



Jabatan Pembangunan Kemahiran  
Kementerian Sumber Manusia, Malaysia

NATIONAL OCCUPATIONAL SKILLS STANDARD  
*(STANDARD KEMAHIRAN PEKERJAAN KEBANGSAAN)*

P853-002-4:2021

TVET INSTRUCTION

*PENGAJARAN TVET*

LEVEL 4

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Department of Skills Development (DSD)  
Federal Government Administrative Centre  
62530 PUTRAJAYA, MALAYSIA

NATIONAL OCCUPATIONAL SKILLS STANDARD

**TVET INSTRUCTION**

***PENGAJARAN TVET***

**LEVEL 4**

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## Preface

### **Standard Definition**

The National Occupational Skills Standard (NOSS) is a Standard document that outlines the **minimum** competencies required by a skilled worker working in Malaysia for a particular area and level of occupational, also the path to achieve the competencies. The competencies are based on the needs of employment, according to the career structure for the occupational area and developed by industry experts and skilled workers.

The National Competency Standard (NCS) is a Standard document that outlines the competencies required by a skilled worker in Malaysia.

### **Description of Standard Components**

The document is divided into three (3) components which includes: -

#### **Component I      Standard Practice**

This component is about the information related to occupational area including introduction to the industry, Standard requirements, occupational structure, levelling of competency, authority and industry requirements as a whole.

#### **Component II     Standard Content**

This component is a reference to industry employers in assessing and improving the competencies that is required for a skilled worker. The competencies are specific to the occupational area. The component is divided into two (2) section which are the chart (Competency Profile Chart, CPC) and details of the competencies (Competency Profile, CP).

#### **Component III    Curriculum of Competency Unit**

This component is a reference for the training personnel to identify training requirements, design the curriculum, and develop assessment. The training hours that included in this component is based on the recommendations by the Standard Development Committee (SDC). If there are modifications to the training hours, the Department provides the medium for discussion and consideration for the matter.

### Abbreviation

1	AC	Accredited Centre
2	AR	As Required
3	CBT	Competency Based Training
4	CP	Competency Profile
5	CPC	Competency Profile Chart
6	CU	Competency Unit
7	DOSH	Department of Occupational Safety and Health
8	DSD	Department of Skills Development
9	ISCED	International Standard Classification of Education
10	JPS	also known as Standard Development Committee
11	JTPS	also known as Standard Technical Evaluation Committee
12	KAPA	Knowledge Assessment, Performance Assessment
13	LMS	Learning Management System
14	MoHR	Ministry of Human Resources
15	MPKK	also known as National Skills Development Council
16	MQA	Malaysian Qualification Accreditation
17	MQF	Malaysian Qualification Framework
18	MS	Malaysian Standard
19	MSAD	Malaysian Skills Advanced Diploma
20	MSC	Malaysian Skills Certificate
21	MSD	Malaysian Skills Diploma
22	MSIC	Malaysian Standard Industrial Classification
23	NCS	National Competency Standard
24	NDTS	National Dual Training System
25	NOSS	National Occupational Skills Standard
26	OAS	Occupational Area Structure
27	OS	Occupational Structure

28	OSHA	Occupational Safety and Health Act
29	PBL	Problem Based Learning
30	SBT	Scenario Based Training
31	SOP	Standard Operating Procedures
32	STC	Standard Technical Committee
33	TEM	Tools, Equipment and Materials
34	TNA	Training Needs Analysis
35	TNI	Training Needs Identification
36	TVET	Technical & Vocational Education & Training
37	UNESCO	United Nations Educational, Scientific and Cultural Organization
38	VTO	Vocational Training Operation
39	WIM	Written Instructional Material

## Glossary

- |   |                    |   |
|---|--------------------|---|
| 1 | Bloom's Taxonomy   | Set of three hierarchical models used to classify educational learning objectives into levels of complexity and specificity. The three lists cover the learning objectives in cognitive, affective and sensory domains. |
| 2 | Cloud Storage      | Model of computer data storage in which the digital data is stored in logical pools, said to be on "the cloud."   |
| 3 | E-training         | Cognitive science principles of effective multimedia learning using electronic educational technology.  |
| 4 | Simpson's Taxonomy | Simpson's psychomotor domain is comprised of utilising motor skills and coordinating them. Simpson's taxonomy has a focus toward the progression of mastery of a skill from observation to invention.                   |
| 5 | TNA                | A process of identifying the gap in employee training and related training needs. It focuses on the organization goals and objectives and then determine the competencies of the employees needed to get there.         |
| 6 | TNI                | A process to identifying what educational courses or activities should be provided to employees to improve their competencies and work productivities.  |



### **List of Figure**

1. Figure 1            Malaysian Qualification Framework 2.0
2. Figure 2            Occupational Structure for TVET Instruction
3. Figure 3            Occupational Area Structure for TVET Instruction

### **Acknowledgement**

Director General of Department of Skills Development (DSD) would like to extend his gratitude to the National Skills Development Council (MPKK), Standard Technical Committee (JTS), Standard Technical Evaluation Committee (JTPS), Standard Development Committee (JPS), and organisation and individuals who have been involved directly or indirectly for the contribution, persistence and support in the development of this Standard until it is completed.

The Director General of DSD also would like to express his sincere thanks to the support and involvement of Khairul Anuar Bin Yahya as documenter for the development sessions.

**STANDARD PRACTICE**  
**NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS) FOR:**  
**TVET INSTRUCTION**  
**LEVEL 4**

## 1. Introduction

### 1.1 Occupation Overview

TVET instructor is an individual who is able to conduct effective occupation-related trainings to assist youth and adults in lifelong learning, job training and skill development. They are technically trained, well versed in industry trends and best practices as well as competence in demonstrating a high quality of training performance for the world of work. In Malaysian context, instructor is a person who is responsible for skills training to guide, supervise and evaluate a trainee's ability to assimilate the theoretical and practical aspects of the training (The Commissioner of Law Revision Malaysia, 2006).<sup>1</sup> To summarize, TVET instructors are the key enablers of determining the skills of future workforce (UNESCO-UNEVOC, 2020).<sup>2</sup>

In general, Malaysian TVET instructors are designated to train formal and informal learning at training-based institutions for few federal ministries which own, fund and operate TVET public sectors including, but not limited to:

- a) Ministry of Human Resources: Institut Latihan Perindustrian (ILP), Advanced Training Centre (ADTEC), Japan-Malaysia Technical Institute (JMTI) and Centre for Instructors and Advanced Skills Training (CIASST);
- b) Ministry of Youth and Sports: Institut Kemahiran Belia Negara (IKBN), Institut Kemahiran Tinggi Belia Negara (IKTBN), Akademi Kemahiran Belia Golf (AKBG);
- c) Ministry of Agriculture and Food Industries: Institut Pertanian, Institut Perikanan dan Institut Veterinar;
- d) Ministry of Rural and Regional Development: Kolej Kemahiran Tinggi Mara (KKTM), Institut Kemahiran Mara (IKM), MARA-Japan Industrial Institut (MJII), GIATMARA;
- e) Ministry of Tourism and Culture: Institut Latihan Pelancongan;
- f) Ministry of Work- Akademi Binaan Malaysia and
- g) Ministry of Defense: Perhebat Institutes.

In addition to that, other public agencies such as *Bahagian Pendidikan dan Latihan Teknikal Vokasional* (BPLTV), Ministry of Education; Polytechnics and Community Colleges, Malaysian Technical University Network (MTUN); Ministry of Higher Education as well as private training institutes also contribute such preparation for TVET and human capital development to accelerate economic growth. Recognizing TVET plays a significant role in country's economic development, Malaysian Qualification Framework (MQF) is developed to coordinate and monitor TVET progression to meet industry demand and help well-defined the roles and functions of TVET instructors in this country. Substantially, Department of Skills Department, Ministry of Human Resources and Malaysia Qualification Agency (MQA) are the

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<sup>1</sup> The Commissioner of Law Revision Malaysia (2006). *Act 652: National Skill Development Act* 2006. Retrieved from <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/95630/112654/F-998717512/MYS95630.pdf>

<sup>2</sup> UNESCO UNEVOC (2020). Training TVET Teachers/Trainers. Retrieved from <https://unevoc.unesco.org/home/Teacher%20Training>

respective bodies that harmonize and strengthen governance and institutional mechanism for TVET implementation in related to accreditation and quality assurance within three main pillars of TVET pathways as illustrated in Figure 1.

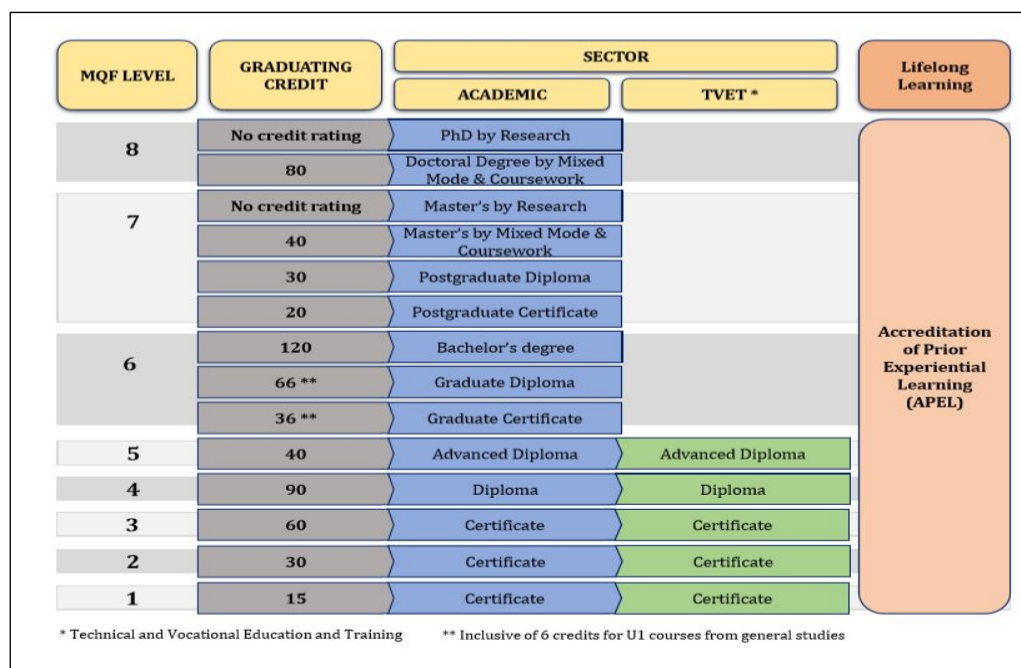


Figure 1. Malaysian Qualification Framework 2.0  
(Malaysian Qualification Agency, 2020)<sup>3</sup>

The application of digital technology is essential in today's training delivery methods due to demand for digital and human factors in the profession and workforce of the future (World Economic Forum, 2020).<sup>4</sup> The quality of the existing skills trainings is reviewed and improved due to TVET transformation and globalization to accelerate human capital development for high skilled and advanced nation and the changes in the role of TVET instructors are significant. Thus, TVET instructors should take the opportunities to upskill and reskill their competence in modernizing training regulations and pedagogical approaches in TVET by understanding Malaysian TVET ecosystem specifically on National Dual Training System (NDTS), competency-based training, digital literacy and industry best practices.

<sup>3</sup> Malaysian Qualification Agency (2020). Malaysian Qualifications Framework 2<sup>nd</sup> Edition. Retrieved from <https://www.mqa.gov.my/pv4/mqf.cfm>

<sup>4</sup> World Economic Forum (2020). Jobs of tomorrow: *Mapping opportunity in the new economy*. Retrieved from [http://www3.weforum.org/docs/WEF\\_Jobs\\_of\\_Tomorrow\\_2020.pdf](http://www3.weforum.org/docs/WEF_Jobs_of_Tomorrow_2020.pdf)

## 1.2 Rationale of NOSS Development

This is a review of the NOSS for Vocational Training Operation Level 3 (I-031-3:2014) and Vocational Education & Training Implementation Level 4 (I-031-4:2014) or Vocational Training Executive Level 4 (I-031-4). The rationale for the development of NOSS for TVET Instructor is based on the real practices from industrial players' feedback who have discovered the existing NOSS VTO should consider the latest interventions in training implementation. With the proposed obsolescence of Vocational Training Operation (VTO) Level 3, the current certificate holder, DSD to consider upgrading to the proposed TVET Instruction Level 4 based on existing guideline.

This NOSS is developed a complimentary to the technical NOSS to equip personnel with teaching methodology and techniques. With the current demand of a broad range of complex technical and professional work activities such as e-Learning platform, the current job requires a wide variety of contexts with a substantial degree of personal responsibility and autonomy. Therefore, the NOSS of TVET Instructor proposed is to enhance the current competency up to higher standard and the NOSS development panels have unanimously agreed to set the justification of TVET Instructor at Diploma Level and required internship placement at the accredited centre.

## 1.3 Rationale of Occupational Structure and Occupational Area Structure

In view of the higher demand in TVET Instructor competencies requirements, the NOSS development committee has come to a consensus that this TVET Instructor certification shall be placed in Level 4, in comparison to earlier certification of Vocational Training Operation (VTO) at Level 3. The TVET Instructor certification shall be taken as a TVET teaching licence, firstly in all DSD Accredited Centres (AC) and in the future should be applicable in all institutions which teach technical and vocational certification programs.

The reason to justify the upgrading of current VTO Level 3 to the proposed TVET Instruction Level 4 is to align the academic teaching license and skills instructing license; in-line with the increased demand of complex and non-routine activities.

The occupational standard for Level 4 is to develop personnel to be 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. As this is a teaching license for TVET, the career path shall be based on the Instructor's level of expertise and competencies.

The current occupational structure and occupational area structure are depicted in the following page. Based on Malaysia Standard Industry Classification (MSIC 2008) this NOSS on TVET Instruction is classified in Section (P) Education and grouped under Higher Education (853). This group includes technical and vocational education at post-secondary and university levels. The activities of educational

institutions providing education at ISCED 1997 levels 4, 5 and 6 are classified in group 853.

#### **1.4 Regulatory/Statutory Body Requirements Related to Occupation**

- a) National Skills Development Act 2006 (ACT 652) – Department of Skill Development;
- b) Malaysia Qualifications Agency Acts (ACT 679) – MQA;
- c) Public Service Department Malaysia;
- d) Public Services Commission of Malaysia;
- e) Human Resource Development Act 2001 (ACT 612) - Human Resource Development Fund;
- f) *Rasionalisasi Skim Perkhidmatan Bagi Perkhidmatan Awam Persekutuan Dibawah System Saraan Malaysia, Pekeliling Perkhidmatan Bilangan 1 2016;*
- g) *Pemakluman Rasmi Perubahan Sukatan Peperiksaan Perkhidmatan untuk tujuan Pengesahan JPA.BK 241/44/1;*
- h) *Pindaan Skim Perkhidmatan Pembantu Pegawai Latihan Vokasional / Penolong Pegawai Latihan Vokasional / Pegawai Latihan Vokasional - Pekeliling Perkhidmatan Bil.6 Tahun 2018. JPA.BPO (S) 324/14/12-1 Jld 10 (77);*
- i) *Kelayakan kemahiran yang di tauliah oleh JPK, mengikut peruntukan Akta Pembangunan Kemahiran Kebangsaan 2006 (Akta 652) adalah selaras dengan penguatkuasaan Akta Agensi kelayakan Malaysia 2007 (Akta 679); and*
- j) *Mulai 1 Januari 2017, program yang mendapat akreditasi penuh Agensi Kelayakan Malaysia (MQA) boleh digunakan oleh JPA atau Pihak Berkuasa Melantik (PBM) bagi tujuan perlantikan dengan Perkhidmatan Awam.*

#### **1.5 Occupational Prerequisite**

There is no minimum requirement set forth by the industry and relevant statutory bodies for any interested individual to undertake the job or career in this area.

#### **1.6 General Training Prerequisite for Malaysian Skills Certification System**

The minimum requirements set forth before enrolling for this course is possess Malaysia Skills Certificate (MSC) Level 3 in any National Skill Certification programmes or certificate Level 3 in academic based on MQF 2.0.

## 2. Occupational Structure (OS)

Section	(P) Education	
Group	(853) Higher Education	
Area	Technical & Vocational Education & Training (TVET)	
Level 5	TVET Manager	TVET Lecturer
Level 4	TVET Instructor	No Level
Level 3	No Level	No Level
Level 2	No Level	No Level
Level 1	No Level	No Level

Figure 2: Occupational Structure for Technical & Vocational Education & Training (TVET) Instruction

## 3. Occupational Area Structure (OAS)

Section	(P) Education	
Group	(853) Higher Education	
Area	Technical & Vocational Education & Training (TVET)	
Level 5	TVET Management	TVET Implementation & Development
Level 4	TVET Instruction	No Level
Level 3	No Level	No Level
Level 2	No Level	No Level
Level 1	No Level	No Level

Figure 3: Occupational Area Structure for Technical & Vocational Education & Training (TVET) Instruction



#### 4. Definition of Competency Levels

The NOSS is developed for various occupational areas. 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 required 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.

## **5. Award of Certificate**

The Director General may award, to any person upon conforming to the Standards the following skills qualifications as stipulated under the National Skills Development Act 2006 (Act 652):

- a) Malaysian Skills Diploma (MSD); or
- b) Statements of Achievement

## **6. Occupational Competencies**

The TVET Instruction Level 4 personnel are competent in performing the following core competencies:

- a) Instructional Delivery Implementation;
- b) Written Instructional Material (WIM) Development;
- c) Competency Based Training (CBT) Instruction;
- d) Digital Training Implementation;
- e) Competency Based Training (CBT) Assessment Material Development; and
- f) Training Facilities Administration.

## **7. Work Conditions**

Generally, they work under similar operating hours of the organization/company, may involve in organizing extra training activities outside normal working hours. Normally they work in classrooms, workshops, laboratories, and workplaces or at the allocated sites.

## **8. Employment Prospects**

In the Eleventh Malaysian Plan (EMP-11), it was identified that, there will be an increased in demand of the vocational training profession. It is evident that Technical & Vocational Education and Training (TVET) industry sector is an important enabler of Malaysia to position itself at the international level. The Vocational Education and Training industry is growing rapidly in Malaysia and there is an acute shortage of well-trained personnel in this area.

