRS)
IT-063-3:2014-C01	AUDIO PRODUCTION MEDIA PREPARATION	Receive (incoming) audio/video files	10	25	35	100
		Deliver (outgoing) audio/video project files	10	25	35	
		Carry out archiving process	10	20	30	
		TOTAL HOURS	**30**	**70**	**100**	
IT-063-3:2014-C02	AUDIO PRODUCTION RECORDING	Identify audio production requirement	10	30	40	250
		Prepare audio tools and equipment	20	50	70	
		Carry out sound recording	25	80	105	
		Present recorded material	10	25	35	
		TOTAL HOURS	**65**	**185**	**250**	
IT-063-3:2014-C03	AUDIO PRODUCTION EDITING	Perform audio files compilation	10	20	30	250
		Detect sound/technical fault	10	20	30	
		Perform audio/sound effects (SFX) editing	15	45	60	
		Carry out audio clip consolidation	15	50	65	
		Perform audio track for premix	15	50	65	
		TOTAL HOURS	**65**	**185**	**250**	

NO ID	COMPETENCY UNIT TITLE	WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILL	HOURS	TOTAL (HRS)
			(A)	(B)	(A) + (B)	
IT-063-3:2014-C04	AUDIO PRODUCTION PRE-MIXING	Perform levelling/balancing of audio track	15	40	55	250
		Carry out dynamic processing	15	40	55	
		Carry out sound effect (SFX) processing	20	65	85	
		Carry out automation processing	15	40	55	
		TOTAL HOURS	**65**	**185**	**250**	
IT-063-3:2014-C05	STUDIO SETUP AND MAINTENANCE	Identify studio acoustic and sound proof/isolation requirement	15	30	45	250
		Configure equipment and system routing	15	45	60	
		Carry out the equipment testing	15	50	65	
		Carry out troubleshooting	20	60	80	
		TOTAL HOURS	**65**	**185**	**250**	
TOTAL (CORE)						**1100**
IT-064-3:2014-C01	VISUAL MEDIA PREPARATION	Determine project requirements	24	56	80	200
		Organise project holder	18	42	60	
		Compile project rushes material	18	42	60	
		TOTAL HOURS	**60**	**140**	**200**	
TOTAL (ELECTIVE)						**200**
TOTAL (CORE + ELECTIVE)						**1300**

GLOSSARY

TERMS	DESCRIPTION
EBU	European Broadcasting Union (EBU)
AES	Audio Engineering Society (AES)
A/V	Audio/Visual (A/V) both a sound and a visual component, the production or use of such works, or the equipment used to create and present such works
Animation	A medium that creates the illusions of movement through the projection of a series of still images or frames
Assets	Any item of media that has been formatted into a binary source that includes the right to use it. Digital assets are categorised in three major groups which may be defined as textual content (digital assets), images (media assets) and multimedia
Audio	Sound, especially when recorded, transmitted, or reproduced. Audio signal is an electrical representation in the form of a fluctuating voltage of current within the limits of equipment
CP	Competency Profile (CP) explains each of the competencies in terms of Competency Unit Description, Work Activities and Performance Criteria
CPC	Competency Profile Chart (CPC) consists of core and elective competency units. A Competency Unit (CU) is an independent meaningful unit of work, which contains several activities to complete a work cycle
CoCU	Competency of Curriculum Unit (CoCU) is the training curriculum for the competency unit for the purpose of learning and teaching
CU	Competency Unit (CU) is an independent meaningful unit of work, which contains several activities to complete a work cycle
DAW	Digital Audio Workstation (DAW) is a digital system designed for recording and editing digital audio
MCMC	Malaysian Multimedia and Communications Commission (MCMC) is the regulator for the converging communications and multimedia industry in Malaysia

TERMS	DESCRIPTION
MTDC	Malaysian Technology Development Corporation
NOSS	National Occupational Skills Standard (NOSS) is defined as a specification of the competencies expected of a skilled worker who is gainfully employed in Malaysia for an occupational area, level and the pathway to achieve the competencies
SFX	Sound Effect (SFX) is a are artificially created or enhanced sounds, or sound processes used to emphasize artistic or other content of films, television shows, live performance, animation, video games, music, or other media. In motion picture and television production, a sound effect is a sound recorded and presented to make a specific storytelling or creative point without the use of dialogue or music
TEM	Tools, Equipment and Material (TEM) used in a work activity