

Web Development and Database Administration LEVEL II



TVET CURRICULUM

Based on December, 2021 Version-IV

Occupational standard (OS)

March, 2022

Adiss Ababa

Preface

The reformed TVET-System is an outcome-based system. It utilizes the needs of the labor market and occupational requirements from the world of work as the benchmark and standard for TVET delivery. The requirements from the world of work are analyzed and documented – taking into account international benchmarking – as occupational standards (OS).

In the reformed TVET-System, curricula and curriculum development play an important role with regard to quality driven comparable TVET-Delivery. The Curricula help to facilitate the training process in a way, that trainees acquire the set of occupational competences (skills, knowledge and attitude) required at the working place and defined in the occupational standards (OS).

This curriculum has been developed by a group of professional experts from different Regional TVET Bureaus, colleges, Industries, Institutes and universities based on the occupational standard for **Web Development and Database Administration Level II**.

The curriculum development process has been actively supported and facilitated by **Ministry of Labor and Skills**.

Page 1 of 89	Author/Copyright : Ministry of Labor and Skills	Web development and Database Administration Technology Level- II	Version - I March, 2022
--------------	---	--	----------------------------

TVET-Program Design

1.1. TVET-Program Title: Web Development and Database Administration Level II

1.2. TVET-Program Description

The Program is designed to develop the necessary knowledge, skills and attitude of the trainees to the standard required by the occupation. The contents of this program are in line with the occupational standard. The Trainees who successfully completed the Program will be qualified to work as a **Web Development and Database Administration Assistant II** with competencies elaborated in the respective OS. Graduates of the program will have the required qualification to work in the **Economic Infrastructure (EIS)** sector in the field of **Web Development and Database Administration**.

The prime objective of this training program is to equip the Trainees with the identified competences specified in the OS. Graduates are therefore expected to Operate Database Application, Build simple websites using commercial programs, Administrate Network and Hardware Peripherals, Implement maintenance Procedures, Configure and Use Internet, Operate Presentation Package, Record Client Support Requirements, Update and Document Operational Procedures and Prevent and Eliminate MUDA Procedures in accordance with the performance criteria and evidence guide described in the OS.

1.3. TVET-Program Training Outcomes

The expected outputs of this program are the acquisition and implementation of the following units of competences:

- EIS WDDBA2 01 1221** rate Database Application
- EIS WDDBA2 02 1221** d simple websites using commercial programs
- EIS WDDBA2 03 1221** inistrate Network and Hardware Peripherals
- EIS WDDBA2 04 1221** ntain IT Equipment and consumables.
- EIS WDDBA2 05 1221** figure and Use Internet
- EIS WDDBA2 06 1221** rate Presentation Package
- EIS WDDBA2 07 1221** ord Client Support Requirements
- EIS WDDBA2 08 1221** ate and Document Operational Procedures
- EIS WDDBA2 09 1221** ent and Eliminate MUDA Procedures

1.4. Duration of the TVET-Program

The Program will have duration of 400 hours including the on school/ Institution training and on-the-job practice or cooperative training time. Such cooperative training based on realities of the industry, nature of the occupation, location of the TVET institution, and other factors will be considered in the training delivery to ensure that trainees acquire practical and workplace experience.

s.no	Unit competency	TVET Institution training		Cooperative training	Total hours	Remarks
		Theory	Practical			
1.	Operate Database Application	8	32	8	48	
2.	Build simple websites using commercial programs	20	50	10	80	
3.	Administrate Network and Hardware Peripherals	10	40	10	60	
4.	Maintain IT equipment and consumables	10	30	10	50	
5.	Configure and Use Internet	5	25	10	40	
6.	Operate Presentation Package	5	10	10	25	
7.	Record Client Support Requirements	15	10	10	35	
8.	Update and Document Operational Procedures	10	10	10	30	
9.	Prevent and Eliminate MUDA Procedures	8	16	8	32	

1.5. Qualification Level and Certification

Based on the descriptors elaborated on the Ethiopian National TVET Qualification Framework (NTQF) the qualification of this specific TVET Program is Level II.

The trainee can exit after successfully completing the modules in one level and will be awarded the equivalent institutional certificate on the level completed. However, only institutional certificate of training accomplishment will be awarded.

1.6. Target Groups

Any citizen **with or without disability** who meets the entry requirements under items 1.7 and capable of participating in the training activities is entitled to take part in the Program.

1.7 Entry Requirements

The prospective participants of this program are required to possess the requirements or directive of the **Ministry of Labor and Skills**.

1.8 Mode of Delivery

This TVET-Program is characterized as a formal Program on middle level technical skills. The mode of delivery is co-operative training. The time spent by the trainees in the real work place/ industry will give them enough exposure to the actual world of work and enable them to get hands-on experience.

The co-operative approach will be supported with school-based lecture-discussion, simulation and actual practice. These modalities will be utilized before the trainees are exposed to the industry environment.

Hence based on the nature of the occupation, location of the TVET institutions, and interest of the industry alternative mode of cooperative training such as apprenticeships, internship and traineeship will be employed. In addition, in the areas where industry is not sufficiently available the established production and service centers/learning factories in TVET institutions will be used as cooperative training places. The Training-Institution and identified companies have forged an agreement to co-operate with regard to the implementation of this program.

1.9. TVET-Program Structure

Unit of Competence		Module Code & Title		Training Outcomes	Duration (In Hours)
<u>EIS WDDBA2 01 1221</u>	Operate Database Application	<u>EIS WDDBA2 M01 0322</u>	Preventing and Eliminating MUDA Procedures	<ul style="list-style-type: none"> • Prepare for work. • Identify MUDA and problem • Analyze causes of a problem. • Eliminate MUDA and Assess effectiveness of the solution. • Prevent occurrence of wastes and sustain operation 	32
<u>EIS WDDBA2 02 1221</u>	Build simple websites using commercial programs	<u>EIS WDDBA2 M02 0322</u>	Administrating Network and Hardware Peripherals	<ul style="list-style-type: none"> • Confirm requirements of client • Obtain required peripherals • Connect hardware peripherals • Install peripherals to a network • Configure peripheral services • Administer and support peripheral services • Maintain peripherals and fix common problems • Use and maximize operating system • Support input and output devices 	60
<u>EIS WDDBA2 03 1221</u>	Administrate Network and Hardware Peripherals	<u>EIS WDDBA2 M03 0322</u>	Configuring and Using Internet	<ul style="list-style-type: none"> • Manage internet • Search internet • Work as a team member 	40
<u>EIS WDDBA2 04 1221</u>	Maintain IT equipment and	<u>EIS WDDBA2 M04 0322</u>	Maintaining IT equipment and consumables	<ul style="list-style-type: none"> • Identify and analyze IT system components to be maintained • Apply maintenance procedures 	50