Vocational training programmes shall be trained in DSD accredited training centres. Upon completion of the Competency Units (Core & Electives), other related occupations with respect to employment opportunities are:-

- a) TVET Instructor;
- b) TVET Consultant;
- c) TVET Executive; and
- d) TVET Officer.

Other related industries with respect to employment opportunities are:-

- a) Public and Private Skill Training Institute;
- b) Public and Private Universities;
- c) Public and Private Colleges and Polytechnic;
- d) Secondary Schools; and
- e) Industries that require training personnel.

## **9. Up Skilling Opportunities**

The NOSS forms the basis for targeted trainings of TVET Instruction personnel to enhance their competencies. They may also enrol in upskilling program as part of their Continuous Professional Development (CPD) and would be recognised as industry professionals. Among upskilling opportunities are:-

- a) Digitalizing training for the future;
- b) Industry exposure;
- c) Engaging TVET trainer; and
- d) Master trainer.

## 10. Organisation Reference for Sources of Additional Information

The following organisations can be referred as sources of additional information which can assist in defining the document's contents.

### a) Local

- i) Department of Skills Development  
Level 7-8, Block D4, Complex D  
Federal Government Administrative Centre  
62530 Putrajaya  
Tel: 03-8886 5589  
<http://www.dsd.gov.my>  
Email: [jpk@mohr.gov.my](mailto:jpk@mohr.gov.my)
- ii) Centre for Instructor and Advanced Skill Training (CIAST)  
Jalan Petani 19/1  
Seksyen 19, 40900 Shah Alam  
Selangor Darul Ehsan  
Tel: 03-5543 8200  
<http://www.ciastr.gov.my>  
Email: [aduan@ciastr.gov.my](mailto:aduan@ciastr.gov.my)
- iii) Faculty of Technical & Vocational Education  
Universiti Tun Hussein Onn Malaysia (UTHM)  
86400 Parit Raja  
Batu Pahat Johor  
Tel: 07-453 7700/ 07-456 4028  
<https://www.uthm.edu.my/>  
Email: [pro@uthm.edu.my](mailto:pro@uthm.edu.my)
- iv) Centre for Instructional Technology and Curriculum Development  
University Kuala Lumpur (UniKL)  
1016, Jalan Sultan Ismail,  
50250 Kuala Lumpur  
Tel: 03-2175 4000  
<https://www.unikl.edu.my>  
Email: [enquiries@unikl.edu.my](mailto:enquiries@unikl.edu.my)
- v) Bahagian Pendidikan Latihan Teknikal & Vokasional (BPLTV)  
Ministry of Education (MOE)  
62100 Putrajaya  
Tel: 03-8884 5154  
<https://www.bptv.moe.gov.my>  
Email: [info.bptv@moe.gov.my](mailto:info.bptv@moe.gov.my)

- vi) Institut Latihan Kemahiran Belia & Sukan  
Bahagian Pembangunan Kemahiran Belia  
Ministry of Youth and Sports  
Menara KBS, 27, Persiaran Perdana  
Presint 3, 62570 Putrajaya  
Tel: 03-8871 3000  
<https://kemahiran.kbs.gov.my/>  
Email: [webmaster@kbs.gov.my](mailto:webmaster@kbs.gov.my)
  - vii) Institut Latihan Jabatan Tenaga Manusia  
Aras 6, Blok D4, Kompleks D  
Pusat Pentadbiran Kerajaan Persekutuan  
62530 Putrajaya  
Tel: 03-88865555  
<http://www.jtm.gov.my>  
Email: [jtm@mohr.gov.my](mailto:jtm@mohr.gov.my)
  - viii) Jabatan Pendidikan Politeknik dan Kolej Komuniti  
Galeria PJH Aras 4-7  
Jalan P4W Persiaran Perdana Presint 4  
62100 Putrajaya  
Tel: 03-8891 9000  
<https://www.mypolycc.edu.my/>  
Email: [ukk.jppkk@moe.gov.my](mailto:ukk.jppkk@moe.gov.my)
- b) International
- i) Section for Technical and Vocational Education UNESCO  
7, Place de Fontenoy  
75352 Paris 07 SP (France)  
Tel: (33.1) 45680834  
<https://unevoc.unesco.org/>  
Email: [tve.section@unesco.org](mailto:tve.section@unesco.org)

**11. Standard Technical Evaluation Committee**

NO	NAME	POSITION & ORGANISATION
<b>CHAIRMAN</b>		
1	Mahazrul bin Kamarrudin	Principal Assistant Director Department of Skills Development (DSD).
<b>EVALUATION PANEL</b>		
1	Noordin bin Abdullah	Principal Programme Coordinator Centre for Instructor and Advanced Skill Training (CIAST) Shah Alam, Ministry of Human Resources
2	Ts. Mohd Nor Azlan bin Mohamed Sidek	Principal Programme Coordinator Centre for Instructor and Advanced Skill Training (CIAST) Shah Alam, Ministry of Human Resources
3	Helmi bin Haji Haron	Principal Programme Coordinator Centre for Instructor and Advanced Skill Training (CIAST) Shah Alam, Ministry of Human Resources
4	Ts. Bizaisham bin Bidin	Principal Programme Coordinator Centre for Instructor and Advanced Skill Training (CIAST) Shah Alam, Ministry of Human Resources
5	Suzana binti Mohammed Zohdi	Director Institut Kemahiran Tinggi Belia Negara Pagoh, Ministry of Youth and Sport
6	Dr Sariyah binti Adam	Deputy Director Institut Kemahiran Tinggi Belia Negara Dusun Tua, Ministry of Youth and Sport
7	Lt. Cdr. Ts. Mohd Zulhilmi bin Jamaluddin	Program Manager Network Centric Operations (NCO) OpenApps Sdn. Bhd.
<b>SECRETARIAT</b>		
1	Nurul Afifah binti Mohd Zaid	Senior Assistant Director Department of Skills Development (DSD).

## 12. Standard Development Committee

### TVET INSTRUCTION

#### LEVEL 4

NO	NAME	POSITION & ORGANISATION
DEVELOPMENT PANEL		
1	Mohd Noor bin Menhad	Head of Programme Coordinator Centre for Instructor and Advanced Skill Training (CIAST), MOHR
2	Tc. Mohd Zaini bin Mat Wazir	Senior Programme Coordinator Centre for Instructor and Advanced Skill Training (CIAST) Shah Alam, MOHR
3	Mohd Tamrin bin Enche Yusoff	Head of Quality Control Coordination & Research Institut Kemahiran Tinggi Belia Negara (IKTBN) Sepang, Ministry of Youth and Sport
4	Adam bin Othman	Principal Assistant Director Technical and Vocational Education & Training Division, MOE
5	Ong Joo Hun	Head of Automation Robotic & Automotive Production Department Advanced Technology Training Centre (ADTEC) Shah Alam, MOHR
6	Associate Professor Dr. Nor Lisa binti Sulaiman	Head of Advanced Centre for Technical and Vocational Education (ACTIVE) Faculty of Technical & Vocational Education UTHM
7	Associate Professor Ts. Dr. Mimi Mohaffyza binti Mohamad	Head of Department Teaching & Practice Industrial Training Faculty of Technical & Vocational Education UTHM
8	Associate Professor Dr. Ruzainah binti Ali @ Jaafar	Dean Universiti Kuala Lumpur, Branch Campus, Institute of Chemical & Bio- Engineering Technology (UniKL- MICET)
9	Ts. Dr. Zulkifli bin Mohd Sidi A.M.N	Chairman Association for Researcher of Skills & Vocational Training (ARSVOT), Shah Alam
10	Ir. Ts. Noor Hisham bin Yahaya	Managing Director Lindenwood Consult Sdn Bhd
11	Zainudin bin Kadir	Chief Executive Officer Thames Oxford Academy

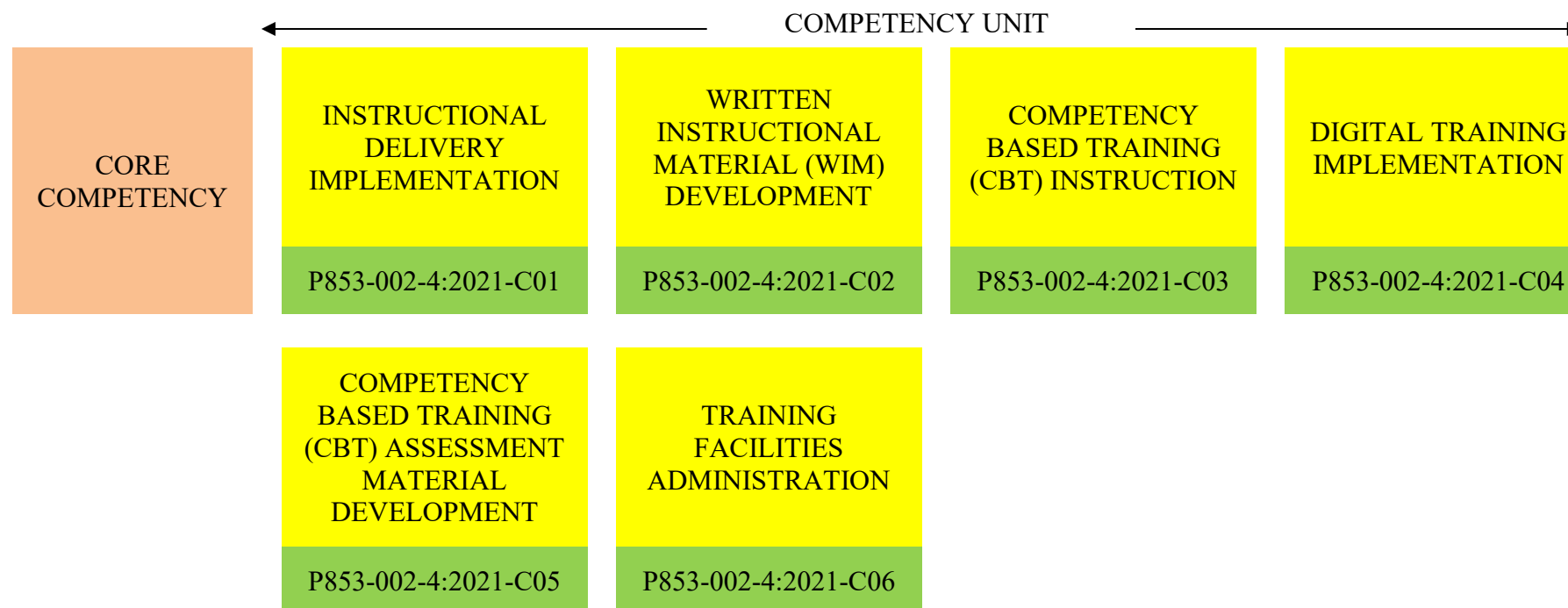
FACILITATOR		
1	Zaharudin bin Abdul Latif A.M.N	Principal Assistant Director Department of Skills Development (DSD).
2	Nurul Afifah binti Mohd Zaid	Senior Assistant Director Department of Skills Development (DSD).



**STANDARD CONTENT**  
**NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS) FOR:**  
**TVET INSTRUCTION**  
**LEVEL 4**

### 13. Competency Profile Chart (CPC)

SECTION	(P) EDUCATION		
GROUP	(853) HIGHER EDUCATION		
AREA	TECHNICAL & VOCATIONAL EDUCATION & TRAINING (TVET) INSTRUCTION		
NOSS TITLE	TVET INSTRUCTION		
NOSS LEVEL	FOUR (4)	NOSS CODE	P853-002-4:2021



Note: Besides the Six (6) CUs, trainees should undertake an internship to comply with this NOSS.

#### 14. Competency Profile (CP)

SECTION	(P) Education		
GROUP	(853) Higher Education		
AREA	Technical & Vocational Education & Training (TVET) Instruction		
NOSS TITLE	TVET Instruction		
NOSS LEVEL	Four (4)	NOSS CODE	P853-002-4:2021

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
1 Instructional Delivery Implementation  P853-002-4:2021-C01	<p>Instructional Delivery Implementation is an essential function to develop lesson plan, organize and deliver programmes learning objectives in accordance with expected outcomes.</p> <p>The person who is competent in instructional delivery shall be able to analyse training requirements, prepare pre training requirement, conduct training preparation, deliver training presentation and conduct training confirmation.</p> <p>The outcome of this competency unit is to ensure training session are holistically prepared, meaningful</p>	1. Analyse training requirements.	<p>1.1 Job competencies requirements identified based on stakeholder's needs.</p> <p>1.2 Competency gap evaluated based on established Training Need Analysis (TNA) procedures.</p> <p>1.3 Training needs to be addressed specified based on Training Need Analysis (TNA).</p> <p>1.4 Training program proposed based on Training Need Analysis (TNA)/ Training Need Identification (TNI).</p>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
	materials and multisensory delivery applied in accordance with programmes objectives attaining expected learning outcomes.	2. Prepare pre training requirement.	2.1 Training schedule reviewed based on Lesson Plan. 2.2 Training plan analysed based on Accredited Centre's (AC's) requirements. 2.3 Training delivery aligned with related session based on training plan. 2.4 Training activities determined based on training plan. 2.5 Training methodologies determined based on AC's requirements. 2.6 Training material acquired according to training activities. 2.7 Training facilities set-up based on delivery approach.
		3. Conduct training preparation.	3.1 Session orientation conducted based on AC's SOP. 3.2 Trainees' attention initiated based on AC's SOP. 3.3 Prior lesson experience related to present topic based on WIM. 3.4 Desired objectives explained based on training Learning Outcome. 3.5 Intended structured delivery approach explained based on Lesson Plan.

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			3.6 Health Safety Environmental (HSE) briefing conducted based on AC's SOP.
		4. Deliver training presentation.	4.1 Theory and practical lesson technique carried out based on Learning Outcome (LO). 4.2 Topic delivered in sequence based on Lesson Plan. 4.3 Trainee questions & answer handled based on NOSS Assessment Criteria. 4.4 Topic conclusion performed based on Learning Outcome (LO). 4.5 Learning Outcome (LO) reviewed based on CoCU.
		5. Conduct training confirmation.	5.1 Learning evidence checked based on related knowledge and skills. 5.2 Lesson delivery summarised based on session plan. 5.3 Lesson delivery adjourned based on session plan. 5.4 Session delivery evaluated based on session plan.
2 Written Instructional Material (WIM) Development	Written Instructional Material (WIM) Development describes the preparation of Lesson Plan (LP), Information Sheet (IS),	1. Review & Refine CoCU	1.1 Relevant NOSS by level selected based on latest NOSS Registry. 1.2 Related CU selected based on program requirements.

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
P853-002-4:2021-C02	Assignment Sheet (AS) and Work Sheet (WS) for the delivery of CBT instruction based on WIM development guidelines.		1.3 Work Activities (WA) maintained/ Split / merged according to WIM development guidelines. 1.4 New CoCU produced based on WIM development guideline.
	The person who is competent in this CU should be able to review & refine CoCU, develop <i>Jadual Pembahagian WIM (JPW)</i> , develop <i>Jadual Penetapan Peratusan Masa Aktiviti Pembelajaran dan Penilaian (JPPMP)</i> , develop <i>Jadual Pembahagian Masa Pembelajaran Bersemuka (JPMPB)</i> , develop theory lesson plan, develop practical lesson plan, develop Information Sheet (IS), develop Assignment Sheet (AS) and develop Work Sheet (WS).	2. Develop <i>Jadual Pembahagian WIM (JPW)</i> .	2.1 JPW for Work Activity (WA) determined based on WIM development guideline. 2.2 WIM title determined based on new JPW provided. 2.3 Title set of WIM theory and practical completed based on WIM development guideline. 2.4 JPW completed according to the prescribed format.
	The outcome of this CU is CoCU and WIM are produced as per WIM development guidelines.	3. Develop <i>Jadual Penetapan Peratusan Masa Aktiviti Pembelajaran dan Penilaian (JPPMP)</i> .	3.1 NOSS by level and all Competency Unit (CU) selected based on AC's requirements. 3.2 Percentage range face to face, self/own activities and assessment determined based on relevant accreditation body. 3.3 Training duration in hours for each Competency Unit (CU) determined based on CoCU. 3.4 Hours calculated according to percentage and time allocated based on CoCU.