	consumables			<ul style="list-style-type: none"> • Clean equipment • Replace and maintain consumables and supplies • Maintain equipment 	
<u>EIS WDDBA2 05 1221</u>	Configure and Use Internet	<u>EIS WDDBA2 M05 0322</u>	Building simple websites using commercial programs	<ul style="list-style-type: none"> • Identify authoring requirements • Create and save files • Add content to web pages • Create simple navigation • Test website 	80
<u>EIS WDDBA2 06 1221</u>	Operate Presentation Package	<u>EIS WDDBA2 M06 0322</u>	Operating Database Application	<ul style="list-style-type: none"> • Create database objects • Customize basic settings • Create reports • Create forms • Retrieve information 	48
<u>EIS WDDBA2 07 1221</u>	Record Client Support Requirements	<u>EIS WDDBA2 M07 0322</u>	Recording Client Support Requirements	<ul style="list-style-type: none"> • Log requests for support • Prioritize support requests with appropriate personnel • Participate in workplace meetings and discussions 	35
<u>EIS WDDBA2 08 1221</u>	Update and Document Operational Procedures	<u>EIS WDDBA2 M08 0322</u>	Operating Presentation Package	<ul style="list-style-type: none"> • Create presentations • Customize basic settings • Format presentations • Add slide show effects • Print presentation and notes 	25
<u>EIS WDDBA2 08 1221</u>	Prevent and Eliminate MUDA Procedures	<u>EIS WDDBA2 M09 0322</u>	Updating and Documenting Operational Procedures	<ul style="list-style-type: none"> • Assess technical and user documentation • Update procedures • Update documentation 	30

1.10 Institutional Assessment

Two types of evaluation will be used in determining the extent to which training outcomes are achieved. The specific training outcomes are stated in the modules. In assessing them, verifiable and observable indicators and standards shall be used.

The *formative assessment* is incorporated in the training modules and form part of the training process. Formative evaluation provides the trainee with feedback regarding success or failure in attaining training outcomes. It identifies the specific training errors that need to be corrected, and provides reinforcement for successful performance as well. For the teacher, formative evaluation provides information for making instruction and remedial work more effective.

Summative Evaluation the other form of evaluation is given when all the modules in the program have been accomplished. It determines the extent to which competence have been achieved. And, the result of this assessment decision shall be expressed in the term of institutional Assessment implementation guidelines..

Techniques or tools for obtaining information about trainees' achievement include oral or written test, demonstration and on-site observation.

1.11 TVET Teachers Profile

The teachers conducting this particular TVET Program are **B Level** and above who have satisfactory practical experiences or equivalent qualifications.

LEARNING MODULE 01	
TVET-PROGRAMME TITLE: Web development and database administration Level II	
MODULE TITLE: Preventing and Eliminating MUDA Procedures	
MODULE CODE: <u>EIS WDDBA2 M01 0322</u>	
NOMINAL DURATION: 32 Hours	
MODULE DESCRIPTION: This module covers the knowledge, skills and attitude required by a worker to prevent and eliminate MUDA/wastes in his/her workplace by applying scientific problem-solving techniques and tools to enhance quality, productivity and other kaizen elements on continual basis. It covers responsibility for the day-to-day operation of the work and ensures Kaizen Elements are continuously improved and institutionalized.	
LEARNING OUTCOMES	
At the end of the module the trainee will be able to:	
<p>LO1. Prepare for work.</p> <p>LO2. Identify MUDA and problem</p> <p>LO3. Analyze causes of a problem</p> <p>LO4. Eliminate MUDA and Assess effectiveness of the solution</p> <p>LO5. Prevent occurrence of wastes and sustain operation</p>	
MODULE CONTENTS:	
<p>LO1. Prepare for work.</p> <ol style="list-style-type: none"> 1.1. Using work instructions 1.2. Reading and interpreting job specifications 1.3. Observing OHS requirements throughout the work 1.4. Selecting appropriate material 1.5. Identifying and checking safety equipment and tools <p>LO2. Identify MUDA and problem</p> <ol style="list-style-type: none"> 2.1 Preparing and implementing plan of MUDA and problem identification 2.2 Discussing causes and effects of MUDA 2.3 Listing all possible problems related to the process /kaizen elements using statistical tools and techniques 2.4 Identifying and listing possible problem on visual management board/kaizen board 2.5 Using tools and techniques 	

2.6 Identifying and measuring wastes/MUDA based on relevant procedures

2.7 Reporting wastes to relevant personnel

LO3. Analyze causes of a problem

3.1 Listing causes of problems

3.2 Analyzing cause relationship using 4MIE

3.3 Identifying causes of problems

3.4 Selecting the root cause of problem

3.5 Listing possible ways to eliminate most critical root cause using creative idea generation

3.6 Testing and evaluating suggested solutions

3.7 Preparing summaries of action plan

LO4. Eliminate MUDA and Assess effectiveness of the solution

4.1 Preparing and implementing plan of MUDA elimination

4.2 Adopting attitude and ten basic principles to eliminate waste /MUDA

4.3 Using tools and techniques based on procedures and OHS

4.4 Reducing and eliminating wastes /MUDA in accordance with OHS and organizational requirements

4.5 Identifying tangible and intangible results

4.6 Comparing tangible results with targets using various types of diagrams

4.7 Reporting improvements gained by elimination of waste /MUDA

LO5. Prevent occurrence of wastes and sustain operation.

5.1. Preparing and implementing plan of MUDA prevention

5.2. Discussing and preparing standards of machines, operations, defining normal and abnormal conditions, clerical procedures and procurement

5.3. Preventing occurrences of waste /MUDA by using visual and auditory control methods.

5.4. Creating waste-free workplace using 5W and 1H sheet

5.5. Performing the completion of required operation in accordance with standard procedures and practices.

5.6. Facilitating the updating of standard procedures and practices

5.7. Ensuring the capability of the work team and training on the new Standard Operating Procedures (SOPs).

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	

ASSESSMENT METHODS:

Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA:

LO.1 Prepare for work.

- Work instructions are used to determine job requirements, including method, material and equipment.
- Job specifications are read and interpreted following working manual.
- OHS requirements, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.
- Appropriate material is selected for work.
- Safety equipment and tools are identified and checked for safe and effective operation.

LO.2 Identify MUDA and problem

- Plan of MUDA and problem identification is prepared and implemented.
- Causes and effects of MUDA are discussed.
- All possible problems related to the process /Kaizen elements are listed using statistical tools and techniques.
- All possible problems related to kaizen elements are identified and listed on Visual Management Board/Kaizen Board.
- Tools and techniques are used to draw and analyze current situation of the work place.
- Wastes/MUDA are identified and measured based on relevant procedures.
- Identified and measured wastes are reported to relevant personnel.

LO.3 Analyze causes of a problem

- All possible causes of a problem are listed.
- Cause relationships are analyzed using 4M1E.
- Causes of the problems are identified.
- The root cause which is most directly related to the problem is selected.
- All possible ways are listed using creative idea generation to eliminate the most critical root cause.
- The suggested solutions are carefully tested and evaluated for potential complications.

- Detailed summaries of the action plan are prepared to implement the suggested solution.

LO.4 Eliminate MUDA and Assess effectiveness of the solution.

- Plan of MUDA elimination is prepared and implemented by medium KPT members.
- Necessary attitude and the ten basic principles for improvement are adopted to eliminate waste/MUDA.
- Tools and techniques are used to eliminate wastes/MUDA based on the procedures and OHS.
- Wastes/MUDA are reduced and eliminated in accordance with OHS and organizational requirements.
- Tangible and intangible results are identified.
- Tangible results are compared with targets using various types of diagrams.
- Improvements gained by elimination of waste/MUDA are reported to relevant bodies.

LO.5 Prevent occurrence of wastes and sustain operation.

- Plan of MUDA prevention is prepared and implemented.
- Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement are discussed and prepared.
- Occurrences of wastes/MUDA are prevented by using visual and auditory control methods.
- Waste-free workplace is created using 5W and 1Hsheet.
- The completion of required operation is done in accordance with standard procedures and practices.
- The updating of standard procedures and practices is facilitated.
- The capability of the work team that aligns with the requirements of the procedure is ensured and trained on the new Standard Operating Procedures (SOPs).

Annex: Resource Requirements

Module code: EIS WDDBA1 M01 0322		Module title: Preventing and eliminating MUDA		
Item No.	Category/Item	Description/ Specification	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1.	TTLM	Trainers made	25	1:1
2.	Reference Book	Identifying waste on the shop floor	5	1:5
3.	Journals/publications/magazines	Rec	5	1:5
B. Learning Facilities and Infrastructure				
1.	Class room	Standard	1	1:25
2.	Workshop	Standard	1	1:25
3.	Visual training media (LCD, laptops, blackboard, whiteboard, flip chart)		1	1:25
C. Consumable Materials				
1.	Paper	A4,A3	1packet	1:5
2.	Paint	standard	5	1:5
3.	Sticker	standard	5	1:5
4.	Broom	standard	5	1:5
5.	Pencil	standard	25	1:1
6.	Sponge	standard	5	1:5
D. Tools and Equipment				
1.	Safety equipment and tools	(dust masks/ goggles, glove, working cloth, first	25	1:1
2.	Materials and equipment for waste elimination and prevention	(hook, photo and video camera, signboard, nails, shelves, chip wood, tools board,	1	1:25

LEARNING MODULE 02
TVET-PROGRAMME TITLE: Web Development and Database Administration Level II
MODULE TITLE: Administrating Network and Hardware Peripherals
MODULE CODE: <u>EIS WDDBA2 M02 0322</u>
NOMINAL DURATION: 60 Hours
MODULE DESCRIPTION: This modules defines the competence required to connect, install, configure, maintain and troubleshoot local area network and peripherals
<p>LEARNING OUTCOMES</p> <p>At the end of the module the trainee will be able to:</p> <p>LO1. Confirm requirements of client</p> <p>LO2. Obtain required peripherals</p> <p>LO3. Connect hardware peripherals</p> <p>LO4. Install peripherals to a network</p> <p>LO5. Configure peripheral services</p> <p>LO6. Administer and support peripheral services</p> <p>LO7. Maintain peripherals and fix common problems</p> <p>LO8. Use and maximize operating system</p> <p>LO9. Support input and output devices</p>
<p>MODULE CONTENTS:</p> <p>LO1. Confirm requirements of client</p> <ol style="list-style-type: none"> 1.1. Identifying and conforming Client peripheral with organizational standard 1.2. Documenting client requirements and peripherals 1.3. Reporting findings to appropriate person 1.4. Verifying client requirements and reporting procedures. 1.5. Covering action taken to ensure client support expectation by vendor warranty. <p>LO2. Obtain required peripherals</p> <ol style="list-style-type: none"> 2.1. Obtaining peripherals under instruction 2.2. Entering peripherals into equipment inventory. 2.3. Validating delivered component and physical content that match packaging list 2.4. Storing peripherals using vendor/manual guidelines. <p>LO3. Connect hardware peripherals</p>

- 3.1 Verifying timeframe installation schedule
- 3.2 Removing old peripherals with environmental consideration and OHS standards
- 3.3 Connecting new peripherals by taking into account operating system procedures.
- 3.4 Configuring computer to accept new peripherals.
- 3.5 Testing hardware peripherals
- 3.6 Confirming tested results to client satisfaction, possible impact on other systems and making adjustments.

LO4. Install peripherals to a network

- 4.1. Planning location of peripherals to provide service to users based on OHS standard.
- 4.2. Connecting peripherals to the network
- 4.3. Connecting peripherals to computers using parallel, serial and other direct connection methods
- 4.4. Testing Peripherals based on client's specifications.

LO5. Configure peripheral services

- 5.1. Installing software to manage local and network-connected peripherals
- 5.2. Using meaningful name for peripherals and control queues
- 5.3. Configuring security and access to make use of peripherals.
- 5.4. Configuring workstation to allow applications work with peripherals.

LO6. Administer and support peripheral services

- 6.1. Assigning Priority to control queues
- 6.2. Configuring settings on network
 - 6.2.1. Create maintenance schedules
 - 6.2.2. Usage loges
 - 6.2.3. Cost center usage statistics
- 6.3. Demonstrating peripherals services methods to user.

LO7. Maintain peripherals and fix common problems

- 7.1. Establishing and following regular maintenance schedule
- 7.2. Replacing m and components

- 7.3. Fixing peripherals mishaps (unfortunate accident) and malfunction
- 7.4. Monitoring peripheral usage and traffic
- 7.5. Recommending additional needed peripherals
- 7.6. Determining and rectifying failure of peripherals

LO8. Use and maximize operating system

- 8.1. Configuring Operating system
- 8.2. Installing, upgrading and uninstalling application software
- 8.3. Using graphical user interface and command line interface
- 8.4. Utilizing operating system and third-party utilities
- 8.5. Customizing Graphical user interface

LO9. Support input and output devices

- 9.1. Setting up and checking functionality of input and output devices
- 9.2. Installing appropriate drivers.
- 9.3. Ensuring drivers are working properly

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipment's/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	

ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA:

LO1. Confirm requirements of client

- Client peripheral requirements are Identified and confirmed in accordance with organizational standards.
- Client requirements and peripherals needed are documented in line with organizational standards and report findings to the appropriate person.
- Client requirements are verified with appropriate person in line with organizational standards and reporting procedures.
- Action taken to ensure client support expectations are covered by vendor warranty and support services.

LO2. Obtain required peripherals

- Peripherals are obtained under instruction from appropriate person.
- Peripherals are entered into equipment inventory according to organizational standards.
- Contents of delivered components and physical contents that match the packing list are validated and resolved discrepancies if necessary.
- Peripherals are stored according to vendor/manual guidelines

LO3. Connect hardware peripherals

- Timeframe for installation schedule is verified with the client requirement.
- Old peripherals are removed if they are being replaced with minimal disruption to clients, taking into account environmental considerations and OHS standards.
- New peripherals are connected with minimum disruption to clients, taking into account operating system procedures.
- The computer configured to accept the new peripherals based on business requirement
- Hardware peripherals are tested and confirmed to client satisfaction, pay particular attention to possible impact on other systems and make adjustments as required.