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			<p>3.5 Calculation hours confirmed based on CoCU.</p> <p>3.6 <i>Jadual Penetapan Peraturan Masa Aktiviti Pembelajaran dan Penilaian (JPPMP)</i> produced based on CoCU.</p>
		<p>4. Develop <i>Jadual Pembahagian Masa Pembelajaran Bersemuka (JPMPB)</i>.</p>	<p>4.1 All work activities listed based on Competency Unit (CU).</p> <p>4.2 Percentage range face to face, self/own activities and assessment analysed based on relevant accreditation body.</p> <p>4.1 Face to face learning time for theory title and practical title calculated based on relevant accreditation body.</p> <p>4.2 Face to face learning Time for theoretical and practical lesson with JPPMP verified based on relevant accreditation body.</p> <p>4.3 <i>Jadual Pembahagian Masa Pembelajaran Bersemuka (JPMPB)</i> produced based on relevant accreditation body.</p>
		<p>5. Develop theory lesson plan.</p>	<p>5.1 JPW (theory) obtained based on Related Knowledge in CoCU.</p> <p>5.2 Instructional delivery content identified based on Related Knowledge in CoCU.</p>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			<p>5.3 Components in theory lesson format determined based on Related Knowledge in CoCU.</p> <p>5.4 Theory lesson plan for teaching delivery produced based on Related Knowledge in CoCU.</p>
		6. Develop practical lesson plan.	<p>6.1 JPW (Practical) obtained based on Related Skills in CoCU.</p> <p>6.2 Instructional delivery content identified based on Related Skills in CoCU.</p> <p>6.3 Components in practical lesson format determined based on Related Skills in CoCU.</p> <p>6.4 Practical lesson plan for teaching delivery produced based on Related Skills in CoCU.</p>
		7. Develop Information Sheet (IS).	<p>7.1 Main learning content determined based on Related Knowledge in CoCU.</p> <p>7.2 Related sub-topic specified based on Related Knowledge in CoCU.</p> <p>7.3 Overall content should meet related knowledge in CoCU acquired based on Related Knowledge in CoCU.</p> <p>7.4 Available content of each related knowledge acquired based on Related Knowledge in CoCU.</p>



CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			<p>7.5 Quality and relevancy of content validated based on Related Knowledge in CoCU.</p> <p>7.6 Visual and graphical content for clarity of information incorporated based on NOSS requirements.</p> <p>7.7 Information Sheet (IS) format determined based on guidelines by accreditation body.</p>
		8. Develop Assignment Sheet (AS).	<p>8.1 Knowledge to be assess identified based on Related Knowledge.</p> <p>8.2 Number of items determined based on Related Knowledge in CoCU.</p> <p>8.3 Criteria and number of items to be developed identified based on Related Knowledge in CoCU.</p> <p>8.4 Content for assignment developed to meet the requirement of IS based on Related Knowledge in CoCU.</p> <p>8.5 Assignment Sheet (AS) generated according to Information Sheet (IS) based on Related Knowledge in CoCU.</p>
		9. Develop Work Sheet (WS).	<p>9.1 Main learning content evaluated based on Related Skills and ASE in CoCU.</p> <p>9.2 Related sub-topic validated based on Related Skills and ASE in CoCU.</p>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			<p>9.3 Overall content should meet related skill, attitude, safety and environment in CoCu reviewed based on Related Skills and ASE in CoCU.</p> <p>9.4 Available content of each related skill reviewed based on Related Skills and ASE in CoCU.</p> <p>9.5 Visual and graphical content for clarity of instruction integrated based on Related Skills and ASE in CoCU.</p> <p>9.6 Tool, equipment, materials (TEM) requirements during practical activities verified based on NOSS requirements.</p> <p>9.7 Components in Work Sheet format reviewed based on guidelines by accreditation body.</p> <p>9.8 Work Sheet for practical delivery produced based on guidelines by accreditation body.</p>
<p>3 Competency Based Training (CBT) Instruction</p> <p>P853-002-4:2021-C03</p>	<p>Competency Based Training (CBT) Instruction describes the delivery process of theoretical and practical lesson based on NOSS to produce competent skill trainees.</p>	<p>1. Deliver theoretical lesson.</p>	<p>1.1 Theoretical lesson plan prepared based on trainee's competencies.</p> <p>1.2 Information Sheet (IS) prepared based on trainee's competencies.</p> <p>1.3 Assignment Sheet (AS) prepared based on trainee's competencies.</p>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
	<p>The person who is competent in this CU should be able to deliver theoretical lesson, deliver practical lesson, deliver Core Abilities (CA) theory, perform Core Abilities (CA) mapping with NOSS and conduct Core Abilities (CA) practical performance assessment.</p> <p>The outcome of this CU is competent skill trainees are able to deliver theoretical lesson, practical lesson and Core Abilities instruction as per lesson plan.</p>		<p>1.4 Tools, Equipment and Materials (TEM) prepared based on session plan.</p> <p>1.5 Theoretical lesson presentation conducted based on session plan.</p> <p>1.6 Theoretical lesson delivery confirmed based on trainee's competencies.</p>
		2. Deliver practical lesson.	<p>2.1 Practical lesson plan identified based on Trainer's SKM certification.</p> <p>2.2 Work Sheet (WS) prepared based on Trainer's SKM certification.</p> <p>2.3 Tools, Equipment and Materials (TEM) prepared based on session plan.</p> <p>2.4 Practical lesson presentation conducted based on lesson plan.</p> <p>2.5 Confirm practical lesson plan and Work Sheet (WS) confirmed based on trainee's delivery.</p>
		3. Deliver Core Abilities (CA) theory.	<p>3.1 Core Abilities selected based on NCS CA.</p> <p>3.2 Core Abilities (CA) Information Sheet used based on WIM Core Abilities (CA).</p> <p>3.3 Core Abilities (CA) slide used based on NCS requirements.</p>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			<p>3.4 Core Abilities (CA) presentation performed based on NCS requirements.</p> <p>3.5 Information Sheet (IS) and slide delivered confirmed based on NCS requirements.</p>
		<p>4. Perform Core Abilities (CA) mapping with NOSS.</p>	<p>4.1 Relevant NOSS Level identified based on AC's requirements.</p> <p>4.2 Related Core Abilities (CA) &amp; Abilities Level selected based on NCS requirements.</p> <p>4.3 Competency Unit &amp; Work Activities Level selected based on NOSS requirements.</p> <p>4.4 Core Abilities (CA) against NOSS Matrix prepared based on NCS level.</p> <p>4.5 Related abilities Level aligned with related Work Activities (WA) Level based on NCS.</p> <p>4.6 Related Core Abilities (CA) confirmed based on NCS.</p>
		<p>5. Conduct Core Abilities (CA) practical performance assessment.</p>	<p>5.1 WIM Core Abilities (CA) performance assessment checklist obtained based on NCS requirements.</p>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			5.2 Core Abilities (CA) against NOSS Matrix reviewed based on NCS level. 5.3 Participant's abilities with WA Matrix confirmed based on NCS. 5.4 Participant's abilities evaluated with WA in NOSS based on trainee's delivery. 5.5 Participant's performance evaluated based on trainee's delivery. 5.6 Performance assessment result validated based on AC's SOP.
4 Digital Training Implementation  P853-002-4:2021-C04	Digital Training Implementation describes the technology oriented in digitalizing of training material, delivery and assessment based on the current and trend for digitalization era in creating new jobs and replacing others.  The person who is competent in this CU should be able to develop e-training material, deliver online training and conduct online assessment.  The outcome of this CU is digital skill are acquired for the preparation of training material,	1. Develop e-training material	1.1 Learning Outcomes (LO) identified based on NOSS requirements. 1.2 Type of e-training materials to be developed selected based on WIM requirements. 1.3 E-training material produced based on WIM document. 1.4 E-training material developed reviewed based on WIM requirements. 1.5 E-training material developed saved based on AC's SOP.
		2. Deliver online training.	2.1 Learning Outcomes (LO) identified based on NOSS requirements.

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
	and assessment for delivery of digitalize training as per 21 <sup>st</sup> century digitalization.		2.2 Synchronous/ asynchronous delivery mode selected based on AC's requirements. 2.3 Physical set up performed based on E-training requirements. 2.4 Type of virtual learning platform and applications selected based on AC's requirements. 2.5 Participants on boarding performed based on AC's SOP. 2.6 Online training performed based on AC's SOP. 2.7 Participants online learning assessed based on AC's SOP.
		3. Conduct online assessment.	3.1 Learning Outcomes (LO) identified based on NOSS requirements. 3.2 Synchronous/ asynchronous delivery mode selected based on AC's requirements. 3.3 Physical set up performed based on AC's requirements. 3.4 Type of virtual assessment platform and applications selected based on AC's requirements. 3.5 Participants on boarding performed based on AC's SOP. 3.6 Online assessment performed based on AC's SOP.

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
5 Competency Based Training (CBT) Assessment Material Development  P853-002-4:2021-C05	<p>Competency Based Training (CBT) Assessment Material Development describes the assessment process of trainees' competency in compliance with CBT concept and approach.</p> <p>The person who is competent in this CU should be able to develop Table of Specification (TOS), develop Knowledge Assessment (KA), develop Performance Assessment (PA), conduct Knowledge Assessment (KA), conduct Performance Assessment (PA) and analyse candidates' performance.</p> <p>The outcome of this CU is CBT assessment material produced as per CBT assessment development guidelines.</p>	1. Develop Table of Specification (TOS).	1.1 Table <i>Jadual Pembahagian Penilaian Kerja Kursus</i> created based on NOSS. 1.2 Relevant Standard by level selected based on AC's requirements. 1.3 Related CU selected based on identified NOSS program. 1.4 <i>Jadual Spesifikasi Ujian (JSU)</i> Standard created according to question development guidelines. 1.5 JSU Individual created according to question development guidelines. 1.6 JSU developed checked according to question development guidelines.
		2. Develop Knowledge Assessment (KA).	2.1 Knowledge Assessment (KA) criteria identified based on NOSS. 2.2 Knowledge Assessment (KA) component identified according to question development guidelines. 2.3 Types of item identified based on knowledge content according to question development guidelines. 2.4 Types of competencies (Fact/ Procedure/ Attitude) identified according to question development guidelines. 2.5 Work activities title confirmed according to question development guidelines.

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			<p>2.6 Level of difficulty determined according to question development guidelines.</p> <p>2.7 Knowledge Assessment (KA) developed checked according to question development guidelines.</p>
		3. Develop Performance Assessment (PA).	<p>3.1 Performance Assessment (PA) criteria based on standard identified.</p> <p>3.2 Skills competencies to be assessed identified according to question development guidelines.</p> <p>3.3 Work activities identified according to question development guidelines.</p> <p>3.4 Performance Assessment (PA) duration confirmed according to question development guidelines.</p> <p>3.5 Assignment instruction created according to question development guidelines.</p> <p>3.6 Chart/ diagram if applicable identified based on NOSS delivery requirements.</p> <p>3.7 Tools, equipment and material required listed according to assignment.</p> <p>3.8 Performance Assessment (PA) criteria determined based on Related Skills in CoCU.</p>



CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			<p>3.9 Marking scheme prepared according to question development guidelines.</p> <p>3.10 Performance Assessment (PA) developed checked based on guideline by accreditation body.</p>
		4. Conduct Knowledge Assessment (KA).	<p>4.1 Knowledge Assessment (KA) schedule checked based on program timetable.</p> <p>4.2 Knowledge Assessment (KA) documents collected based on AC's SOP.</p> <p>4.3 Candidate attendances confirmed based on AC's SOP.</p> <p>4.4 Knowledge Assessment (KA) administered based on AC's SOP.</p> <p>4.5 Answer script collected based on AC's SOP.</p> <p>4.6 Answer script counted based on AC's SOP.</p> <p>4.7 Knowledge Assessment (KA) documents submission confirmed based on AC's SOP.</p>
		5. Conduct Performance Assessment (PA).	<p>5.1 Performance Assessment (PA) schedule checked based on program timetable.</p> <p>5.2 Performance Assessment (PA) documents collected based on AC's SOP.</p>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			5.3 Candidate attendances confirmed based on AC's SOP. 5.4 Performance assessment administered based on AC's SOP. 5.5 Candidate performance evaluated based on AC's SOP. 5.6 Performance assessment result compiled based on AC's SOP.
		6. Analyse candidates' performance.	6.1 Candidates' assessments result obtained based on AC's SOP. 6.2 Candidate's level of achievements determined based on AC's SOP. 6.3 Data recorded based on AC's SOP. 6.4 Candidate's performance assessments report prepared based on AC's SOP. 6.5 Report details checked based on AC's SOP. 6.6 Performance result statistic analysed based on AC's SOP.
6 Training Facilities Administration	Training Facilities Administration is the competency required to maintain and upkeep training facilities and TEMs. It includes occupational compliance for workplace and personnel's safety,	1. Perform training facilities support function.	1.1 Training facilities service and maintenance requirement determined based on AC's SOP. 1.2 End-user facilities maintenance inspection conducted based on AC's SOP.

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
P853-002-4:2021-C06	<p>health and security adherence. It is to demonstrate Safety, Health, and Environment (SHE) and security governance to trainees for minimize incidents during training implementation.</p> <p>The person who is competent in training facilities and safety implementation shall be able to perform training facilities support function, perform training procurement activities and perform Health, Safety, Security &amp; Environment (HSSE) activities.</p> <p>The outcome of this competency unit is to allow training facilities and TEM readiness with workplace SHE and security compliance in accordance with standards and legislative requirements.</p>		<p>1.3 Facilities maintenance requisition prepared based on maintenance requirements and AC's budget.</p> <p>1.4 Training area housekeeping carried out based on AC's requirements.</p> <p>1.5 Maintenance and housekeeping records updated based on latest activities.</p> <p>1.6 References, facts and evidence recorded based on site inspection.</p> <p>1.7 Confidentiality of report upheld based on AC's requirements.</p>
		2. Perform training procurement activities.	<p>2.1 Training procurement system examined based on AC's requirements.</p> <p>2.2 Training procurement requirement determined based on AC's requirements.</p> <p>2.3 Inventory control conducted based on AC's requirements.</p> <p>2.4 Store handling carried out based on AC's requirements.</p> <p>2.5 Purchasing requisition generated based on AC's requirements.</p>
		3. Perform Health, Safety, Security & Environment (HSSE) activities.	<p>3.1 HSSE policy analysed based on AC's requirements.</p> <p>3.2 HSSE requirement determined based on government's act and regulations.</p>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			<p>3.3 HSSE activities plan examined according to HSSE rules and regulation.</p> <p>3.4 HSSE activities carried out based on AC's policies.</p> <p>3.5 Training facilities security activities carried out based on AC's SOP.</p> <p>3.6 Security breach incident report prepared based on AC's SOP.</p> <p>3.7 Training facilities security records updated based on latest activities.</p>

**CURRICULUM OF COMPETENCY UNIT**  
**NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS) FOR:**  
**TVET INSTRUCTION**  
**LEVEL 4**

## 15. Curriculum of Competency Unit

### 15.1. Instructional Delivery Implementation

SECTION	(P) Education		
GROUP	(853) Higher Education		
AREA	Technical & Vocational Education & Training (TVET) Instruction		
NOSS TITLE	TVET Instruction		
COMPETENCY UNIT TITLE	Instructional Delivery Implementation		
LEARNING OUTCOMES	<p>The learning outcomes of this competency are to enable the trainees to ensure training session are holistically prepared, meaningful materials and multisensory delivery applied in accordance with programmes objectives attaining expected learning outcomes.</p> <p>Upon completion of this competency unit, trainees should be able to:</p> <ol style="list-style-type: none"> <li>1. Analyse training requirements.</li> <li>2. Prepare pre training requirement.</li> <li>3. Conduct training preparation.</li> <li>4. Deliver training presentation.</li> <li>5. Conduct training confirmation.</li> </ol>		
TRAINING PREREQUISITE (SPECIFIC)	Not available.		
CU CODE	P853-002-4:2021-C01	NOSS LEVEL	Four (4)

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
1. Analyse training requirements.	1.1 Training Needs Analysis (TNA). <ul style="list-style-type: none"> <li>• Purpose.</li> <li>• Benefits.</li> </ul>	1.1 Identify job competencies requirements. 1.2 Evaluate competency gap.	<u>ATTITUDE</u> 1.1 Ensure systematic documentation.	1.1 Training Needs Analysis (TNA) described.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>The processing of data gathering (Offline, Online).</li> </ul> <p>1.2 Levels of Needs Analysis/ Identification.</p> <ul style="list-style-type: none"> <li>National.</li> <li>Organisational.</li> <li>Departmental.</li> <li>Employee.</li> </ul> <p>1.3 Approach of training needs survey.</p> <ul style="list-style-type: none"> <li>Qualitative (Interview, Observation).</li> <li>Quantitative (Questionnaire, Testing).</li> </ul> <p>1.4 Analysing data according to competency gap.</p> <ul style="list-style-type: none"> <li>Gap analysis.</li> <li>Task skills.</li> <li>Task management skills.</li> <li>Skills transfer.</li> </ul>	<p>1.3 Specify training needs to be addressed.</p> <p>1.4 Propose training program.</p>	<p>1.2 Comply with training requirement procedures.</p> <p>1.3 Comply with cultural awareness.</p> <p>1.4 Adhere to effective presentation methodology.</p> <p><u>SAFETY</u></p> <p>1.1 Conscious on unsafe conditions surrounding the workplace.</p> <p><u>ENVIRONMENT</u></p> <p>1.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>1.2 Levels of Needs Analysis/ Identification elaborated.</p> <p>1.3 The approach of training needs survey listed.</p> <p>1.4 Data analysing based on competency gap explained.</p> <p>1.5 TNA implementation described.</p> <p>1.6 Method of analysing TNA data described.</p> <p>1.7 Implementation of training needs analysis described.</p> <p>1.8 TNA report verification explained.</p> <p>1.9 Job competencies requirements confirmed based on stakeholder's needs.</p> <p>1.10 Competency gap identified based on established TNA procedures.</p> <p>1.11 Training needs to be addressed confirmed based on TNA.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>Environmental management skills.</li> </ul> <p>1.5 Instrument/ tools of analysing TNA data.</p> <p>1.6 Method of analysing TNA data.</p> <p>1.7 Implementation of training needs analysis.</p> <ul style="list-style-type: none"> <li>Job analysis development.</li> <li>Analysis information obtaining the organisational needs.</li> </ul> <p>1.8 TNA report verification.</p> <ul style="list-style-type: none"> <li>Validate competencies gap.</li> <li>Evaluating the information gathered.</li> <li>Information collected &amp; documented in an acceptable format.</li> </ul>			<p>1.12 Training program selected based on TNA/ TNI.</p> <p>1.13 Systematic documentation observed.</p> <p>1.14 Training requirement procedures compliance observed.</p> <p>1.15 Cultural awareness compliance observed.</p> <p>1.16 Effective presentation methodology observed.</p> <p>1.17 Conscious on unsafe conditions surrounding the workplace observed.</p> <p>1.18 Practice of 3R concept (Reduce, Reuse, Recycle) observed.</p>



WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
2. Prepare pre training requirement.	2.1 Application of training schedule. 2.2 Determination of topics from the CoCU. 2.3 Training delivery methodology & techniques. <ul style="list-style-type: none"> <li>• Pedagogy approach.</li> <li>• Andragogy approach.</li> <li>• Problem-based Learning (PBL).</li> <li>• Project-based Learning.</li> <li>• Tutorials/ Coursework.</li> <li>• On-line/Virtual delivery.</li> <li>• Learning Management System (LMS).</li> <li>• Relevance virtual applications.</li> </ul> 2.4 Determining Learning Outcome (LO).	2.1 Review training schedule. 2.2 Analyse training plan. 2.3 Align training delivery with related session. 2.4 Determine training activities. 2.5 Determine training methodologies. 2.6 Acquire training material. 2.7 Set-up training facilities.	<u>ATTITUDE</u> 2.1 Ensure systematic documentation. 2.2 Comply with training requirement procedures. 2.3 Comply with cultural awareness. 2.4 Adhere to effective presentation methodology.  <u>SAFETY</u> 2.1 Conscious on unsafe conditions surrounding the workplace.  <u>ENVIRONMENT</u> 2.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	2.1 Application of training schedule explained. 2.2 Determination of topics from the CoCU explained. 2.3 Training delivery methodology & techniques described. 2.4 Learning Outcome (LO) described. 2.5 Training material sources listed. 2.6 Method of setting up training material described. 2.7 Training facilities listed. 2.8 Training schedule confirmed based on Lesson Plan. 2.9 Training plan identified based on AC's requirements. 2.10 Training delivery with related session confirmed based on AC plan. 2.11 Training activities identified based on training plan.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	2.5 Training material sources. 2.6 Method of setting up training material. 2.7 Training facilities, including. <ul style="list-style-type: none"> <li>• Tools, Equipment and Material (TEM).</li> <li>• Classroom layout.</li> <li>• Training aids.</li> <li>• Workshop.</li> </ul>			2.12 Training methodologies identified based on AC's requirements. 2.13 Training material obtained based on approved WIM. 2.14 Training facilities arranged based on training methodology. 2.15 Systematic documentation observed. 2.16 Training requirement procedures compliance observed. 2.17 Cultural awareness compliance observed. 2.18 Effective presentation methodology observed. 2.19 Conscious on unsafe conditions surrounding the workplace observed. 2.20 Practice of 3R concept (Reduce, Reuse, Recycle) observed.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
3. Conduct training preparation.	3.1 Session orientation. <ul style="list-style-type: none"> <li>• Greet.</li> <li>• Attendance.</li> <li>• Comfort.</li> <li>• Law of readiness.</li> </ul> 3.2 Content of introduction.	3.1 Organise session orientation.	<u>ATTITUDE</u> 3.1 Ensure systematic documentation. 3.2 Comply with training requirement procedures. 3.3 Comply with cultural awareness. 3.4 Adhere to effective presentation methodology.  <u>SAFETY</u> 3.1 Conscious on unsafe conditions surrounding the workplace.  <u>ENVIRONMENT</u> 3.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	3.1 Session orientation described. 3.2 Content of introduction listed. 3.3 Training objectives elaborated. 3.4 Type of training approach explained. 3.5 Methodology of delivery explained. 3.6 Training environment safety aspect highlighted. 3.7 Session orientation performed based on AC's SOP. 3.8 Trainees' attention performed. 3.9 Prior lesson experience to present topic presented based on WIM. 3.10 Desired objectives described based on training Learning Outcome. 3.11 Intended structured delivery approach
	3.3 Training objectives. <ul style="list-style-type: none"> <li>• Importance of lesson.</li> <li>• Focus.</li> </ul> 3.4 Type of training approach. <ul style="list-style-type: none"> <li>• Lecture.</li> <li>• Practical.</li> <li>• Simulation.</li> </ul> 3.5 Methodology of delivery. <ul style="list-style-type: none"> <li>• Facilitate.</li> <li>• Mentoring.</li> <li>• Couching.</li> <li>• Supervise.</li> <li>• Trainees guide (counselling).</li> </ul> 3.6 Training environment safety aspect. <ul style="list-style-type: none"> <li>• Lightning.</li> </ul>	3.2 Initiate trainees' attention. 3.3 Relate prior lesson experience to present topic. 3.4 Explain desired objectives. 3.5 Describe intended structured delivery approach. 3.6 Organise HSE briefing.		

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Confine space.</li> <li>• Safety exit/ entrance.</li> <li>• Safety equipment.</li> </ul>			<p>presented based on Lesson Plan.</p> <p>3.12 HSE briefing presented based on AC's SOP.</p> <p>3.13 Systematic documentation observed.</p> <p>3.14 Training requirement procedures compliance observed.</p> <p>3.15 Cultural awareness compliance observed.</p> <p>3.16 Effective presentation methodology observed.</p> <p>3.17 Conscious on unsafe conditions surrounding the workplace observed.</p> <p>3.18 Practice of 3R concept (Reduce, Reuse, Recycle) observed.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
4. Deliver training presentation.	<p>4.1 Methods of presentation (4 steps pattern).</p> <ul style="list-style-type: none"> <li>• Preparation.</li> <li>• Presentation.</li> <li>• Application.</li> <li>• Confirmation.</li> </ul> <p>4.2 Techniques of training delivery.</p> <ul style="list-style-type: none"> <li>• Lecture.</li> <li>• Role play.</li> <li>• Case study.</li> <li>• Demonstration.</li> <li>• Discussion.</li> <li>• Observation.</li> </ul> <p>4.3 Techniques of training activities.</p> <ul style="list-style-type: none"> <li>• Energiser.</li> <li>• Ice breaker.</li> <li>• Recap.</li> </ul> <p>4.4 Quality of delivery.</p> <ul style="list-style-type: none"> <li>• Language.</li> <li>• Posture.</li> <li>• Eye contact.</li> <li>• Gesture.</li> <li>• Mannerism.</li> <li>• Personal appearance.</li> </ul>	<p>4.1 Carry out theory and practical lesson technique.</p> <p>4.2 Perform topic in sequence.</p> <p>4.3 Handle trainee questions &amp; answer.</p> <p>4.4 Perform topic conclusion.</p> <p>4.5 Review learning outcome.</p>	<p><u>ATTITUDE</u></p> <p>4.1 Ensure systematic documentation.</p> <p>4.2 Comply with training requirement procedures.</p> <p>4.3 Comply with cultural awareness.</p> <p>4.4 Adhere to effective presentation methodology.</p> <p><u>SAFETY</u></p> <p>4.1 Conscious on unsafe conditions surrounding the workplace.</p> <p><u>ENVIRONMENT</u></p> <p>4.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>4.1 Methods of presentation explained.</p> <p>4.2 Techniques of training delivery described.</p> <p>4.3 Techniques of training activities described.</p> <p>4.4 Quality of delivery listed.</p> <p>4.5 Law of learning described.</p> <p>4.6 Technique of presentation listed.</p> <p>4.7 Question and answer handling described.</p> <p>4.8 Lesson introduction described.</p> <p>4.9 Fundamental characteristic of voice explained.</p> <p>4.10 Importance key point highlighted.</p> <p>4.11 Session plan time management elaborated.</p> <p>4.12 Theory and practical lesson technique performed based on learning outcome.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<p>4.5 Law of learning.</p> <ul style="list-style-type: none"> <li>• Readiness.</li> <li>• Primacy.</li> <li>• Effect.</li> <li>• Intensity.</li> <li>• Exercise.</li> </ul> <p>4.6 Technique of presentation.</p> <ul style="list-style-type: none"> <li>• Methods of presentation.</li> <li>• Apply technique of presentation.</li> <li>• Handling training aids.</li> </ul> <p>4.7 Question and answer handling.</p> <ul style="list-style-type: none"> <li>• Verbal and non-verbal.</li> <li>• Question technique.</li> <li>• Topic conclusion.</li> </ul> <p>4.8 Lesson introduction.</p> <ul style="list-style-type: none"> <li>• Digital training material.</li> <li>• AVA.</li> </ul> <p>4.9 Fundamental characteristic of voice.</p>			<p>4.13 Topic in sequence presented based on Lesson Plan.</p> <p>4.14 Trainee questions &amp; answer conducted based on NOSS Assessment Criteria.</p> <p>4.15 Topic conclusion presented based on learning outcome.</p> <p>4.16 Learning outcome confirmed based on CoCU.</p> <p>4.17 Systematic documentation observed.</p> <p>4.18 Training requirement procedures compliance observed.</p> <p>4.19 Cultural awareness compliance observed.</p> <p>4.20 Effective presentation methodology observed.</p> <p>4.21 Conscious on unsafe conditions surrounding the workplace observed.</p> <p>4.22 Practice of 3R concept (Reduce, Reuse, Recycle) observed.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Tone.</li> <li>• Volume.</li> <li>• Range.</li> <li>• Pitching.</li> <li>• Pace.</li> <li>• Inflection.</li> </ul> 4.10 Importance key point. 4.11 Session plan time management.			
5. Conduct training confirmation.	5.1 Learning techniques appraisal. <ul style="list-style-type: none"> <li>• Quiz.</li> <li>• Feedback.</li> <li>• Oral question.</li> <li>• Assignment Sheet (AS).</li> </ul> 5.2 Learning preparation checklist. <ul style="list-style-type: none"> <li>• Content of session plan.</li> <li>• Training materials.</li> <li>• Training facilities preparation.</li> <li>• Safety aspect compliance.</li> </ul>	5.1 Check learning evidence. 5.2 Summarise training delivery. 5.3 Adjourn training delivery. 5.4 Evaluate session delivery.	<u>ATTITUDE</u> 5.1 Ensure systematic documentation. 5.2 Comply with training requirement procedures. 5.3 Comply with cultural awareness. 5.4 Adhere to effective presentation methodology.  <u>SAFETY</u> 5.1 Conscious on unsafe conditions surrounding the workplace.	5.1 Learning techniques appraisal described. 5.2 Learning preparation checklist described. 5.3 Session delivery process flow listed. 5.4 Lesson summary content explained. 5.5 Lesson overview highlighted. 5.6 Lesson adjourning approach explained. 5.7 Learning evidence reviewed based on related knowledge and skills.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<p>5.3 Session delivery process flow.</p> <ul style="list-style-type: none"> <li>• Motivate trainees.</li> <li>• Topic explanation.</li> <li>• Question &amp; answer.</li> <li>• Subject conclusion.</li> </ul> <p>5.4 Lesson summary content.</p> <ul style="list-style-type: none"> <li>• Lesson review.</li> <li>• Importance key point.</li> </ul> <p>5.5 Lesson overview.</p> <p>5.6 Lesson adjourning approach.</p> <ul style="list-style-type: none"> <li>• Cognitive closing skill.</li> <li>• Social closing skill.</li> </ul>		<p><u>ENVIRONMENT</u></p> <p>5.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>5.8 Training delivery recapped based on session plan.</p> <p>5.9 Training delivery concluded based on session plan.</p> <p>5.10 Session delivery assessed based on session plan.</p> <p>5.11 Systematic documentation observed.</p> <p>5.12 Training requirement procedures compliance observed.</p> <p>5.13 Cultural awareness compliance observed.</p> <p>5.14 Effective presentation methodology observed.</p> <p>5.15 Conscious on unsafe conditions surrounding the workplace observed.</p> <p>5.16 Practice of 3R concept (Reduce, Reuse, Recycle) observed.</p>



## Employability Skills

### Core Abilities

- Please refer NCS- Core Abilities latest edition.

### Social Values & Social Skills

- Please refer Handbook on Social Skills and Social Values in Technical Education and Vocational Training.

## References for Learning Material Development

- 1 Ryosuke Nakamura, Ir. Azmi bin Ahmad and Zulkifli bin Omar. 2008. Training Methodology Handbooks for Vocational Instructor. Kuala Lumpur: Duta Printing Sdn Bhd. ISBN-978 983 4407 90 2.
- 2 Rahim M. Sail, Abdul Rahman Md. Aroff, Asnarulkhadi Abu Samah, Azimi Hamzah, Sidek Mohd Noah and Zakaria Kasa. 2008. Handbooks on Social Skill and Social Values in Technical Education and Vocational Training (Second Edition). Kuala Lumpur: Ampang Press Sdn. Bhd. ISBN-978 976 5026 21 8.
- 3 Sharon Bartram and Brenda Gibson. 1997. Training Needs Analysis: A Resource for Identifying Training Needs, Selecting Training Strategies, and Developing Training Plans (Second Edition). Toronto: Grover Pub Co. ISBN-978 056 6079 16 0.
- 4 Department of Skills Standard (DSD). 2015. Z-009-1:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 5 Department of Skills Standard (DSD). 2015. Z-009-2:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 6 Department of Skills Standard (DSD). 2015. Z-009-3:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 7 Department of Skills Standard (DSD). 2015. Z-009-4:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 8 Department of Skills Standard (DSD). 2018. Handbook on Social Skills and Social Values in Technical Education and Vocational Training. Putrajaya: Department of Skills Standard (DSD).

### 15.2. Written Instructional Material (WIM) Development

SECTION	(P) Education		
GROUP	(853) Higher Education		
AREA	Technical & Vocational Education & Training (TVET) Instruction		
NOSS TITLE	TVET Instruction		
COMPETENCY UNIT TITLE	Written Instructional Material (WIM) Development		
LEARNING OUTCOMES	<p>The learning outcomes of this competency are to enable the trainees to produce WIM as per WIM development guidelines.</p> <p>Upon completion of this competency unit, trainees should be able to:</p> <ol style="list-style-type: none"> <li>1. Review &amp; Refine CoCU</li> <li>2. Develop <i>Jadual Pembahagian WIM (JPW)</i>.</li> <li>3. Develop <i>Jadual Penetapan Peratusan Masa Aktiviti Pembelajaran dan Penilaian (JPPMP)</i>.</li> <li>4. Develop <i>Jadual Pembahagian Masa Pembelajaran Bersemuka (JPMPB)</i>.</li> <li>5. Develop theory lesson plan.</li> <li>6. Develop practical lesson plan.</li> <li>7. Develop Information Sheet (IS).</li> <li>8. Develop Assignment Sheet (AS).</li> <li>9. Develop Work Sheet (WS).</li> </ol>		
TRAINING PREREQUISITE (SPECIFIC)	Must complete P853-002-4:2021-C01 Instructional Delivery Implementation.		
CU CODE	P853-002-4:2021-C02	NOSS LEVEL	Four (4)

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
1. Review & Refine CoCU.	1.1 Overview of NOSS package. • Standard Practice.	1.1 Select relevant NOSS by level. 1.2 Select related CU.	<u>ATTITUDE</u> 1.1 Ensure systematic documentation.	1.1 Overview of NOSS package described.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>Standard Content.</li> <li>CoCU.</li> </ul> <p>1.2 CoCU refine requirements.</p> <ul style="list-style-type: none"> <li>Non repetition.</li> <li>Leftovers addition.</li> <li>Sorting procedure.</li> <li>Learning and teaching completion.</li> </ul> <p>1.3 Usage of instructional materials in various training delivery.</p> <ul style="list-style-type: none"> <li>Full time (institutional).</li> <li>Work base (dual training).</li> <li>Accreditation of prior experience.</li> <li>On-line learning.</li> </ul>	<p>1.3 Decide whether to maintain/ split/ merge Work Activities (WA).</p> <p>1.4 Produce new CoCU.</p>	<p>1.2 Adhere to continuous effective learning.</p> <p>1.3 Adhere to result oriented practices.</p> <p><u>SAFETY</u> Not Available.</p> <p><u>ENVIRONMENT</u> 1.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>1.2 CoCU refine requirements listed.</p> <p>1.3 Use of instructional materials in various training delivery explained.</p> <p>1.4 Relevant NOSS by level confirmed based on AC's requirements.</p> <p>1.5 Related CU picked based on program requirements.</p> <p>1.6 Whether to maintain/ split/ merge Work Activities (WA) concluded based on resources requirements.</p> <p>1.7 New CoCU generated based on resources requirements.</p> <p>1.8 Systematic documentation observed.</p> <p>1.9 Adhere to continuous effective learning observed.</p> <p>1.10 Adhere to result oriented practices observed.</p> <p>1.11 Practice 3R concept (Reduce, Reuse, Recycle) observed.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
2. Develop <i>Jadual Pembahagian WIM (JPW)</i> .	<p>2.1 Types of instructional materials in different training delivery strategy.</p> <p>2.2 Component of theoretical and practical JPW.</p> <p>2.3 Method to identify type and quantity of instructional materials based on:</p> <ul style="list-style-type: none"> <li>• Training duration.</li> <li>• Related Knowledge and Related Skill.</li> <li>• Tools, Equipment and Materials (TEM).</li> <li>• Work processes involve (products, services and decision).</li> </ul> <p>2.4 Research techniques to identify sources and reference for develop a title for WIM theory and practical.</p>	<p>2.1 Determine JPW for Work Activity (WA).</p> <p>2.2 Determine WIM title base on JPW provided.</p> <p>2.3 Complete the title set of WIM theory and practical.</p> <p>2.4 Complete JPW according to the prescribed format.</p>	<p><u>ATTITUDE</u></p> <p>2.1 Ensure systematic documentation.</p> <p>2.2 Adhere to continuous effective learning.</p> <p>2.3 Adhere to result oriented practices.</p> <p><u>SAFETY</u></p> <p>Not Available.</p> <p><u>ENVIRONMENT</u></p> <p>2.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>2.1 Types of instructional materials in different training delivery strategy explained.</p> <p>2.2 Component of theoretical and practical JPW described.</p> <p>2.3 Method to identify type and quantity of instructional materials explained.</p> <p>2.4 Research techniques to identify sources and reference for develop a title for WIM theory and practical described.</p> <p>2.5 Sets of WIM theory explained.</p> <p>2.6 Sets of WIM practical explained.</p> <p>2.7 JPW for Work Activity (WA) confirmed based on program requirements.</p> <p>2.8 WIM title confirmed base on JPW provided.</p> <p>2.9 Title set of WIM theory and practical finalised based on JPW provided.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>Title for WIM theory begins with noun.</li> <li>Title for WIM practical begins with active verb.</li> </ul> 2.5 Sets of WIM theory. <ul style="list-style-type: none"> <li>Information Sheet (IS).</li> <li>Theory Lesson Plan (LP).</li> <li>Assignment Sheet (AS)</li> </ul> 2.6 Sets of WIM practical. <ul style="list-style-type: none"> <li>Work Sheet (WS)</li> <li>Practical Lesson Plan (LP).</li> </ul>			2.10 JPW finalised based on the prescribed format. 2.11 Systematic documentation observed. 2.12 Adhere to continuous effective learning observed. 2.13 Adhere to result oriented practices observed. 2.14 Practice 3R concept (Reduce, Reuse, Recycle) observed.
3. Develop <i>Jadual Penetapan Peratusan Masa Aktiviti Pembelajaran dan Penilaian (JPPMP)</i> .	3.1 Range by level. <ul style="list-style-type: none"> <li>Face to face.</li> <li>Independent learning.</li> <li>Assessment.</li> </ul> 3.2 Requirements of Curriculum of Competency Unit (CoCu) or	3.1 Select NOSS by level and all Competency Unit (CU). 3.2 Determine percentage range face to face, self/own activities and assessment.	<u>ATTITUDE</u> 3.1 Ensure systematic documentation. 3.2 Adhere to continuous effective learning. 3.3 Adhere to result oriented practices.	3.1 Range by level described. 3.2 Requirements of CoCu or CU explained. 3.3 NOSS by level and all Competency Unit (CU) decided based on AC's requirements. 3.4 Percentage range face to face, self/ own activities