LO4. Install peripherals to a network

- Location of peripherals are planned to provide appropriate services to users and to take into consideration OHS standards.
- Peripherals are connected to network, using vendor approved method and technology.
- Peripherals are connected to computers in the network using parallel, serial or other direct connection methods appropriate for the job order.
- Peripherals are tested for correct operation based on client's specifications.

LO5. Configure peripheral services

- Required software is installed to manage local and network-connected peripherals according to business requirement.
- Meaningful names are used for peripherals and control queues
- Security and access are configured to allow appropriate users to make use of peripherals.
- Workstation for peripherals is configured to allow applications to work with peripherals.

LO6. Administer and support peripheral services

- Priority is assigned to control queues based on organizational requirement.
- Settings on the network is configured to create maintenance schedules, usage logs, and cost center usage statistics
- Methods are demonstrated to the user for using peripheral services from their application or workstation

LO7. Maintain peripherals and fix common problems

- A regular maintenance schedule is established and followed as recommended by

peripheral manufacturer.

- Consumables and components are replaced when required.
- Peripheral mishaps (unfortunate accident) and malfunctions are fixed based on procedure.
- Peripheral usage and traffic is monitored and recommend additional peripherals if needed.
- Failures of peripheral services or devices are determined and rectify as required.

LO8. Use and maximize operating system

- Operating system is configured to suit the working environment, including but not limited to setting variables.
- Application software is installed, upgraded and uninstalled to suit the working environment.
- Both graphical user interface and the command line interface are used to perform basic tasks based on clients.
- Operating system and third-party utilities are used based system requirement.
- Graphical user interface is customized based on clients.

LO9. Support input and output devices

- Input and output devices are set up and checked functionality based on requirement.
- Drivers are installed as appropriate and checked functionality based vendor manuals.
- Drivers are ensured to be properly working

Annex: Resource Requirements

Module Code		Module Title		
EIS WDDBA2 M02 0322		Administrating Network and Hardware Peripherals		
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1.	TTLM	Teachers made <ul style="list-style-type: none"> • Teacher's Guide • Learning Guide • Assessment Packet 	5 copies for each	1:5
2.	Reference Books	Any Relevant Books If available	5	1:5
3.	Journals/Publication/ Magazines	- ICT journals(Monthly)	5	1:5
B. Learning Facilities & Infrastructure				
1.	Lecture Room	- 8x12m; equipped with IT equipment	1	1:25
2.	Library	- Multipurpose	1	1:25
3.	Internet	Broadband		1:2
4.	White Board	1.50 X 1.50	1	1:25
C. Consumable Materials				
1.	Blank Disk	- CD-R/RW & DVD-R/RW	5	1:5
2.	Stationer	- Whiteboard marker, printing paper, printer ink	-	-
3.	Flash disk	8 GB or 16 GB	1	1:25
D. Tools and Equipment's				
1.	Laptop	Core i7, Ram 8 GB, Hard disk 1TB	1	
2.	Maintenance Tool kit	Screw(set), wrist pad, anti-electro static mat, anti-electro static bag	5	1:5
3.	Network toolkit	- set/case	5	1:5
4.	Software	Office software, Antivirus software & operating system (Windows 7 or above)	25	1:1
5.	UPS	1000 Volt Ampere	13	1:2
6.	Projector	- LCD	1	1:25
7.	Printer	Any	1	1:25

LEARNING MODULE 03	
TVET-PROGRAMME TITLE: Web Development and Database Administration Level II	
MODULE TITLE: Configuring and Accessing Internet Services	
MODULE CODE: EIS WDDBA2 M03 0322	
NOMINAL DURATION: 40 Hours	
MODULE DESCRIPTION: This module defines the competence required to access internet and complete basic web search tasks. It includes finding required information.	
LEARNING OUTCOMES At the end of the module the trainee will be able to: LO1. Manage internet LO2. Search internet LO3. Work as a team member	
MODULE CONTENTS: LO1. Manage internet 1.1. Introduction to the internet 1.2. Opening different types of internet browsers 1.3. Accessing a particular site using its URL to obtain data and browse links 1.4. Setting internet options of the browsers 1.4.1. Setting a home page of personal choice 1.4.2. Changing your homepage 1.4.3. Managing browser add-ons 1.4.4. Managing browsing history and cookies option 1.4.5. Configuring a socks proxy 1.4.6. Verifying internet options security and privacy level 1.4.7. Managing location of temporary files 1.5. Adjusting display/view modes to suit personal requirements 1.6. Images are loaded or not loaded depending on modem speed, computer and browser capabilities 1.7. Modifying toolbars to meet user and browsing needs 1.8. Deleting cookies and browser history as precaution from virus infection.	

LO2. Search internet

- 2.1 Privacy and security threats on the internet
- 2.2 Observing OHS and netiquette principles
- 2.3 Opening different types of search engines
 - 2.3.1 Defining search requirements using a range of search parameters
 - 2.3.2 Evaluating and assessing the authority, reliability and authenticity of information
 - 2.3.3 Downloading the required files
- 2.4 Saving search results and presenting as a report according to the information required
- 2.5 Creating bookmarks for required web page and saved in associated bookmark folder
- 2.6 Modifying page set up options and printing required information from web pages
- 2.7 Exiting browser windows

LO3. Work as a team member

- 3.1 Using effective and appropriate forms of communications and undertaking interactions with team members.
- 3.2 Making effective and appropriate contributing to complement team activities and objectives, based on individual skills, competencies and workplace context
- 3.3 Observing protocols in reporting using standard operating procedures
- 3.4 Making contributing to the development of team work plans based on understanding of team's role, objectives and individual competencies.

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	

ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA:

LO1. Manage internet

- Internet browser is opened and a home page of personal choice set up by setting internet options
- Display/view modes is adjusted to suit personal requirements
- Toolbar is modified to meet user and browsing needs
- Particular site is accessed and retrieved data
- Images are loaded or not loaded depending on modem speed, computer and browser capabilities
- URL is opened to obtain data and browse link
- Cookies and history of internet browser are deleted as precaution from virus infection

LO2. Search internet

- Search engines are opened and search requirements defined using a range of search parameters
- Search results are saved and presented as a report according to the information required
- Bookmarks are created for required web page and saved in associated bookmark folder
- Page set up options is modified and web page or the required information printed
- Browser is shut down and exited
- OHS and netiquette principles are observed through the process

LO3. Work as a team member

- Effective and appropriate forms of communications used and interactions undertaken with team members who contribute to known team activities and objectives

- Effective and appropriate contributions made to complement team activities and objectives, based on individual skills and competencies and workplace context
- Observed protocols in reporting using standard operating procedures
- Contribution is made to the development of team work plans based on understanding of team's role and objectives and individual competencies of the members.

Annex: Resource Requirements

Module Code EIS WDDBA2 MO3 0322		Module Title Configuring and Accessing Internet Services		
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1.	TTLM	Trainer's made handouts	25	1:1
2.	Reference Books			
2.1	How to Use the Internet Subsequent Edition	Rogers Cadenced, subsequent edition 2002.	5	1:5
2.2	Computer & Internet Security: A Hands-on Approach	Wenliang Du , 2019, 2nd Edition	5	1:5
2.3	Internet and virtual library	Audio visual	1	1:25
B. Learning Facilities & Infrastructure				
1.	Lecture Room	standard	1	1:25
2.	Library	equipped with database books	1	1:25
3.	Computer lab	- 8x12m; equipped with computers and Internet	1	1:25
C. Consumable Materials				
1.	Blank CD	- CD-R/RW	5	1:5
2	Stationery	- Whiteboard marker, printing paper, printer ink	-	-
3	Flash disk	San disk or similar 4GB	5	1:5
D. Tools and Equipment				
1.	Computer	<ul style="list-style-type: none"> At least 80 GB, 3.4Ghz, P IV With Expandability 	25	1:1
2	UPS	750 Volt Ampere	13	1:2
3	Divider	American socket supporter	13	1:2
4	Multimedia projector	- LCD	1	1:25
5	Printer	Any available printer	1	1:25
6	Software	Internet browsers Internet Explorer • Firefox Mozilla • Opera • Google chrome	5	1:5

LEARNING MODULE 04	
TVET-PROGRAMME TITLE: Web Development and Database Administration Level II	
MODULE TITLE: Maintaining IT equipment and consumables	
MODULE CODE: <u>EIS WDDBA2 M04 0322</u>	
NOMINAL DURATION: 50 Hours	
MODULE DESCRIPTION: This modules describes the performance outcomes, skills and knowledge required to set up maintenance procedures and to maintain the operation of basic computer hardware and peripherals, including the replacement of consumables.	
LEARNING OUTCOMES At the end of the module the trainee will be able to: LO1. Identify and analyze IT system components to be maintained LO2. Apply maintenance procedures LO3. Clean equipment LO4. Replace and maintain consumables and supplies LO5. Maintain equipment	
MODULE CONTENTS: LO1. Identify and analyze IT system components to be maintained 1.1. Determining and documenting warranty status of components and/or software 1.1.1. Manufacturer and vendor 1.1.2. Project or organizational requirements 1.2. Reviewing system architecture and configuration documentation for currency status. 1.3. Identifying critical hardware components and/or software and documenting recommendation in service arrangements LO2. Apply maintenance procedures 2.1 Creating Preventative maintenance schedule 2.1.1. Maintenance cost 2.1.2. Business requirement 2.1.3. Service-level agreement 2.2 Identifying and applying specific and appropriate maintenance procedure 2.3 Documenting and submitting recommended procedure for approval accordingly 2.4 Giving orientation to implementing staffs and ensuring to follow maintenance schedule	

2.5 Observing OHS throughout the process

LO3. Clean equipment

- 3.1. Identifying IT related tools and equipment
- 3.2. Accessing and verifying cleaning supplies selected for usability
- 3.3. Recording and documenting maintenance actions
- 3.4. Cleaning equipment as per manufacturer specifications and organization manual.

LO4. Replace and maintain consumables and supplies

- 4.1. Identifying IT related consumables
- 4.2. Accessing consumables from storage and recording usage information
- 4.3. Replacing consumables and logging the action undertaken
- 4.4. Disposing consumables by following environmental guidelines
- 4.5. Testing equipment to ensure it is in working order at set time periods

LO5. Maintain equipment

- 5.1. Identifying equipment which requires maintenance
- 5.2. Maintaining equipment based on manufacturer specifications and organization manual.
- 5.3. Documenting maintenance procedures based on organizational instruction
- 5.4. Exercising care to prevent interruption of business activities
- 5.5. Storing unused equipment devices based on manufacturer specifications and organization manual.

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	

ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA:

LO1. Identify and analyze IT system components to be maintained

- IT equipment and software to be maintained are identified and implement processes to ensure future acquisitions of equipment and software are identified.
- Warranty status of components and/or software is determined and documented according to vendor, project or organizational requirements.
- System architecture and configuration documentation are reviewed for currency status.
- Critical components and/or software are identified and recommendations are documented regarding possible service arrangements

LO2. Apply maintenance procedures

- Preventative maintenance schedule is created based on cost, business and service-level agreements requirements
- Specific and appropriate maintenance procedure is identified and applied based on cost, business and service-level agreements requirements
- Recommended procedures are documented and submitted for approval in accordance with organizational requirements and service-level agreement
- Implementing staff are oriented on the procedures and ensured to follow the maintenance schedule
- OHS is observed throughout the process

LO3. Clean equipment

- Cleaning supplies are accessed and verified for usability on the selected equipment
- Maintenance actions undertaken are recorded and documented according to organizational procedures
- Equipment are cleaned as per manufacturer specifications and in line with organizational manuals

LO4. Replace and maintain consumables and supplies

- Access consumables from storage points and record usage information in line with organizational procedures

- Replace consumables when needed and log the action undertaken
- Dispose of consumables following environmental guidelines
- Test equipment to ensure it is in working order at set time periods and in line with organizational procedures

LO5. Maintain equipment

- Equipment are identified which requires maintenance
- Equipment is maintained as required by organizational guidelines and manufacturer specifications.
- Maintenance procedures are documented as required by organizational guidelines.
- Care is exercised to prevent interruption of business activities during maintenance procedures
- Unused equipment devices are stored in line with manufacturer specifications and organizational guidelines

Annex: Resource Requirements

Module Code EIS WDDBA2 M04 0322		Module Title Maintaining IT Equipment and consumables		
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1.	TTLM	Teacher's Made <ul style="list-style-type: none"> • Learning Guide • Teaching guide • Assessment Packet 	25	1:1
2.	Textbooks	Any relevant Database Book	25	1:1
3	Reference Books	<ul style="list-style-type: none"> • CompTIA A+ Certification all in one 9th edition • CompTIA A+ Compete guide • IT Essential Hardware and software • A+ guide to hardware managing maintaining and troubleshooting 	5	1:5
4	Journals/Publication/ Magazines	- ICT journals(Monthly)	1	1:25
B. Learning Facilities & Infrastructure				
1.	Lecture Room	- 8x12m; equipped with IT equipment and internet	1	1:25
2.	Library	-Multipurpose	1	1:25
3.	ICT Tool room	-Multipurpose storage	1	1:25
C. Consumable Materials				
1.	Blank CD	- CD-R/RW, - DVD/CDRW	5	1:4
2	Stationery	- Whiteboard marker, printing paper, printer ink	-	-
3	Flash disk	San disk or similar 4GB	8	1:3
D. Tools and Equipment's				
1.	Samples	<ul style="list-style-type: none"> • Sample Daily work plans • Sample Project plans • Sample Program plans • Sample Organization strategic and restructuring plans • Sample Resource plans • Sample Skills development plans • Sample Management strategies and objectives 	7	1:4
2	Computer	• At least w/15 inch monitor and 120 GB Hard disk; RAM size 2 GB; 3Gz or	25	1:1

		above with installed operating system (windows 7 and above)		
3	ISP	<ul style="list-style-type: none"> • PSTN for dial-up modems • Broadband 10MB • CDMA 1X • EV-DO • VPN • Portable 4G modem 	1	1:25
4	UPS	<ul style="list-style-type: none"> • 750 Volt Ampere 	25	1:25
5	Divider	<ul style="list-style-type: none"> • American socket supporter 	13	2:25
6	Desktop Computer including its peripherals	Core I5, RAM=4GB, HDD=500GB Operating system package installed	25	1:1
7	Multimedia projector	- LCD	1	1:25
8	Printer	- Capability of A3 printing - color printing capability	1	1:25
9	Network toolkit	- set/case	5	1:5
10	Maintenance toolkit	- set/case	5	1:5
11	Scanner	-Any	2	1:13
12	Web cam	-8piixel and above	2	1:13
13	Shelves	- wooden or metal	5	1:5
14	Locker	- wooden or metal	2	1:13
15	Cabinet	- metal	1	1:25