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	Competency Unit (CU). <ul style="list-style-type: none"> <li>• Training duration each CU or CoCu.</li> <li>• Content.</li> </ul>	3.3 Determine training duration in hours for each Competency Unit (CU). 3.4 Perform calculation on allocated percentage and time. 3.5 Confirm calculation hours. 3.6 Produce <i>Jadual Penetapan Peratusan Masa Aktiviti Pembelajaran dan Penilaian</i> .	<u>SAFETY</u> Not Available.  <u>ENVIRONMENT</u> 3.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	and assessment confirmed based on relevant accreditation body. 3.5 Training duration in hours for each Competency Unit (CU) confirmed based on CoCU. 3.6 Calculation on allocated percentage and time executed based on CoCU. 3.7 Calculation hours validated based on CoCU. 3.8 <i>Jadual Penetapan Peratusan Masa Aktiviti Pembelajaran dan Penilaian</i> generated based on CoCU. 3.9 Systematic documentation observed. 3.10 Adhere to continuous effective learning observed. 3.11 Adhere to result oriented practices observed. 3.12 Practice 3R concept (Reduce, Reuse, Recycle) observed.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
4. Develop <i>Jadual Pembahagian Masa Pembelajaran Bersemuka (JPMPB)</i> .	4.1 Content of <i>JPMPB</i> . <ul style="list-style-type: none"> <li>• Related knowledge.</li> <li>• Related skill.</li> <li>• Attitude/ safety/ environment.</li> </ul>	4.1 List all work activities. 4.2 Analyse percentage range face to face, self/own activities and assessment. 4.3 Calculate Face to Face Learning Time for theory title and practical title. 4.4 Verify Face to Face Learning Time for theoretical and practical lesson with JPPMP. 4.5 Produce <i>Jadual Pembahagian Masa Pembelajaran Bersemuka (JPMPB)</i> .	<u>ATTITUDE</u> 4.1 Ensure systematic documentation. 4.2 Adhere to continuous effective learning. 4.3 Adhere to result oriented practices.  <u>SAFETY</u> Not Available.  <u>ENVIRONMENT</u> 4.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	4.1 Content of <i>JPMPB</i> explained. 4.2 All work activities recorded based on Competency Unit (CU). 4.3 Percentage range face to face, self/own activities and assessment evaluated based on relevant accreditation body. 4.4 Face to Face Learning Time for theory title and practical title estimated based on relevant accreditation body. 4.5 Face to Face Learning Time for theoretical and practical lesson with JPPMP validated based on relevant accreditation body. 4.6 <i>Jadual Pembahagian Masa Pembelajaran Bersemuka (JPMPB)</i> generated based on relevant accreditation body. 4.7 Systematic documentation observed.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				4.8 Adhere to continuous effective learning observed. 4.9 Adhere to result oriented practices observed. 4.10 Practice 3R concept (Reduce, Reuse, Recycle) observed.
5. Develop theory lesson plan.	5.1 Overview of theory lesson plan. 5.2 Type of instructional material (theory). 5.3 Theory lesson plan format. 5.4 Components of theory lesson plan. <ul style="list-style-type: none"> <li>• Preparation.</li> <li>• Delivery.</li> <li>• Application.</li> <li>• Conformation.</li> </ul>	5.1 Obtain JPW (Theory). 5.2 Identify instructional delivery content. 5.3 Determine the components in the theory lesson format. 5.4 Produce theory lesson plan for teaching delivery.	<u>ATTITUDE</u> 5.1 Ensure systematic documentation. 5.2 Adhere to continuous effective learning. 5.3 Adhere to result oriented practices.  <u>SAFETY</u> Not Available.  <u>ENVIRONMENT</u> 5.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	5.1 Overview of theory lesson plan explained. 5.2 Type of instructional material (theory) described. 5.3 Theory lesson plan format described. 5.4 Components of theory lesson plan described. 5.5 JPW (Theory) retrieved based on Related Knowledge in CoCU. 5.6 Instructional delivery content confirmed based on Related Knowledge in CoCU. 5.7 Components in the theory lesson format confirmed based on Related Knowledge in CoCU.



WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				5.8 Theory lesson plan for teaching delivery generated based on Related Knowledge in CoCU. 5.9 Systematic documentation observed. 5.10 Adhere to continuous effective learning observed. 5.11 Adhere to result oriented practices observed. 5.12 Practice 3R concept (Reduce, Reuse, Recycle) observed.
6. Develop practical lesson plan.	6.1 Overview of practical lesson plan. 6.2 Type of instructional material (practical). 6.3 Practical lesson plan format. 6.4 Components of practical lesson plan. <ul style="list-style-type: none"> <li>• Preparation.</li> <li>• Delivery.</li> <li>• Application.</li> <li>• Conformation.</li> </ul>	6.1 Obtain JPW (Practical). 6.2 Identify instructional delivery content. 6.3 Determine the components in the practical lesson format. 6.4 Produce practical lesson plan for teaching delivery.	<u>ATTITUDE</u> 6.1 Ensure systematic documentation. 6.2 Adhere to continuous effective learning. 6.3 Adhere to result oriented practices.  <u>SAFETY</u> Not Available.  <u>ENVIRONMENT</u>	6.1 Overview of practical lesson plan explained. 6.2 Type of instructional material (practical) described. 6.3 Practical lesson plan format described. 6.4 Components of practical lesson plan described. 6.5 JPW (Practical) retrieved based on Related Skills in CoCU.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
			6.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	6.6 Instructional delivery content confirmed based on Related Skills in CoCU. 6.7 Components in the practical lesson format confirmed based on Related Skills in CoCU. 6.8 Practical lesson plan for teaching delivery generated based on Related Skills in CoCU. 6.9 Systematic documentation observed. 6.10 Adhere to continuous effective learning observed. 6.11 Adhere to result oriented practices observed. 6.12 Practice 3R concept (Reduce, Reuse, Recycle) observed.
7. Develop Information Sheet (IS).	7.1 Overview of Information Sheet (IS). 7.2 Source of instructional material.	7.1 Determine the main learning content. 7.2 Specify related sub-topic. 7.3 Acquire overall content should meet	<u>ATTITUDE</u> 7.1 Ensure systematic documentation. 7.2 Adhere to continuous effective learning.	7.1 Overview of Information Sheet explained. 7.2 Source of instructional material highlighted. 7.3 References to CoCU listed.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<p>7.3 References to CoCU.</p> <ul style="list-style-type: none"> <li>• Work Activities (WA).</li> <li>• Related Knowledge.</li> <li>• Attitude, Safety &amp; Environment</li> <li>• Core Abilities.</li> <li>• Tools, equipment and materials (TEM).</li> </ul> <p>7.4 Components of Information Sheet (IS).</p> <ul style="list-style-type: none"> <li>• Front pages.</li> <li>• Title – refer to JPW.</li> <li>• Purpose – refer to Learning Outcomes.</li> <li>• Description – refer to Related Knowledge.</li> <li>• Question.</li> <li>• References.</li> </ul> <p>7.5 Procedure of IS development.</p>	<p>related knowledge in CoCU.</p> <p>7.4 Acquire available content of each related knowledge.</p> <p>7.5 Validate quality and relevancy of content.</p> <p>7.6 Incorporate visual and graphical content for clarity of information.</p> <p>7.7 Determine Information Sheet (IS) format.</p> <p>7.8 Produce Information Sheet (IS) for teaching and learning delivery.</p>	<p>7.3 Adhere to result oriented practices.</p> <p><u>SAFETY</u> Not Available.</p> <p><u>ENVIRONMENT</u> 7.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>7.4 Components of Information Sheet listed.</p> <p>7.5 Procedure of IS development described.</p> <p>7.6 Main learning content identified based on Related Knowledge in CoCU.</p> <p>7.7 Related sub-topic identified based on Related Knowledge in CoCU.</p> <p>7.8 Overall content should meet related knowledge in CoCU confirmed based on Related Knowledge in CoCU.</p> <p>7.9 Available content of each related knowledge confirmed based on Related Knowledge in CoCU.</p> <p>7.10 Quality and relevancy of content certified based on Related Knowledge in CoCU.</p> <p>7.11 Visual and graphical content for clarity of information included</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				<p>based on NOSS requirements.</p> <p>7.12 Information Sheet (IS) format confirmed based on guidelines by accreditation body.</p> <p>7.13 Information Sheet (IS) for teaching and learning delivery generated based on guidelines by accreditation body.</p> <p>7.14 Systematic documentation observed.</p> <p>7.15 Adhere to continuous effective learning observed.</p> <p>7.16 Adhere to result oriented practices observed.</p> <p>7.17 Practice 3R concept (Reduce, Reuse, Recycle) observed.</p>
8. Develop Assignment Sheet (AS).	<p>8.1 Overview of Assignment Sheet (AS).</p> <p>8.2 References to CoCU.</p> <ul style="list-style-type: none"> <li>• Work Activities (WA).</li> </ul>	<p>8.1 Identify knowledge to be assessed.</p> <p>8.2 Determine the form of question.</p> <p>8.3 Determine number of items.</p>	<p><u>ATTITUDE</u></p> <p>8.1 Ensure systematic documentation.</p> <p>8.2 Adhere to continuous effective learning.</p>	<p>8.1 Overview of Assignment Sheet described.</p> <p>8.2 References to CoCU listed.</p> <p>8.3 Components of Assignment Sheet listed.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Related Knowledge.</li> <li>• Attitude, Safety &amp; Environment.</li> <li>• Core Abilities.</li> <li>• Tools, equipment and materials (TEM).</li> </ul> <p>8.3 Components of Assignment Sheet (AS).</p> <ul style="list-style-type: none"> <li>• Front pages.</li> <li>• Title – refer to JPW.</li> <li>• Purpose – refer to Learning Outcomes.</li> <li>• Information – refer to Information Sheet (IS).</li> <li>• Question.</li> <li>• References.</li> </ul> <p>8.4 Level of difficulty</p> <ul style="list-style-type: none"> <li>• Easy.</li> <li>• Moderate.</li> <li>• Difficult.</li> </ul> <p>8.5 Type of question.</p>	<p>8.4 Identify criteria and number of items to be developed.</p> <p>8.5 Prepare content for assignment to meet the requirement of IS.</p> <p>8.6 Generate Assignment Sheet (AS).</p>	<p>8.3 Adhere to result oriented practices.</p> <p><u>SAFETY</u> Not Available.</p> <p><u>ENVIRONMENT</u> 8.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>8.4 Level of difficulty explained.</p> <p>8.5 Type of question listed.</p> <p>8.6 Procedure of Assignment Sheet (AS) development described.</p> <p>8.7 Knowledge to be assessed confirmed based on Related Knowledge.</p> <p>8.8 Form of question identified based on Related Knowledge in CoCU.</p> <p>8.9 Number of items confirmed based on Related Knowledge in CoCU.</p> <p>8.10 Criteria and number of items to be developed confirmed based on Related Knowledge in CoCU.</p> <p>8.11 Content for assignment to meet the requirement of IS prepared base on Related Knowledge in CoCU.</p> <p>8.12 Assignment Sheet (AS) produced based on</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• True/ false.</li> <li>• Matching.</li> <li>• Objective (multiple choices).</li> <li>• Subjective.</li> <li>• Essay.</li> </ul> 8.6 Procedure of Assignment Sheet (AS) development.			Related Knowledge in CoCU. 8.13 Systematic documentation observed. 8.14 Adhere to continuous effective learning observed. 8.15 Adhere to result oriented practices observed. 8.16 Practice 3R concept (Reduce, Reuse, Recycle) observed.
9. Develop Work Sheet (WS).	9.1 Overview of Work Sheet (WS). 9.2 Components of Work Sheet (WS). <ul style="list-style-type: none"> <li>• Front pages.</li> <li>• Title – refer to JPW.</li> <li>• Instructional Aims.</li> <li>• Instruction.</li> <li>• Drawing, data and table.</li> <li>• Tool, Equipment and Material (TEM).</li> </ul>	9.1 Evaluate the main learning content. 9.2 Validate related sub-topic. 9.3 Review overall content should meet related skill, attitude, safety and environment in CoCu. 9.4 Review available content of each related skill. 9.5 Integrate visual and graphical content for clarity of instruction.	<u>ATTITUDE</u> 9.1 Ensure systematic documentation. 9.2 Adhere to continuous effective learning. 9.3 Adhere to result oriented practices.  <u>SAFETY</u> Not Available.  <u>ENVIRONMENT</u> 9.1 Concern about sustainability and wastage; practice	9.1 Overview of Work Sheet explained. 9.2 Components of Work Sheet listed. 9.3 References to CoCU listed. 9.4 Level of achievement checklist described. 9.5 Main learning content analysed based on Related Skills and ASE in CoCU. 9.6 Related sub-topic verified based on Related Skills and ASE in CoCU. 9.7 Overall content should meet related skill,

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Work step and details.</li> <li>• Question.</li> <li>• Checklist.</li> </ul> <p>9.3 References to CoCU.</p> <ul style="list-style-type: none"> <li>• Work Activities (WA).</li> <li>• Related Skills.</li> <li>• Attitude, Safety &amp; Environment.</li> <li>• Core Abilities.</li> <li>• Tools, equipment and materials (TEM).</li> </ul> <p>9.4 Level of achievement checklist.</p> <ul style="list-style-type: none"> <li>• Work process.</li> <li>• End result.</li> <li>• Attitude.</li> <li>• Safety &amp; Environmental.</li> </ul>	<p>9.6 Verify tool, equipment, materials (TEM) requirements during practical activities.</p> <p>9.7 Review components in the Work Sheet format.</p> <p>9.8 Produce Work Sheet for practical delivery.</p>	<p>3R concept (Reduce, Reuse, Recycle).</p>	<p>attitude, safety and environment in CoCU confirmed based on Related Skills and ASE in CoCU.</p> <p>9.8 Available content of each related skill confirmed based on Related Skills and ASE in CoCU.</p> <p>9.9 Visual and graphical content for clarity of instruction incorporated based on Related Skills and ASE in CoCU.</p> <p>9.10 Tool, equipment, materials (TEM) requirements during practical activities validated based on NOSS requirements.</p> <p>9.11 Components in the Work Sheet format confirmed based on guidelines by accreditation body.</p> <p>9.12 Work Sheet for practical delivery generated based on guidelines by accreditation body.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				9.13 Systematic documentation observed. 9.14 Adhere to continuous effective learning observed. 9.15 Adhere to result oriented practices observed. 9.16 Practice 3R concept (Reduce, Reuse, Recycle) observed.

### Employability Skills

#### Core Abilities

- Please refer NCS- Core Abilities latest edition.

#### Social Values & Social Skills

- Please refer Handbook on Social Skills and Social Values in Technical Education and Vocational Training.

### References for Learning Material Development

- 1 International Ruth Colvin Clark. 2008. Developing Technical Training: A Structured Approach for Developing Classroom and Computer-Based Instructional Materials (Third Edition). San Francisco: Wiley. ISBN 978-078-7988-46-3.
- 2 Robert F. Mager. 1962. Preparing Instructional Objectives: A Critical Tool in the Development of Effective Instruction. Fearon Publishers ISBN 0-8224-5601-X.
- 3 Carolyn M. Chapman, Rita King. 2009. Differentiated Instructional Strategies for Writing in the Content Areas (Second Edition). Corwin. ISBN 978-141-2972-31-4.



- 4 Department of Skills Standard (DSD). 2015. Z-009-1:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 5 Department of Skills Standard (DSD). 2015. Z-009-2:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 6 Department of Skills Standard (DSD). 2015. Z-009-3:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 7 Department of Skills Standard (DSD). 2015. Z-009-4:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 8 Department of Skills Standard (DSD). 2018. Handbook on Social Skills and Social Values in Technical Education and Vocational Training. Putrajaya: Department of Skills Standard (DSD).

### 15.3. Competency Based Training (CBT) Instruction

SECTION	(P) Education		
GROUP	(853) Higher Education		
AREA	Technical & Vocational Education & Training (TVET) Instruction		
NOSS TITLE	TVET Instruction		
COMPETENCY UNIT TITLE	Competency Based Training (CBT) Instruction		
LEARNING OUTCOMES	The learning outcomes of this competency are to enable the trainees to deliver theoretical lesson, practical lesson and Core Abilities instruction as per lesson plan.  Upon completion of this competency unit, trainees should be able to: 1. Deliver theoretical lesson. 2. Deliver practical lesson. 3. Deliver Core Abilities (CA) theory. 4. Perform Core Abilities (CA) mapping with NOSS. 5. Conduct Core Abilities (CA) practical performance assessment.		
TRAINING PREREQUISITE (SPECIFIC)	Must complete P853-002-4:2021-C02 Written Instructional Material (WIM) Development.		
CU CODE	P853-002-4:2021-C03	NOSS LEVEL	Four (4)