LEARNING MODULE 05	
TVET-PROGRAMME TITLE: Web Development and Database Administration Level II	
MODULE TITLE: Building simple websites using commercial programs	
MODULE CODE: <u>EIS WDDBA2 M05 0322</u>	
NOMINAL DURATION: 80 Hours	
MODULE DESCRIPTION: This module describes the performance outcomes, skills and knowledge required to use web authoring tools to create, modify and test simple web pages and websites.	
<p>LEARNING OUTCOMES</p> <p>At the end of the module the trainee will be able to:</p> <p>LO1. Identify authoring requirements</p> <p>LO2. Create and save files</p> <p>LO3. Add content to web pages</p> <p>LO4. Create simple navigation</p> <p>LO5. Test website</p>	
<p>MODULE CONTENTS:</p> <p>LO1. Identify authoring requirements</p> <ul style="list-style-type: none"> 1.1. Identifying clients and their requirement 1.2. Selecting preferred web authoring tool 1.3. Installing selected web authoring tool 1.4. Setting preference for web authoring tool <p>LO2. Create and save files</p> <ul style="list-style-type: none"> 2.1 Creating and saving files in correct location or directory 2.2 Navigating web authoring tool environment or workplace 2.3 Accessing and using a range of features in the web authoring tool 2.4 Maintaining suitable directory structure for site 2.5 Saving in appropriate directory structure <p>LO3. Add content to web pages</p> <ul style="list-style-type: none"> 3.1 Inserting and formatting text content 3.2 Inserting images, data tables and simple forms in a web page 	

3.3 Accessing markup language code and making basic modifications to the code

LO4. Create simple navigation

- 4.1 Creating sitemap and plan navigation
- 4.2 Creating links between pages using both text and images
- 4.3 Creating frame using markup language
- 4.4 Creating form using markup language

LO5. Test website

- 5.1. Testing web page content for consistency
- 5.2. Testing elements of website content across a number of different browsers and browser versions
- 5.3. Confirming that web page meets client requirement and web content accessibility guidelines

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	

ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA:

LO1. Identify authoring requirements

- Select preferred web authoring tool according to client requirements
- Set preferences for the web authoring tool,
- select and install web authoring tool

LO2. Create and save files

- Create files and save in correct location or directory
- Navigate the web authoring tool environment or workspace
- Access and use a range of features in the web authoring tool
- Maintain suitable directory structure for the site
- Save in appropriate directory structure

LO3. Add content to web pages

- Insert and format text content according to client requirements
- Insert images, data tables and simple forms
- Access markup language and make basic modifications to code

LO4. Create simple navigation

- Create links between pages to reflect content structure using both text and images
- Create frame using markup language
- create form using markup language

LO5. Test website

- Test elements of website content across a number of different browsers and browser versions to ensure consistency of presentation and performance
- Test that website meets client requirements.

Annex: Resource Requirements

Module Code EIS WDDBA2 M05 0322		Module Title Building simple websites using commercial programs		
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1.	TTLM	Trainer's made handouts	25	1:1
2.	Reference Books	•		
2.1	Web Design with HTML and CSS Digital Classroom	Jeremy Osborn, Jennifer Smith, and the AGI Training Team, © 2011	5	1:5
2.2	Learning Web Design	Jennifer Niederst Robbins, Fourth Edition, 2012	5	1:5
2.4	Adobe Dreamweaver CC Classroom in a Book®	Adobe, 2015 release	5	1:5
B. Learning Facilities & Infrastructure				
1.	Lecture Room		1	1:25
2.	Library	equipped with database books	1	1:25
3.	Computer lab	- 8x12m; equipped with computers and Internet	1	1:25
C. Consumable Materials				
1.	Blank CD	- CD-R/RW	5	1:5
2	Stationery	- Whiteboard marker, printing paper, printer ink	-	-
3	Flash disk	San disk or similar 4GB		
D. Tools and Equipment's				
1.	Computer	• At least w/15 inch monitor and 120 GB Hard disk; RAM size 2 GB; 3Gz or above with installed operating system (windows 7 and above)	25	1:1
2	UPS	750 Volt Ampere	13	1:2

3	Divider	American socket supporter	13	1:2
4	Multimedia projector	- LCD	1	1:25
5	Printer	Laser Jet	1	1:25
6	Software (Web browsers)	may include: Internet browsers • Internet Explorer • Firefox Mozilla • Opera • Google chrome With a latest version	5	1:5
7	Web authoring tool	May include • Dreamweaver • Edit Pad • Edit Plus • Front Page • Notepad • Sublime text editor • Atomic • Visual Studio code With a latest version	5	1:5

LEARNING MODULE 06	
TVET-PROGRAMME TITLE: Web Development and Database Administration Level II	
MODULE TITLE: Operating Database Application	
MODULE CODE: <u>EIS WDDBA2 MO6 0322</u>	
NOMINAL DURATION: 48 Hours	
MODULE DESCRIPTION: This module covers the competence required to produce sketches, pictorial drawings (3-D), multi-view, and sectional views relevant to furniture making.	
LEARNING OUTCOMES	
At the end of the module the trainee will be able to:	
<p>LO1.Create database objects</p> <p>LO2.Customize basic settings</p> <p>LO3.Create reports</p> <p>LO4.Create forms</p> <p>LO5.Retrieve information</p>	
MODULE CONTENTS:	
LO1. Create database objects	
<p>1.1. Identifying OHS requirement</p> <p>1.2. Basic design principles</p> <p>1.3. Opening and designing database application</p> <p>1.4. Creating database object</p> <p>1.5. Modifying database object</p> <p>1.6. Adding and modifying data in a table</p> <p>1.7. Creating relationship</p> <p>1.8. Adding, modifying and deleting records</p> <p>1.9. Saving and compiling database objects</p>	
LO2. Customize basic settings	
<p>2.1. Adjusting page layout</p> <p>2.2. Opening and viewing different toolbars</p> <p>2.3. Formatting font as appropriate</p>	

LO3. Create reports

- 3.1. Designing reports in a logical sequence or manner
- 3.2. Modifying reports
- 3.3. Distributing reports to appropriate person in approved format

LO4. Create forms

- 4.1. Using wizard to create a simple form
- 4.2. Opening existing database and modifying records using a simple modified form
- 4.3. Rearranging objects within the form

LO5. Retrieve information

- 5.1. Accessing existing database and locating required records
- 5.2. Creating simple query and retrieving required information
- 5.3. Developing query with multiple criteria to retrieving required information
- 5.4. Selecting data and displaying appropriately

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	

ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA:

LO1. Create database objects.