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
1. Deliver theoretical lesson.	1.1 Type of theoretical sheets. <ul style="list-style-type: none"> <li>• Theoretical lesson plan.</li> <li>• Information Sheets (IS).</li> </ul>	1.1 Prepare theoretical lesson plan. 1.2 Prepare Information Sheet (IS). 1.3 Prepare Assignment Sheet (AS).	<u>ATTITUDE</u> 1.1 Comply with training requirement procedures. 1.2 Comply with cultural awareness.	1.1 Type of theoretical sheets explained. 1.2 Bloom's Taxonomy described. 1.3 Source of training requirements listed.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Assignment Sheets (AS).</li> </ul> <p>1.2 Bloom's Taxonomy.</p> <ul style="list-style-type: none"> <li>• Knowledge.</li> <li>• Comprehension.</li> <li>• Application.</li> <li>• Analysis.</li> <li>• Synthesis.</li> <li>• Evaluation.</li> </ul> <p>1.3 Source of training requirements.</p> <ul style="list-style-type: none"> <li>• Training material sources.</li> <li>• Tools, Equipment and Material.</li> <li>• Training aids.</li> <li>• Training facilities.</li> </ul> <p>1.4 Methods of presentation (4 steps pattern).</p> <p>1.5 Technique of presentation.</p> <ul style="list-style-type: none"> <li>• Methods of presentation.</li> <li>• Apply technique of presentation.</li> </ul>	<p>1.4 Prepare Tools, Equipment and Material (TEM).</p> <p>1.5 Conduct theoretical lesson presentation.</p> <p>1.6 Confirm theoretical lesson plan and IS followed.</p>	<p>1.3 Apply effective communication.</p> <p>1.4 Formulate constructive presentation speech.</p> <p>1.5 Adhere to effective presentation methodology.</p> <p>1.6 Adopt appropriate software application.</p> <p><u>SAFETY</u></p> <p>1.1 Adhere to classroom/ workshop safe work practices.</p> <p>1.2 Intolerant to unsafe work practices.</p> <p><u>ENVIRONMENT</u></p> <p>1.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>1.4 Methods of presentation (4 steps pattern) described.</p> <p>1.5 Technique of presentation explained.</p> <p>1.6 Readiness checklist described.</p> <p>1.7 Delivery session highlighted.</p> <p>1.8 Lesson summary described.</p> <p>1.9 Theoretical lesson plan completed based on trainee's competencies.</p> <p>1.10 Information Sheet (IS) completed based on trainee's competencies.</p> <p>1.11 Assignment Sheet (AS) completed based on trainee's competencies.</p> <p>1.12 TEM organised based on session plan.</p> <p>1.13 Theoretical lesson presentation delivered</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Handling training aids.</li> </ul> <p>1.6 Readiness checklist.</p> <ul style="list-style-type: none"> <li>• Content of session plan.</li> <li>• Training materials.</li> <li>• Training facilities preparation.</li> <li>• Safety aspect compliance.</li> </ul> <p>1.7 Delivery session.</p> <ul style="list-style-type: none"> <li>• Trainees motivation.</li> <li>• Topic explanation.</li> <li>• Question &amp; answer.</li> <li>• Subject conclusion.</li> </ul> <p>1.8 Lesson summary.</p> <ul style="list-style-type: none"> <li>• Training review.</li> <li>• Importance key point.</li> <li>• Learning Outcome (LO).</li> </ul>			<p>based on trainee's competencies.</p> <p>1.14 Theoretical lesson plan and IS followed validated based on trainee's delivery.</p> <p>1.15 Training requirement procedures compliance observed.</p> <p>1.16 Comply with cultural awareness observed.</p> <p>1.17 Effective communication observed.</p> <p>1.18 Formulate constructive presentation speech observed.</p> <p>1.19 Effective presentation methodology observed.</p> <p>1.20 Adopt appropriate software application observed.</p> <p>1.21 Adhere to classroom/ workshop safe work practices observed.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				1.22 Intolerant to unsafe work practices observed. 1.23 Practice 3R concept (Reduce, Reuse, Recycle) observed.
2. Deliver practical lesson.	2.1 Type of practical sheets. <ul style="list-style-type: none"> <li>• Practical lesson plan.</li> <li>• Work Sheets (WS).</li> </ul> 2.2 Simpson's Taxonomy. <ul style="list-style-type: none"> <li>• Origination.</li> <li>• Adaptation.</li> <li>• Complex Overt Response.</li> <li>• Mechanism.</li> <li>• Guided response.</li> <li>• Set.</li> <li>• Perception.</li> </ul> 2.3 Source of training requirements. <ul style="list-style-type: none"> <li>• Training material sources.</li> </ul>	2.1 Identify practical lesson plan. 2.2 Prepare work sheet. 2.3 Prepare TEM. 2.4 Conduct practical lesson presentation. 2.5 Confirm practical lesson plan and WS followed.	<u>ATTITUDE</u> 2.1 Comply with training requirement procedures. 2.2 Comply with cultural awareness. 2.3 Apply effective communication. 2.4 Formulate constructive presentation speech. 2.5 Adhere to effective presentation methodology. 2.6 Adopt appropriate software application.  <u>SAFETY</u> 2.1 Adhere to classroom/ workshop safe work practices.	2.1 Type of practical sheets explained. 2.2 Simpson's Taxonomy described. 2.3 Source of training requirements listed. 2.4 Technique of presentation explained. 2.5 Readiness checklist described. 2.6 Demonstration session described. 2.7 Supervisory technique explained. 2.8 Lesson summary explained. 2.9 Practical lesson plan selected based on Trainer's SKM certification.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>Tools, Equipment and Material (TEM).</li> <li>Training aids.</li> <li>Training facilities.</li> </ul> <p>2.4 Technique of presentation.</p> <ul style="list-style-type: none"> <li>Methods of presentation.</li> <li>Apply technique of presentation (shop talk).</li> <li>Handling training aids.</li> </ul> <p>2.5 Readiness checklist.</p> <ul style="list-style-type: none"> <li>Content of session plan.</li> <li>Training materials.</li> <li>Training facilities preparation.</li> <li>Safety aspect compliance.</li> </ul> <p>2.6 Demonstration session.</p> <ul style="list-style-type: none"> <li>Trainees motivation.</li> </ul>		<p>2.2 Intolerant to unsafe work practices.</p> <p><u>ENVIRONMENT</u></p> <p>2.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>2.10 Work sheet completed based on Trainer's SKM certification.</p> <p>2.11 TEM arranged based on session plan.</p> <p>2.12 Practical lesson presentation organised based on lesson plan.</p> <p>2.13 Confirm practical lesson plan and WS followed based on trainee's delivery.</p> <p>2.14 Training requirement procedures compliance observed.</p> <p>2.15 Comply with cultural awareness observed.</p> <p>2.16 Effective presentation methodology observed.</p> <p>2.17 Formulate constructive presentation speech observed.</p> <p>2.18 Adhere to effective presentation methodology observed.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Topic explanation.</li> <li>• Question &amp; answer.</li> <li>• Subject conclusion.</li> </ul> 2.7 Supervisory technique. 2.8 Lesson summary. <ul style="list-style-type: none"> <li>• Training review.</li> <li>• Importance key point.</li> <li>• Learning Outcome (LO).</li> </ul>			2.19 Appropriate software application adoption observed. 2.20 Adhere to classroom/ workshop safe work practices observed. 2.21 Intolerant to unsafe work practices observed. 2.22 Practice 3R concept (Reduce, Reuse, Recycle) observed.
3. Deliver Core Abilities (CA) theory.	3.1 Definition of Core Abilities. 3.2 Importance of Core Abilities. 3.3 Soft skills commonly observed. 3.4 Core Abilities L1 delivery techniques based on: <ul style="list-style-type: none"> <li>• Basic working communication.</li> </ul>	3.1 Select Core Abilities. 3.2 Use Core Abilities Information Sheet. 3.3 Use Core Abilities slide. 3.4 Perform Core Abilities presentation. 3.5 Confirm IS and slide followed.	<u>ATTITUDE</u> 3.1 Demonstrate Initiative behaviour. 3.2 Adhere to continuous effective learning. 3.3 Adhere to result oriented practices. 3.4 Formulate constructive presentation speech. 3.5 Adhere to effective presentation methodology.	3.1 Definition of Core Abilities described. 3.2 Importance of Core Abilities explained. 3.3 Soft skills commonly observed described. 3.4 Core Abilities L1, L2, L3, L4 and L5 delivery techniques listed. 3.5 Technique of presentation described.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Personal behaviour skill.</li> <li>• Workplace ethics awareness.</li> <li>• Health, Safety and Environment (HSE) awareness.</li> </ul> <p>3.5 Core Abilities L2 delivery techniques based on:</p> <ul style="list-style-type: none"> <li>• Communication application.</li> <li>• Interpersonal behaviour.</li> <li>• Workplace culture behaviour.</li> <li>• Health, Safety and Environment (HSE) adaptation.</li> </ul> <p>3.6 Core Abilities L3 delivery techniques based on:</p> <ul style="list-style-type: none"> <li>• Effective communication.</li> <li>• Leadership skill.</li> <li>• Workplace ethics.</li> </ul>		<p><u>SAFETY</u></p> <p>3.1 Conscious on unsafe conditions surrounding the workplace.</p> <p><u>ENVIRONMENT</u></p> <p>3.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>3.6 Readiness checklist described.</p> <p>3.7 Delivery session explained.</p> <p>3.8 Lesson summary described.</p> <p>3.9 Core Abilities decided based on level of teaching.</p> <p>3.10 Core Abilities Information Sheet applied based on NCS requirements.</p> <p>3.11 Core Abilities slide picked based on NCS requirements.</p> <p>3.12 Core Abilities presented based on NCS requirements.</p> <p>3.13 IS and slide followed validated based on NCS requirements.</p> <p>3.14 Demonstrate Initiative behaviour observed.</p> <p>3.15 Adhere to continuous effective learning observed.</p>



WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Health, Safety and Environment (HSE) consciousness.</li> <li>• Information technology awareness.</li> <li>• Administrative skill.</li> </ul> <p>3.7 Core Abilities L4 delivery techniques based on:</p> <ul style="list-style-type: none"> <li>• Effective communication collaboration.</li> <li>• Organization behaviour awareness.</li> <li>• Etiquette practices.</li> <li>• Health, Safety and Environment (HSE) monitoring awareness.</li> <li>• Information technology application.</li> </ul>			<p>3.16 Adhere to result oriented practices observed.</p> <p>3.17 Formulate constructive presentation speech observed.</p> <p>3.18 Adhere to effective presentation methodology observed.</p> <p>3.19 Conscious on unsafe conditions surrounding the workplace observed.</p> <p>3.20 Practice 3R concept (Reduce, Reuse, Recycle) observed.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Relationship management capability.</li> <li>• Change management awareness.</li> <li>• Strategic thinking skill.</li> </ul> <p>3.8 Core Abilities L5 delivery techniques based on:</p> <ul style="list-style-type: none"> <li>• Communication management skill.</li> <li>• Organization management skill.</li> <li>• Etiquette management skill.</li> <li>• Health, Safety and Environment (HSE) cognition.</li> <li>• Information technology management.</li> <li>• Networking skill.</li> </ul>			

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Change management implementation.</li> <li>• Strategic resolution.</li> </ul> <p>3.9 Technique of presentation.</p> <ul style="list-style-type: none"> <li>• Methods of presentation (4 steps pattern).</li> <li>• Apply technique of presentation.</li> <li>• Handling training aids.</li> </ul> <p>3.10 Readiness checklist.</p> <ul style="list-style-type: none"> <li>• Content of session plan.</li> <li>• Training materials.</li> <li>• Training facilities preparation.</li> <li>• Safety aspect compliance.</li> </ul> <p>3.11 Delivery session.</p> <ul style="list-style-type: none"> <li>• Trainees motivation.</li> <li>• Topic explanation.</li> </ul>			

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Question &amp; answer.</li> <li>• Subject conclusion.</li> </ul> 3.12 Lesson summary. <ul style="list-style-type: none"> <li>• Training review.</li> <li>• Importance key point.</li> <li>• Learning Outcome (LO).</li> </ul>			
4. Perform Core Abilities (CA) mapping with NOSS.	4.1 Core Abilities against NOSS analysis. <ul style="list-style-type: none"> <li>• Competency Profile Chart (CPC).</li> <li>• Competency Profile (CP).</li> <li>• Competency Unit (CU).</li> <li>• Work Activities (WA).</li> <li>• NOSS Matrix.</li> </ul> 4.2 Mapping analysis technique.	4.1 Identify relevant NOSS Level. 4.2 Select related Core Abilities & Abilities Level. 4.3 Select Competency Unit & Work Activities Level. 4.4 Prepare Core Abilities against NOSS Matrix. 4.5 Align related abilities Level with related Work Activities (WA) Level. 4.6 Confirm related Core Abilities according to work activities.	<u>ATTITUDE</u> 4.1 Demonstrate Initiative behaviour. 4.2 Adhere to continuous effective learning. 4.3 Adhere to result oriented practices. 4.4 Formulate constructive presentation speech. 4.5 Adhere to effective presentation methodology.  <u>SAFETY</u> 4.1 Conscious on unsafe conditions	4.1 Analyse Core Abilities against NOSS explained. 4.2 Mapping analysis technique described. 4.3 Relevant NOSS Level selected based on AC's requirements. 4.4 Related Core Abilities & Abilities Level picked based on NCS requirements. 4.5 Competency Unit & Work Activities Level picked based on NOSS requirements.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
			<p>surrounding the workplace.</p> <p><u>ENVIRONMENT</u></p> <p>4.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>4.6 Core Abilities against NOSS Matrix planned based on NCS level.</p> <p>4.7 Related abilities level with related Work Activities (WA) level confirmed based on NCS.</p> <p>4.8 Related Core Abilities validated based on NCS.</p> <p>4.9 Demonstrate Initiative behaviour observed.</p> <p>4.10 Adhere to continuous effective learning observed.</p> <p>4.11 Adhere to result oriented practices observed.</p> <p>4.12 Formulate constructive presentation speech observed.</p> <p>4.13 Adhere to effective presentation methodology observed.</p> <p>4.14 Conscious on unsafe conditions</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				surrounding the workplace observed. 4.15 Practice 3R concept (Reduce, Reuse, Recycle) observed.
5. Conduct Core Abilities (CA) practical performance assessment.	5.1 Assessment checklist performance. <ul style="list-style-type: none"> <li>• Observation.</li> <li>• Inspection.</li> <li>• Supervision.</li> <li>• Coaching.</li> <li>• Counselling.</li> </ul> 5.2 Participant abilities evaluation based on. <ul style="list-style-type: none"> <li>• Core Abilities L1.</li> <li>• Core Abilities L2.</li> <li>• Core Abilities L3.</li> <li>• Core Abilities L4.</li> <li>• Core Abilities L5.</li> </ul>	5.1 Obtain WIM Core Abilities performance assessment checklist. 5.2 Review Core Abilities against NOSS Matrix. 5.3 Confirm Abilities with WA Matrix. 5.4 Evaluate participant's abilities with WA in NOSS. 5.5 Evaluate participant's performance. 5.6 Validate performance assessment result.	<u>ATTITUDE</u> 5.1 Demonstrate Initiative behaviour. 5.2 Adhere to continuous effective learning. 5.3 Adhere to result oriented practices. 5.4 Formulate constructive presentation speech. 5.5 Adhere to effective presentation methodology.  <u>SAFETY</u> 5.1 Conscious on unsafe conditions surrounding the workplace.  <u>ENVIRONMENT</u> 5.1 Concern about sustainability and	5.1 Assessment checklist performance listed. 5.2 Participant abilities evaluation based on listed and described. 5.3 Participant performance evaluation method explained. 5.4 Performance assessment result described. 5.5 WIM Core Abilities performance assessment checklist acquired based on NCS requirements. 5.6 Core Abilities against NOSS Matrix selected based on NCS level. 5.7 Confirm Abilities with WA Matrix

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<p>5.3 Participant performance evaluation method.</p> <ul style="list-style-type: none"> <li>• Rubric.</li> <li>• Checklist.</li> </ul> <p>5.4 Performance assessment result.</p>		wastage; practice 3R concept (Reduce, Reuse, Recycle).	<p>validated based on NCS.</p> <p>5.8 Participant's abilities with WA in NOSS assessed based on trainee's delivery.</p> <p>5.9 Participant's performance assessed based on trainee's delivery.</p> <p>5.10 Performance assessment result confirmed based on AC's SOP.</p> <p>5.11 Demonstrate Initiative behaviour observed.</p> <p>5.12 Adhere to continuous effective learning observed.</p> <p>5.13 Adhere to result oriented practices observed.</p> <p>5.14 Formulate constructive presentation speech observed.</p> <p>5.15 Adhere to effective presentation</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				<p>methodology observed.</p> <p>5.16 Conscious on unsafe conditions surrounding the workplace observed.</p> <p>5.17 Practice 3R concept (Reduce, Reuse, Recycle) observed.</p>

### Employability Skills

#### Core Abilities

- Please refer NCS- Core Abilities latest edition.

#### Social Values & Social Skills

- Please refer Handbook on Social Skills and Social Values in Technical Education and Vocational Training.



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#### 15.4. Digital Training Implementation

SECTION	(P) Education		
GROUP	(853) Higher Education		
AREA	Technical & Vocational Education & Training (TVET) Instruction		
NOSS TITLE	TVET Instruction		
COMPETENCY UNIT TITLE	Digital Training Implementation		
LEARNING OUTCOMES	<p>The learning outcomes of this competency are to enable the trainees to prepare training material and assessment for delivery of digitalize training as per 21<sup>st</sup> century digitalization.</p> <p>Upon completion of this competency unit, trainees should be able to:</p> <ol style="list-style-type: none"> <li>1. Develop e-training material.</li> <li>2. Deliver online training.</li> <li>3. Conduct online assessment.</li> </ol>		
TRAINING PREREQUISITE (SPECIFIC)	Must complete P853-002-4:2021-C02 Written Instructional Material (WIM) Development.		
CU CODE	P853-002-4:2021-C04	NOSS LEVEL	Four (4)