- Database application is opened and designed incorporating basic design principles
- Database object is created according to database usage, as well as user requirements
- Database object is modified as required
- Data in a table are added and modified according to information requirements
- Records are added, modified and deleted as required
- Database objects are saved and compiled

LO2. Customize basic settings

- Page layout is adjusted to meet user requirements
- Different toolbars are opened and viewed
- Font is formatted as appropriate for the purpose of the database entries

LO3. Create reports

- Reports are designed to present data in a logical sequence or manner
- Reports are modified to include/exclude additional requirements
- Reports are distributed to appropriate person in a approved format

LO4. Create forms

- Wizard used to create a simple form
- Existing database opened and records through a simple form modified
- Objects within the form rearranged to accommodate information requirements

LO5. Retrieve information

- Existing database is accessed and required records located
- Simple query is created and required information retrieved
- Query with multiple criteria is developed and required information retrieved
- Data are selected and appropriately displayed

Annex: Resource Requirements

Module Code EIS WDDBA2 M06 0322		Module Title Operating Database application		
Item No.		Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1.	TTLM	- Teacher's Made <ul style="list-style-type: none"> • Learning Guide • Teaching guide • Assessment Packet 	5 copies for each	1:1
2.	Textbooks	Any relevant Database Book	5	1:5
3.	Reference Books	• Fundamentals of Database System 4 th Edition Ramez Elmasri	5	1:5
4.	Journals/Publication/Magazines	- ICT journals(Monthly)	5	1:5
B. Learning Facilities & Infrastructure				
1	Lecture Room	- 8x12m; equipped with IT equipment and internet	1	1:25
2.	Library	- Multipurpose	1	1:25
3	ICT Tool room	-Multipurpose storage	1	1:25
C. Consumable Materials				
1.	Blank Disk	- CD-R/RW & DVD R/RW	5	1:5
2.	Stationery	- Whiteboard marker, printing paper, printer ink	-	-
3	Flash disk	San disk or similar 16GB	8	1:3
D. Tools and Equipment's				
1	Operating systems	Any operating system that has multi-user ability, Linux, Mac OS, Windows XP or above	5	1:5
2	ISP	• Portable 4G modem	1	1:25
3	UPS	• 750 Volt Ampere	25	1:25
4	Divider	• American socket supporter	13	2:25
5	Desktop Computer including its peripherals	Core I5, RAM=4GB, HDD=500GB Operating system package installed	25	1:1
6	Multimedia projector	- LCD	1	1:25
7	Printer	-Any available printer	1	1:25
8	Shelves	- wooden or metal	1	1:25
9	Cabinet	- metal	1	1:25

LEARNING MODULE 07	
TVET-PROGRAMME TITLE: Web Development and Database Administration Level II	
MODULE TITLE: Recording Client Support Requirements	
MODULE CODE: <u>EIS WDDBA2 M07 0322</u>	
NOMINAL DURATION: 35 Hours	
MODULE DESCRIPTION: This modules defines the competence required to record, prioritize and escalate client support requests.	
LEARNING OUTCOMES At the end of the module the trainee will be able to:	
<p>LO1. Log requests for support</p> <p>LO2. Prioritize support requests with appropriate personnel</p> <p>LO3. Participate in workplace meetings and discussions</p>	
MODULE CONTENTS:	
<p>LO1. Log requests for support</p> <ol style="list-style-type: none"> 1.1. Recording client support requests and requirements according to organizational standards 1.2. Reviewing client support history and details 1.3. Checking and requesting the information for accuracy and urgency <p>LO2. Prioritize support requests with appropriate personnel</p> <ol style="list-style-type: none"> 2.1 Identifying relevant guidelines for prioritizing or rating client requests 2.2 Prioritizing client requests 2.3 Referring requests to appropriate person or department for assistance 2.4 Involving appropriate persons with client support to be communicated <p>LO3. Participate in workplace meetings and discussions</p> <ol style="list-style-type: none"> 3.1. Attending team meetings on time as scheduled. 3.2. Expressing own opinions clearly 3.3. Listening those of others to without interruption. 3.4. Developing consistent meeting inputs with the meeting purpose and established protocols. 3.5. Conducting workplace interactions in a courteous manner. 	

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Inform the group 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	

ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

MODULE CONTENTS:

LO1. Log requests for support

- Client support requests and requirements are recorded according to organizational standards
- Client support history and details are reviewed
- The information is checked and requested for accuracy and urgency according to organizational standards

LO2. Prioritize support requests with appropriate personnel

- Relevant guidelines are identified for prioritizing or rating client requests
- Client requests are prioritized based on its criticality or impact on the business
- Requests are referred to an appropriate person or department for assistance
- Appropriate persons involved with client support are to be communicated

LO3. Participate in workplace meetings and discussions

- Team meetings are attended on time as scheduled.
- Own opinions are clearly expressed and those of others are listened to without interruption.
- Meeting inputs are consistent with the meeting purpose and established protocols.
- Workplace interactions are conducted in a courteous manner.

Annex: Resource Requirements

Module code EIS WDDBA2 M07 0322		Module title Recording Client Support requirements		
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1.	TTLM	Teacher's made		
		<ul style="list-style-type: none"> Learning Guide Teacher Guide Assessment Packet 	25	1:1
			1	
2.	Textbooks	Any Relevant Books	25	1:1
3.	Journals/Publication/Magazines	- ICT journals (Monthly)		1:25
B. Learning Facilities & Infrastructure				
1	Lecture Room	- 8x12m; equipped with IT equipment and internet	1	1:25
2.	Library	- Multipurpose	1	1:25
C. Consumable Materials				
1.	Blank Disk	- CD-R/RW - DVD/CDRW	5	1:4
2.	Stationery	- Whiteboard marker, printing paper, printer ink		
D. Tools and Equipment				
1	Samples	• Client support Record	5	1:5
2	Operating systems	-Windows XP,7,10, Vista,7, Linux,		
3	Application Software	• MS-Office	5	1:5
4	UPS	• 750 Volt Ampère	13	1:2
5	Divider	• American socket supporter	13	1:2
6	Desktop Computer including its peripherals	- w/15 inch flat monitor and 120 GB Hard disk; RAM size 1GB; 3Gz or above	25	1:1
7	Multimedia projector	- LCD	1	1:25
8	Locker	- wooden or metal	2	1:13
9	Cabinet	- metal	1	1:25