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
1. Develop e-training material	1.1 Institutional E-Learning Policy. 1.2 Institutional Learning Management System (LMS) Manual. 1.3 E-training selection technique based on:	1.1 Identify Learning Outcomes (LO). 1.2 Select type of e-training materials to be developed. 1.3 Produce e-training material. 1.4 Review e-training material developed.	<u>ATTITUDE</u> 1.1 Comply with training requirement procedures. 1.2 Adopt appropriate software application. 1.3 Adhere to IT rules & regulations.	1.1 Institutional E-Learning Policy explained. 1.2 Institutional Learning Management System (LMS) Manual described. 1.3 E-training selection technique described.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>Theory dominant.</li> <li>Schedule.</li> <li>Team dynamic.</li> </ul> <p>1.4 E-training platform such as but not limited to:</p> <ul style="list-style-type: none"> <li>Google Classroom.</li> <li>You tube.</li> <li>Zoom.</li> </ul> <p>1.5 Virtual Reality (VR) technology.</p> <p>1.6 Instructional design model.</p> <p>1.7 Audio Video Aids (AVA).</p> <ul style="list-style-type: none"> <li>Video.</li> <li>Audio.</li> <li>Animation.</li> <li>Graphic.</li> </ul> <p>1.8 Cloud storage.</p> <ul style="list-style-type: none"> <li>Training material.</li> <li>Assignment.</li> <li>Assessment.</li> </ul>	<p>1.5 Save e-training material developed.</p>	<p><u>SAFETY</u> Not Available.</p> <p><u>ENVIRONMENT</u> Not Available.</p>	<p>1.4 E-training platform listed.</p> <p>1.5 Virtual Reality (VR) technology explained.</p> <p>1.6 Instructional design model explained.</p> <p>1.7 Audio Video Aids (AVA) listed.</p> <p>1.8 Cloud storage explained.</p> <p>1.9 Learning Outcomes (LO) selected based on NOSS requirements.</p> <p>1.10 Type of e-training materials to be developed determined based on WIM requirements.</p> <p>1.11 E-training material prepared based on WIM document.</p> <p>1.12 E-training material validated based on WIM requirements.</p> <p>1.13 E-training material filed based on AC's SOP.</p> <p>1.14 Comply with training requirement procedures observed.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				1.15 Adopt appropriate software application observed. 1.16 Adhere to IT rules & regulations observed.
2. Deliver online training.	2.1 Internet facility readiness criteria. <ul style="list-style-type: none"> <li>• Speed.</li> <li>• Data storage.</li> <li>• Audience analysis.</li> </ul> 2.2 Basic e-deliver requirements. <ul style="list-style-type: none"> <li>• Computer.</li> <li>• System compatibility.</li> <li>• Microphone.</li> </ul> 2.3 Types of virtual learning platform and application. <ul style="list-style-type: none"> <li>• On boarding/ e-registration/ e-attendance.</li> <li>• E-quizzes.</li> <li>• E-assessment.</li> </ul>	2.1 Identify Learning Outcomes (LO). 2.2 Select synchronous/ asynchronous delivery mode. 2.3 Perform physical set up. 2.4 Select type of virtual learning platform and applications. 2.5 Perform participants on boarding. 2.6 Perform online training. 2.7 Assess participants online learning.	<u>ATTITUDE</u> 2.1 Comply with training requirement procedures. 2.2 Adopt appropriate software application. 2.3 Adhere to IT rules & regulations.  <u>SAFETY</u> Not Available.  <u>ENVIRONMENT</u> Not Available.	2.1 Internet facility readiness criteria described. 2.2 Basic e-deliver requirements explained. 2.3 Types of virtual learning platform and application described. 2.4 Learning Outcomes (LO) selected based on NOSS requirements. 2.5 Synchronous/ asynchronous delivery mode picked based on AC's requirements. 2.6 Physical set up confirmed based on E-training requirements. 2.7 Type of virtual learning platform and applications picked based on AC's requirements.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				2.8 Participants on boarding conducted based on AC's SOP. 2.9 Online training conducted based on AC's SOP. 2.10 Participants online learning evaluated based on AC's SOP. 2.11 Comply with training requirement procedures observed. 2.12 Adopt appropriate software application observed. 2.13 Adhere to IT rules & regulations observed.
3. Conduct online assessment.	3.1 Cybersecurity 3.2 Assessment security system. • Hacking. • Tempering. 3.3 Online assessment ethics. 3.4 Simulation based assessment.	3.1 Identify Learning Outcomes (LO). 3.2 Select synchronous/ asynchronous delivery mode. 3.3 Perform physical set up. 3.4 Select type of virtual assessment platform and applications.	<u>ATTITUDE</u> 3.1 Comply with training requirement procedures. 3.2 Adopt appropriate software application. 3.3 Adhere to IT rules & regulations.  <u>SAFETY</u> Not Available.	3.1 Cybersecurity explained. 3.2 Assessment security system explained. 3.3 Online assessment ethics described. 3.4 Simulation based assessment described. 3.5 Learning Outcomes (LO) selected based on NOSS requirements.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
		3.5 Perform participants on boarding. 3.6 Perform online assessment.	<u>ENVIRONMENT</u> Not Available.	3.6 Synchronous/ asynchronous delivery mode picked based on AC's requirements. 3.7 Physical set up confirmed based on E-training requirements. 3.8 Type of virtual assessment platform and applications picked based on AC's requirements. 3.9 Participants on boarding conducted based on AC's SOP. 3.10 Online assessment conducted based on AC's SOP. 3.11 Comply with training requirement procedures observed. 3.12 Adopt appropriate software application observed. 3.13 Adhere to IT rules & regulations observed.

## Employability Skills

### Core Abilities

- Please refer NCS- Core Abilities latest edition.

### Social Values & Social Skills

- Please refer Handbook on Social Skills and Social Values in Technical Education and Vocational Training.

## References for Learning Material Development

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- 5 Department of Skills Standard (DSD). 2015. Z-009-2:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 6 Department of Skills Standard (DSD). 2015. Z-009-3:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 7 Department of Skills Standard (DSD). 2015. Z-009-4:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 8 Department of Skills Standard (DSD). 2018. Handbook on Social Skills and Social Values in Technical Education and Vocational Training. Putrajaya: Department of Skills Standard (DSD).

### 15.5. Competency Based Training (CBT) Assessment Material Development

SECTION	(P) Education		
GROUP	(853) Higher Education		
AREA	Technical & Vocational Education & Training (TVET) Instruction		
NOSS TITLE	TVET Instruction		
COMPETENCY UNIT TITLE	Competency Based Training (CBT) Assessment Material Development		
LEARNING OUTCOMES	<p>The learning outcomes of this competency are to enable the trainees to produce CBT assessment material as per CBT assessment development guidelines.</p> <p>Upon completion of this competency unit, trainees should be able to: -</p> <ol style="list-style-type: none"> <li>1. Develop Table of Specification (TOS).</li> <li>2. Develop Knowledge Assessment (KA).</li> <li>3. Develop Performance Assessment (PA).</li> <li>4. Conduct Knowledge Assessment (KA).</li> <li>5. Conduct Performance Assessment (PA).</li> <li>6. Analyse candidates' performance.</li> </ol>		
TRAINING PREREQUISITE (SPECIFIC)	Must complete P853-002-4:2021-C02 Written Instructional Material (WIM) Development.		
CU CODE	P853-002-4:2021-C05	NOSS LEVEL	Four (4)

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
1. Develop Table of Specification (TOS).	1.1 Requirements of Table of Specification (TOS) <ul style="list-style-type: none"> <li>• Sources of Curricula of Competency Unit</li> </ul>	1.1 Create table <i>Jadual Pembahagian Penilaian Kerja Kursus</i> . 1.2 Select relevant NOSS by level.	<u>ATTITUDE</u> 1.1 Comply with training requirement procedures. 1.2 Adhere to continuous effective learning.	1.1 Requirements of Table of Specification (TOS) explained. 1.2 Types of TOS listed. 1.3 Structure of TOS Standard described.



WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>Bloom's taxonomy</li> <li>Method of preparing assessment questions and documents for final examination knowledge and performance assessment</li> <li>Criteria of preparing assessment questions and documents based on level of difficulties and trainees' competency</li> <li>Reliability, validity, sufficiency and fairness of assessment questions</li> </ul> <p>1.2 Types of TOS:</p> <ul style="list-style-type: none"> <li>TOS Standard</li> </ul>	<p>1.3 Select related CU.</p> <p>1.4 Create JSU Standard.</p> <p>1.5 Create JSU Individual.</p> <p>Check JSU developed.</p>	<p>1.3 Advocate effective thinking.</p> <p><u>SAFETY</u></p> <p>1.1 Adhere to classroom/ workshop safe work practices.</p> <p><u>ENVIRONMENT</u></p> <p>1.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>1.4 Structure of TOS Individual described.</p> <p>1.5 Table <i>Jadual Pembahagian Penilaian Kerja Kursus</i> generated based on NOSS.</p> <p>1.6 Relevant NOSS by level picked based on AC's requirements.</p> <p>1.7 Related CU picked based on identified NOSS program.</p> <p>1.8 JSU Standard produced based on CoCU Assessment Criteria.</p> <p>1.9 JSU Individual produced based on CoCU Assessment Criteria.</p> <p>1.10 JSU developed validated based on CoCU Assessment Criteria.</p> <p>1.11 Comply with training requirement procedures observed.</p> <p>1.12 Adhere to continuous effective learning.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>TOS Individual</li> </ul> 1.3 Structure of TOS Standard. 1.4 Structure of TOS Individual.			1.13 Advocate effective thinking observed. 1.14 Adhere to classroom/ workshop safe work practices observed. 1.15 Practice 3R concept (Reduce, Reuse, Recycle) observed.
2. Develop Knowledge Assessment (KA).	2.1 Knowledge Assessment (KA) needs and requirements. 2.2 Assessment component requirement: <ul style="list-style-type: none"> <li>Stimulus</li> <li>Assignment</li> <li>Instruction</li> <li>Answer</li> </ul> 2.3 Knowledge Assessment (KA) information: <ul style="list-style-type: none"> <li>Types of assessment.</li> <li>Level of assessment difficulty.</li> </ul>	2.1 Identify Knowledge Assessment criteria. 2.2 Identify assessment component. 2.3 Identify types of item. 2.4 Identify types of competencies (Facts/ Procedures/ Attitude). 2.5 Confirm Work Activities title. 2.6 Determine level of difficulty. 2.7 Prepare Knowledge Assessment (KA) item 2.8 Check Knowledge Assessment developed.	<u>ATTITUDE</u> 2.1 Comply with training requirement procedures. 2.2 Adhere to continuous effective learning. 2.3 Advocate effective thinking.  <u>SAFETY</u> 2.1 Adhere to classroom/ workshop safe work practices.  <u>ENVIRONMENT</u> 2.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	2.1 Knowledge Assessment (KA) needs and requirements described. 2.2 Assessment component requirement listed. 2.3 Knowledge Assessment (KA) information explained. 2.4 Knowledge Assessment (KA) Plan described. 2.5 Knowledge Assessment (KA) sheet component described. 2.6 Knowledge Assessment verification requirements explained.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Method of assessment development.</li> <li>• Technique and strategy used for assessment development.</li> </ul> <p>2.4 Knowledge Assessment (KA) Plan</p> <ul style="list-style-type: none"> <li>• Format</li> <li>• Content</li> </ul> <p>2.5 Knowledge Assessment (KA) sheet component.</p> <p>2.6 Knowledge Assessment verification requirements:</p> <ul style="list-style-type: none"> <li>• Verification process /</li> <li>• Verification method</li> <li>• Verification technique.</li> </ul>			<p>2.7 Knowledge Assessment criteria determined based on NOSS.</p> <p>2.8 Assessment component determined based on CoCU Assessment Criteria.</p> <p>2.9 Types of item confirmed based on CoCU Related Knowledge.</p> <p>2.10 Types of competencies (Facts/ Procedures/ Attitude) confirmed based on CoCU ASE.</p> <p>2.11 Work Activities title validated based on CoCU.</p> <p>2.12 Level of difficulty identified based on Knowledge Assessment requirements.</p> <p>2.13 Knowledge Assessment (KA) item produced based on WIM development guidelines.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				<p>2.14 Knowledge Assessment (KA) developed verified based on WIM development guidelines.</p> <p>2.15 Comply with training requirement procedures observed.</p> <p>2.16 Adhere to continuous effective learning.</p> <p>2.17 Advocate effective thinking observed.</p> <p>2.18 Adhere to classroom/ workshop safe work practices observed.</p> <p>2.19 Practice 3R concept (Reduce, Reuse, Recycle) observed.</p>
3. Develop Performance Assessment (PA).	<p>3.1 Performance Assessment (PA) needs and requirements.</p> <p>3.2 Performance Assessment information:</p> <ul style="list-style-type: none"> <li>Types of assessment.</li> </ul>	<p>3.1 Identify performance assessment criteria.</p> <p>3.2 Identify skills competencies to be assessed.</p> <p>3.3 Identify work activities.</p> <p>3.4 Confirm assessment duration.</p>	<p><u>ATTITUDE</u></p> <p>3.1 Comply with training requirement procedures.</p> <p>3.2 Adhere to continuous effective learning.</p> <p>3.3 Advocate effective thinking.</p>	<p>3.1 Performance Assessment (PA) needs and requirements described.</p> <p>3.2 Performance Assessment (PA) information explained.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>Method of assessment development.</li> <li>Technique and strategy used for assessment development.</li> </ul> <p>3.3 Performance Assessment plan:</p> <ul style="list-style-type: none"> <li>Format</li> <li>Content</li> </ul> <p>3.4 Performance assessment sheet component:</p> <ul style="list-style-type: none"> <li>Learning outcome</li> <li>Assessment instruction</li> <li>Assessment guide</li> <li>Performance assessment set and assessment date.</li> <li>Answer scheme</li> </ul> <p>3.5 Type of illustration:</p> <ul style="list-style-type: none"> <li>Chart</li> <li>Diagram</li> </ul>	<p>3.5 Create assignment instruction.</p> <p>3.6 Identify chart/ diagram if applicable.</p> <p>3.7 List tools, equipment and material (TEM) required.</p> <p>3.8 Determine Performance Assessment criteria.</p> <p>3.9 Prepare marking scheme.</p> <p>3.10 Check Performance Assessment developed.</p>	<p><u>SAFETY</u></p> <p>3.1 Adhere to classroom/ workshop safe work practices.</p> <p><u>ENVIRONMENT</u></p> <p>3.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>3.3 Performance Assessment (PA) Plan described.</p> <p>3.4 Performance assessment sheet component explained.</p> <p>3.5 Type of illustration listed.</p> <p>3.6 Performance Assessment (PA) verification requirements described.</p> <p>3.7 Performance Assessment (PA) criteria determined based on NOSS.</p> <p>3.8 Skills competencies to be assessed determined based on CoCU Assessment Criteria.</p> <p>3.9 Work activities determined based on CoCU.</p> <p>3.10 Assessment duration verified based on assessment guideline by accreditation body.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	3.6 Performance Assessment (PA) verification requirements: <ul style="list-style-type: none"> <li>• Verification process</li> <li>• Verification method</li> <li>• Verification technique.</li> </ul>			3.11 Assignment instruction established based on assessment guideline by accreditation body. 3.12 Chart/ diagram if applicable determined based on NOSS delivery requirements. 3.13 Tools, equipment and material (TEM) required identified based on NOSS requirements. 3.14 Performance Assessment criteria confirmed based on Related Skills in CoCU. 3.15 Marking scheme completed based on guideline by accreditation body. 3.16 Performance Assessment developed verified based on guideline by accreditation body.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				3.17 Comply with training requirement procedures observed. 3.18 Adhere to continuous effective learning. 3.19 Advocate effective thinking observed. 3.20 Adhere to classroom/ workshop safe work practices observed. 3.21 Practice 3R concept (Reduce, Reuse, Recycle) observed.
4. Conduct Knowledge Assessment (KA).	4.1 Knowledge Assessment (KA) schedule: <ul style="list-style-type: none"> <li>• Date</li> <li>• Time</li> <li>• Venue</li> <li>• No of candidate</li> <li>• Assessment Officer</li> </ul> 4.2 Knowledge Assessment preparation. 4.3 Requirement of Knowledge	4.1 Check Knowledge Assessment (KA) schedule. 4.2 Collect Knowledge Assessment documents. 4.3 Confirm candidate attendance. 4.4 Administer Knowledge Assessment. 4.5 Collect answer script. 4.6 Count answer script. 4.7 Confirm Knowledge Assessment	<u>ATTITUDE</u> 4.1 Comply with training requirement procedures. 4.2 Adhere to continuous effective learning. 4.3 Advocate effective thinking.  <u>SAFETY</u> 4.1 Adhere to classroom/ workshop safe work practices.  <u>ENVIRONMENT</u>	4.1 Knowledge Assessment (KA) schedule described. 4.2 Knowledge Assessment preparation listed. 4.3 Requirement of Knowledge Assessment (KA) session execution explained. 4.4 Knowledge Assessment (KA) schedule reviewed

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	Assessment (KA) session execution.	documents submission.	4.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	<p>based on program timetable.</p> <p>4.5 Knowledge Assessment documents obtained based on AC's SOP.</p> <p>4.6 Candidate attendance certified based on AC's SOP.</p> <p>4.7 Knowledge Assessment managed based on AC's SOP.</p> <p>4.8 Answer script picked up based on AC's SOP.</p> <p>4.9 Answer script tallied based on candidate attendance.</p> <p>4.10 Knowledge Assessment documents submission certified based on AC's SOP.</p> <p>4.11 Comply with training requirement procedures observed.</p> <p>4.12 Adhere to continuous effective learning.</p> <p>4.13 Advocate effective thinking observed.</p>



WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				4.14 Adhere to classroom/ workshop safe work practices observed. 4.15 Practice 3R concept (Reduce, Reuse, Recycle) observed.
5. Conduct Performance Assessment (PA).	5.1 Practical Assessment (PA) schedule: <ul style="list-style-type: none"> <li>• Date</li> <li>• Time</li> <li>• Venue</li> <li>• No of candidate</li> <li>• Assessment Officer</li> </ul> 5.2 Practical Assessment preparation. 5.3 Requirement of Practical Assessment (PA) session execution.	5.1 Check Performance Assessment (PA) schedule. 5.2 Collect Performance Assessment (PA) documents. 5.3 Confirm candidate attendances. 5.4 Administer performance assessment. 5.5 Evaluate candidate performance. 5.6 Compile performance assessment result.	<u>ATTITUDE</u> 5.1 Ensure systematic documentation. 5.2 Adhere to continuous effective learning. 5.3 Adhere to result oriented practices.  <u>SAFETY</u> Not Available.  <u>ENVIRONMENT</u> 5.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	5.1 Practical Assessment (PA) schedule described. 5.2 Practical Assessment preparation listed. 5.3 Requirement of Practical Assessment (PA) session execution explained. 5.4 Performance Assessment (PA) schedule checked based on program timetable. 5.5 Performance Assessment (PA) documents collected based on AC's SOP. 5.6 Candidate attendances confirmed based on AC's SOP.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				5.7 Performance assessment administered based on AC's SOP. 5.8 Candidate performance evaluated based on AC's SOP. 5.9 Performance assessment result compiled based on AC's SOP. 5.10 Systematic documentation observed. 5.11 Adhere to continuous effective learning observed. 5.12 Adhere to result oriented practices observed. 5.13 Practice 3R concept (Reduce, Reuse, Recycle) observed.
6. Analyse candidates' performance.	6.1 Assessment (Knowledge and Performance) results documentation format.	6.1 Obtain candidates' assessments result. 6.2 Determine candidates' level of achievements.	<u>ATTITUDE</u> 6.1 Comply with training requirement procedures.	6.1 Assessment (Knowledge and Performance) results documentation format elaborated.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	6.2 Reporting of assessment results. <ul style="list-style-type: none"> <li>Analyse</li> <li>Interpret</li> <li>Summarize</li> </ul>	6.3 Record data. 6.4 Prepare candidates performance assessments report. 6.5 Check report details.	6.2 Adhere to continuous effective learning. 6.3 Advocate effective thinking.  <u>SAFETY</u> 6.1 Adhere to classroom/ workshop safe work practices.  <u>ENVIRONMENT</u> 6.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	6.2 Reporting of assessment results described. 6.3 Candidates' assessments result acquired based on AC's SOP. 6.4 Candidates' level of achievements confirmed based on KAPA results. 6.5 Data reported based on AC's SOP. 6.6 Candidates' performance assessments report completed based on AC's SOP. 6.7 Report details validated based on AC's SOP. 6.8 Comply with training requirement procedures observed. 6.9 Adhere to continuous effective learning observed. 6.10 Advocate effective thinking observed.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				6.11 Adhere to classroom/ workshop safe work practices observed. 6.12 Practice 3R concept (Reduce, Reuse, Recycle) observed.

## Employability Skills

### Core Abilities

- Please refer NCS- Core Abilities latest edition.

### Social Values & Social Skills

- Please refer Handbook on Social Skills and Social Values in Technical Education and Vocational Training.

## References for Learning Material Development

- 1 International Labour Organization. 2020. Competency-Based Training (CBT): An Introduction Manual for Practitioners. Jordan: ILO Publication. ISBN 978-922-0330-31-9.
- 2 Mohammed Khalidi Idrissi, Meriem Hnida and Samir Bennani. 2016. Chapter 4: Competency-Based Assessment: From Conceptual Model to Operational Tool. IGI Global. Website: [www.igi-global.com/chapter/competency-based-assessment/159967?camid=4v1](http://www.igi-global.com/chapter/competency-based-assessment/159967?camid=4v1). [8-Dec-2020: 2:00pm].
- 3 Michelle Navarre Cleary, Kathryn Wozniak, Catherine Marienau, Gretchen Wilbur, Derise E. Tolliver and Pamela Meyer. 2017. Handbook of Research on Competency-Based Education in University Settings: Learning, Adults and Competency-Based Education. Pages 210-231. IGI Global. Website: [www.igi-global.com/chapter/learning-adults-and-competency-based-education/167905?camid=4v1a](http://www.igi-global.com/chapter/learning-adults-and-competency-based-education/167905?camid=4v1a). [8-Dec-2020: 2:15pm].
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- 6 Department of Skills Standard (DSD). 2015. Z-009-3:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 7 Department of Skills Standard (DSD). 2015. Z-009-4:2015 NCS-Core Abilities. Putrajaya: Department of Skills Standard (DSD).
- 8 Department of Skills Standard (DSD). 2018. Handbook on Social Skills and Social Values in Technical Education and Vocational Training. Putrajaya: Department of Skills Standard (DSD).

### 15.6. Training Facilities Administration

SECTION	(P) Education		
GROUP	(853) Higher Education		
AREA	Technical & Vocational Education & Training (TVET) Instruction		
NOSS TITLE	TVET Instruction		
COMPETENCY UNIT TITLE	Training Facilities Administration		
LEARNING OUTCOMES	<p>The learning outcomes of this competency are to enable the trainees to allow training facilities and TEM readiness with workplace HSSE and security compliance in accordance with standards and legislative requirements.</p> <p>Upon completion of this competency unit, trainees should be able to:</p> <ol style="list-style-type: none"> <li>1. Perform training facilities support function.</li> <li>2. Perform training procurement activities.</li> <li>3. Perform Health, Safety, Security &amp; Environment (HSSE) activities.</li> </ol>		
TRAINING PREREQUISITE (SPECIFIC)	Not Available.		
CU CODE	P853-002-4:2021-C06	NOSS LEVEL	Four (4)

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
1. Perform training facilities support function.	1.1 Type of training facilities to be serviced and maintained. <ul style="list-style-type: none"> <li>• Lab tools and equipment.</li> <li>• Material &amp; consumables</li> </ul>	1.1 Determine training facilities service and maintenance requirement. 1.2 Follow maintenance procedure.	<u>ATTITUDE</u> 1.1 Ensure systematic documentation. 1.2 Demonstrate Initiative behaviour.  <u>SAFETY</u>	1.1 Type of training facilities to be serviced and maintained described. 1.2 Training facilities maintenance schedule explained.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>Audio Video Aid (AVA).</li> </ul> 1.2 Training facilities maintenance schedule. 1.3 Training facilities maintenance and inspection procedure. 1.4 Training facilities manual specifications. 1.5 Facilities maintenance requisition procedure. 1.6 Housekeeping requirement. <ul style="list-style-type: none"> <li>Housekeeping signage.</li> <li>Housekeeping tools, equipment and materials.</li> <li>Housekeeping of training area (workshop, classroom, laboratory, etc)</li> </ul>	1.3 Conduct end-user facilities maintenance inspection. 1.4 Prepare facilities maintenance requisition. 1.5 Carry out training area housekeeping. 1.6 Update maintenance and housekeeping records. 1.7 Identify references, facts and evidence.	1.1 Intolerant to unsafe work practices. 1.2 Conscious on unsafe conditions surrounding the workplace.  <u>ENVIRONMENT</u> 1.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	1.3 Training facilities maintenance and inspection procedure described. 1.4 Training facilities manual specifications described. 1.5 Facilities maintenance requisition procedure elaborated. 1.6 Housekeeping requirement explained. 1.7 Maintenance management system described. 1.8 Training facilities service and maintenance requirement identified based on AC's SOP. 1.9 Maintenance procedure complied based on AC's SOP. 1.10 End-user facilities maintenance inspection performed based on AC's SOP. 1.11 Facilities maintenance requisition generated

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>Housekeeping procedures.</li> <li>Housekeeping schedule and checklist/ document.</li> </ul> <p>1.7 Maintenance management system.</p>			<p>based on maintenance requirements and AC's budget.</p> <p>1.12 Training area housekeeping conducted based on AC's requirements.</p> <p>1.13 Maintenance and housekeeping records revised based on latest activities.</p> <p>1.14 References, facts and evidence determined based on site inspection.</p> <p>1.15 Systematic documentation observed.</p> <p>1.16 Demonstrate Initiative behaviour observed.</p> <p>1.17 Intolerant to unsafe work practices observed.</p> <p>1.18 Conscious on unsafe conditions surrounding the workplace observed.</p> <p>1.19 Conscious on unsafe conditions surrounding</p>



WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				the workplace observed.
2. Perform training procurement activities.	2.1 Type of procurement system: <ul style="list-style-type: none"> <li>• Request for Quotation (RFQ).</li> <li>• Tender.</li> <li>• Direct purchase.</li> </ul> 2.2 Specification of items to be purchased. 2.3 Procedure of supplier's selection. 2.4 Inventory control administration. 2.5 Store management system.	2.1 Examine training procurement system. 2.2 Determine training procurement requirement. 2.3 Conduct inventory control. 2.4 Carry out store handling. 2.5 Generate purchasing requisition.	<u>ATTITUDE</u> 2.1 Ensure systematic documentation. 2.2 Demonstrate Initiative behaviour.  <u>SAFETY</u> 2.1 Intolerant to unsafe work practices. 2.2 Conscious on unsafe conditions surrounding the workplace.  <u>ENVIRONMENT</u> 2.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).	2.1 Type of procurement system described. 2.2 Specification of items to be purchased described. 2.3 Procedure of supplier's selection explained. 2.4 Inventory Control administration described. 2.5 Store management system described. 2.6 Training procurement system assessed based on AC's SOP. 2.7 Training procurement requirement identified based on AC's SOP. 2.8 Inventory control performed based on AC's SOP. 2.9 Store handling performed based on AC's SOP.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
				2.10 Purchasing requisition produced based on AC's SOP. 2.11 Systematic documentation observed. 2.12 Demonstrate Initiative behaviour observed. 2.13 Intolerant to unsafe work practices observed. 2.14 Conscious on unsafe conditions surrounding the workplace observed. 2.15 Practice 3R concept (Reduce, Reuse, Recycle) observed.
3. Perform Health, Safety, Security & Environment (HSSE) activities.	3.1 Safety and health requirements. <ul style="list-style-type: none"> <li>• Workshop safety and health rules.</li> <li>• Machineries safety.</li> <li>• Lay-out of training areas.</li> </ul>	3.1 Analyse HSSE policy. 3.2 Determine HSSE requirements. 3.3 Examine HSSE activities plan. 3.4 Carry out HSSE activities. 3.5 Carry out training facilities security activities.	<u>ATTITUDE</u> 3.1 Ensure systematic documentation. 3.2 Demonstrate Initiative behaviour.  <u>SAFETY</u> 3.1 Intolerant to unsafe work practices.	3.1 Safety and health requirements explained. 3.2 Safety equipment and facilities handling described. 3.3 Emergency Response Plan (ERP) described.

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Coding, symbol signage and posters requirements.</li> <li>• Types of safety and health equipment.</li> </ul> <p>3.2 Safety equipment and facilities handling:</p> <ul style="list-style-type: none"> <li>• Fire-fighting.</li> <li>• First aid.</li> <li>• Emergency assistance.</li> <li>• Personal Protective Equipment (PPE).</li> <li>• Emergency exit.</li> </ul> <p>3.3 Emergency Response Plan (ERP):</p> <ul style="list-style-type: none"> <li>• Fire drill.</li> <li>• Evacuation plan.</li> <li>• First aid procedure.</li> </ul>	<p>3.6 Prepare security breach incident report.</p> <p>3.7 Update training facilities security record.</p>	<p>3.2 Conscious on unsafe conditions surrounding the workplace.</p> <p><u>ENVIRONMENT</u></p> <p>3.1 Concern about sustainability and wastage; practice 3R concept (Reduce, Reuse, Recycle).</p>	<p>3.4 Implementation of security requirements explained.</p> <p>3.5 Implementation of rules and regulations elaborated.</p> <p>3.6 Indemnity requirements explained.</p> <p>3.7 HSSE policy elaborated based on AC's requirements.</p> <p>3.8 HSSE requirements identified based on government's act and regulations.</p> <p>3.9 HSSE activities plan elaborated based on AC's requirements.</p> <p>3.10 HSSE activities performed based on AC's policies.</p> <p>3.11 Training facilities security activities performed based on AC's SOP.</p> <p>3.12 Security breach incident report</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<p>3.4 Implementation of security requirements.</p> <ul style="list-style-type: none"> <li>• Technique of application of security code of practice.</li> <li>• Security monitoring requirements.</li> <li>• Technique of monitoring security.</li> <li>• Security inspection checklist.</li> </ul> <p>3.5 Implementation of rules and regulations.</p> <p>3.6 Indemnity requirements.</p> <ul style="list-style-type: none"> <li>• Types of indemnity forms.</li> <li>• Scope of coverage of indemnity.</li> </ul>			<p>produced based on AC's SOP.</p> <p>3.13 Training facilities security record revised based on latest activities.</p> <p>3.14 Systematic documentation observed.</p> <p>3.15 Demonstrate Initiative behaviour observed.</p> <p>3.16 Intolerant to unsafe work practices observed.</p> <p>3.17 Conscious on unsafe conditions surrounding the workplace observed.</p> <p>3.18 Practice 3R concept (Reduce, Reuse, Recycle) observed.</p>

WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	ATTITUDE/ SAFETY/ ENVIRONMENT	ASSESSMENT CRITERIA
	<ul style="list-style-type: none"> <li>• Content of the indemnity document requirements.</li> <li>• Types of indemnity report.</li> </ul>			

### Employability Skills

#### Core Abilities

- Please refer NCS- Core Abilities latest edition.

#### Social Values & Social Skills

- Please refer Handbook on Social Skills and Social Values in Technical Education and Vocational Training.

### References for Learning Material Development

- 1 Ryosuke Nakamura, Ir. Azmi bin Ahmad and Zulkifli bin Omar. 2008. Training Methodology Handbooks for Vocational Instructor. Kuala Lumpur: Duta Printing Sdn Bhd. ISBN 978-983-44079-0-2
- 2 Rahim M. Sail, Abdul Rahman Md. Aroff, Asnarulkhadi Abu Samah, Azimi Hamzah, Sidek Mohd Noah and Zakaria Kasa. 2008. Handbooks on Social Skill and Social Values in Technical Education and Vocational Training (Second Edition). KUala Lumpur: Ampang Press Sdn. Bhd. ISBN 978-976-5026-21-8
- 3 Dr. Ulrike Bollmann, Eva Windemuth. 2011. Standards in Education and Training for Safety and Heath at Work -European perspectives, promising developments and examples of good practices. Berlin: German Social Accident Insurance. ISBN 978-386-4230-28-8.
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- 8 Department of Skills Standard (DSD). 2018. Handbook on Social Skills and Social Values in Technical Education and Vocational Training. Putrajaya: Department of Skills Standard (DSD).

## 16. Delivery Mode

The following are the **recommended** training delivery modes: -

KNOWLEDGE	SKILL
<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Group discussion</li> <li>• E-learning, self-paced</li> <li>• E-learning, facilitate</li> <li>• Case study or Problem based learning (PBL)</li> <li>• Self-paced learning, non-electronic</li> <li>• One-on-one tutorial</li> <li>• Shop talk</li> <li>• Seminar</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration</li> <li>• Simulation</li> <li>• Project</li> <li>• Scenario based training (SBT)</li> <li>• Role play</li> <li>• Coaching</li> <li>• Observation</li> <li>• Mentoring</li> </ul>

Skills training and skills assessment of trainees should be implemented in accordance with TEM requirements and actual situation.

## 17. Tools, Equipment and Materials (TEM)

### TVET INSTRUCTION

#### LEVEL 4

CU	CU CODE	COMPETENCY UNIT TITLE
C01	P853-002-4:2021-C01	Instructional Delivery Implementation
C02	P853-002-4:2021-C02	Written Instructional Material (WIM) Development
C03	P853-002-4:2021-C03	Competency Based Training (CBT) Instruction
C04	P853-002-4:2021-C04	Digital Training Implementation
C05	P853-002-4:2021-C05	Competency Based Training (CBT) Assessment Material Development
C06	P853-002-4:2021-C06	Training Facilities Administration

\* Items listed refer to TEM's **minimum requirement** for skills delivery only.

NO.	ITEM*	RATIO (TEM : Trainees or AR = As Required)					
		C01	C02	C03	C04	C05	C06
A. Tools							
1	Whiteboard	1:25	1:25	1:25	1:25	1:25	1:25
2	Flipchart	1:25	1:25	1:25	1:25	1:25	1:25
3	White screen	1:25	1:25	1:25	1:25	1:25	1:25
4	Stationeries	AR	AR	AR	AR	AR	AR
B. Equipment							
1	Computer c/w webcam	1:1	1:1	1:1	1:1	1:1	1:1
2	Printer/ Scanner/ Photocopy	1:25	1:25	1:25	1:25	1:25	1:25
3	LCD Projector	1:25	1:25	1:25	1:25	1:25	1:25
4	Suitable table and chair	1:1	1:1	1:1	1:1	1:1	1:1
5	Internet connection for online video communication	1:25	1:25	1:25	1:25	1:25	1:25
NO.	ITEM*	RATIO (TEM : Trainees or AR = As Required)					



		C01	C02	C03	C04	C05	C06
<b>C. Materials</b>							
1	Sample of related NOSS	1:1	1:1	1:1	1:1	1:1	
2	Sample of WIM	1:1	1:1	1:1	1:1	1:1	
3	Template of Lesson Plan	1:1	1:1	1:1	1:1	1:1	
4	Template of Information Sheet	1:1	1:1	1:1	1:1	1:1	
5	Template of Assignment Sheet	1:1	1:1	1:1	1:1	1:1	
6	Template of Work Sheet	1:1	1:1	1:1	1:1	1:1	
7	Sample of Table of Specification (TOS)	1:1	1:1	1:1	1:1	1:1	
8	Sample of Knowledge Assessment	1:1	1:1	1:1	1:1	1:1	
9	Sample of Performance Assessment	1:1	1:1	1:1	1:1	1:1	
10	Sample of training content	1:1	1:1	1:1	1:1	1:1	
11	Sample of training schedule	1:1	1:1	1:1	1:1	1:1	
12	Sample of learning modules	1:1	1:1	1:1	1:1	1:1	
13	Sample of inventory list						1:1

## 18. Competency Weightage

The following table shows the percentage of training priorities based on consensus made by the Standard Development Committee (SDC).

### TVET INSTRUCTION

#### LEVEL 4

CU CODE	COMPETENCY UNIT TITLE	COMPETENCY UNIT WEIGHTAGE	WORK ACTIVITIES	WORK ACTIVITIES WEIGHTAGE
P853-002-4:2021-C01	Instructional Delivery Implementation	20%	1. Analyse training requirements.	20%
			2. Prepare pre training requirement.	30%
			3. Conduct training preparation.	20%
			4. Deliver training presentation.	20%
			5. Conduct training confirmation.	10%
P853-002-4:2021-C02	Written Instructional Material (WIM) Development	15%	1. Review & Refine CoCU	15%
			2. Develop Jadual Pembahagian WIM (JPW).	15%
			3. Develop Jadual Penetapan Peratusan Masa Aktiviti Pembelajaran dan Penilaian (JPPMP).	15%
			4. Develop Jadual Pembahagian Masa Pembelajaran Bersemuka (JPMPB).	15%
			5. Develop theory lesson plan.	5%
			6. Develop practical lesson plan.	5%
			7. Develop Assignment Sheet (AS).	10%
			8. Develop Assignment Sheet (AS).	10%
			9. Develop Work Sheet (WS).	10%
P853-002-4:2021-C03	Competency Based Training (CBT) Instruction	20%	1. Deliver theoretical lesson.	30%
			2. Deliver practical lesson.	30%

			3. Deliver Core Abilities (CA) theory.	20%
			4. Perform Core Abilities (CA) mapping with NOSS.	10%
			5. Conduct Core Abilities (CA) practical performance assessment	10%
P853-002-4:2021-C04	Digital Training Implementation	15%	1. Develop e-training material.	40%
			2. Deliver online training.	40%
			3. Conduct online assessment.	20%
P853-002-4:2021-C05	Competency Based Training (CBT) Assessment Material Development	20%	1. Develop Table of Specification (TOS).	20%
			2. Develop Knowledge Assessment (KA).	20%
			3. Develop Performance Assessment (PA).	20%
			4. Conduct Knowledge Assessment (KA).	20%
			5. Conduct Performance Assessment (PA).	10%
			6. Analyse candidates' performance.	10%
P853-002-4:2021-C06	Training Facilities Administration	10%	1. Perform training facilities support function.	40%
			2. Perform training procurement activities.	20%
			3. Perform Health, Safety, Security & Environment (HSSE) activities.	40%
TOTAL PERCENTAGE (CORE COMPETENCY)		100%		