LEARNING MODULE 08	
TVET-PROGRAMME TITLE: Web Development and Database Administration Level II	
MODULE TITLE: Operating Presentation Package	
MODULE CODE: <u>EIS WDDBA2 M08 0322</u>	
NOMINAL DURATION: 30 Hours	
MODULE DESCRIPTION: This modules describes the performance outcomes, skills and knowledge required to operate presentation applications and perform basic operations, including creating, formatting and adding effects to presentations.	
LEARNING OUTCOMES At the end of the module the trainee will be able to: LO1. Create presentations LO2. Customize basic settings LO3. Format presentations LO4. Add slide show effects LO5. Print presentation and notes	
MODULE CONTENTS: LO1. Create presentations 1.1. Opening a presentation package application 1.2. Creating a simple design for a presentation according to organizational requirements 1.3. Opening a blank presentation And adding text and graphics 1.4. Applying existing styles within a presentation 1.5. Using presentation template and slides 1.6. Using various tools to improve the look of the presentation 1.7. Saving presentation to directory LO2. Customize basic settings 2.1 Adjusting display to meet user requirements 2.2 Opening and viewing different toolbars 2.3 Ensuring font settings are appropriate 2.4 Viewing multiple slides at once LO3. Format presentations 3.1. Using, incorporating and modifying organizational charts and bulleted lists	

- 3.2. Adding and manipulating objects to meet presentation purposes
- 3.3. Importing and modifying objects
- 3.4. Modifying slide layout, including text and colors, to meet presentation requirements
- 3.5. Using formatting tools as required within the presentation
- 3.6. Duplicating slides within and across a presentation
- 3.7. Reordering the sequence of slides and deleting slides
- 3.8. Saving presentation in another format
- 3.9. Saving and closing presentation to storage device

LO4. Add slide show effects

- 4.1 Incorporating present animation and multimedia effects as required to enhance the presentation
- 4.2 Adding slide transition effects to ensure smooth progression through the presentation
- 4.3 Testing presentation for overall effect
- 4.4 Using onscreen navigation tools
 - 4.4.1. To start and stop slide show or
 - 4.4.2. Move between different slides

LO5. Print presentation and notes

- 5.1. Selecting appropriate print format for presentation
- 5.2. Selecting preferred slide orientation
- 5.3. Adding notes and slide numbers
- 5.4. Previewing slides and running spell check before presentation
- 5.5. Printing the selected slides
- 5.6. Submitting presentation to appropriate person for feedback

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	

ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA:

LO1. Create presentations

- Open a presentation package application and create a simple design for a presentation according to organizational requirements
- Open a blank presentation and add text and graphics
- Apply existing styles within a presentation
- Use presentation template and slides to create a presentation
- Use various tools to improve the look of the presentation
- Save presentation to directory

LO2. Customize basic settings

- Adjust display to meet user requirements
- Open and view different toolbars to view options
- Ensure font settings are appropriate for the purpose of the presentation
- View multiple slides at once

LO3. Format presentations

- Use and incorporate organizational charts and bulleted lists, and modify as required
- Add objects and manipulate to meet presentation purposes
- Import objects and modify for presentation purposes
- Modify slide layout, including text and colors, to meet presentation requirements
- Use formatting tools as required within the presentation
- Duplicate slides within and across a presentation
- Reorder the sequence of slides and delete slides for presentation purposes
- Save presentation in another format
- Save and close presentation to storage device

LO4. Add slide show effects

- Incorporate present animation and multimedia effects into presentation as required to enhance the presentation
- Add slide transition effects to presentation to ensure smooth progression

through the presentation

- Test presentation for overall effect
- Use onscreen navigation tools to start and stop slide show or move between different slides as required

LO5. Print presentation and notes

- Select appropriate print format for presentation
- Select preferred slide orientation
- Add notes and slide numbers
- Preview slides and run spell check before presentation
- Print the selected slides and submit presentation to appropriate person for feedback

Annex: Resource Requirements

Module code EIS WDDBA2 M08 0322		Module title Operating presentation package		
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1.	TTLM	Teacher's made		
		<ul style="list-style-type: none"> Learning Guide 	25	1:1
		<ul style="list-style-type: none"> Teacher Guide Assessment Packet 	1	
2.	Textbooks	<ul style="list-style-type: none"> Any Relevant Books 	25	1:1
3.	Reference Books	<ul style="list-style-type: none"> Introduction to presentation package 	5	1:5
4.	Journals/Publication/Magazines	- ICT journals (Monthly)	1	1:25
B. Learning Facilities & Infrastructure				
1	Lecture Room	- 8x12m; equipped with IT equipment and internet	1	1:25
2.	Library	- Multipurpose		
C. Consumable Materials				
1.	Blank Disk	<ul style="list-style-type: none"> CD-R/RW DVD/CDRW 	5	1:5
2.	Stationery	- Whiteboard marker, printing paper, printer ink		
D. Tools and Equipment				
1	Samples (Soft/Hard) copy	<ul style="list-style-type: none"> Presentation document 	25	1:1
2	Operating systems	-Windows XP,7,10, Vista,7, Linux,	5	1:5
3	Application Software	<ul style="list-style-type: none"> MS-Office 	5	1:5
4	UPS	<ul style="list-style-type: none"> 750 Volt Ampère 	13	1:3
5	Divider	<ul style="list-style-type: none"> American socket supporter 	13	1:3
6	Desktop Computer including its peripherals	- w/15 inch flat monitor and 120 GB Hard disk; RAM size 1GB; 3Gz or above	25	1:1
7	Multimedia projector	- LCD	1	1:25
8	Printer	Any available printer	1	1:25
9	Locker	- wooden or metal	2	1:25
10	Cabinet	- metal	1	1:25

LEARNING MODULE 09
TVET-PROGRAMME TITLE: Web Development and Database Administration Level II
MODULE TITLE: Updating and Documenting Operational Procedures
MODULE CODE: <u>EIS WDDBA2 M09 0322</u>
NOMINAL DURATION: <u>30 Hours</u>
MODULE DESCRIPTION: This modules describes the performance outcomes, skills and knowledge required to operate presentation applications and perform basic operations, including creating, formatting and adding effects to presentations.
<p>LEARNING OUTCOMES</p> <p>At the end of the module the trainee will be able to:</p> <p>LO1. Assess technical and user documentation</p> <p>LO2. Update procedures</p> <p>LO3. Update documentation</p>
<p>LO1. Assess technical and user documentation</p> <p>1.1. Reviewing current version of technical and user documentation</p> <p>1.2. Comparing user documentation accuracy with current system</p> <p>1.3. Identifying and documenting inaccuracies</p> <p>1.4. Identifying sources and types of information</p> <p>LO2. Update procedures</p> <p>2.1. Determining operational procedure of tools and equipment</p> <p>2.2. Developing operating procedure</p> <p>2.3. Submitting proposed operating procedure to an appropriate person</p> <p>LO3. Update documentation</p> <p>3.1 Reviewing feed back</p> <p>3.2 Updating technical and user documentation</p> <p>3.3 Submitting technical and user documentation</p> <p>3.4 Distributing technical and user documentation</p>

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Write short notes on the black/white board using large text ❖ Make sure the luminosity of the light of class room is kept ❖ Use normal tone of voice ❖ Encourage trainees to record the lecture in audio format ❖ Provide Orientation on the physical feature of the work shop ❖ Summarize main points 	<ul style="list-style-type: none"> ❖ Assign sign language interpreter ❖ Arrange the class room seating to be conducive for eye to eye contact ❖ Make sure the luminosity of the light of class room is kept ❖ Introduce new and relevant vocabularies ❖ Use short and clear sentences ❖ Give emphasis on visual lecture and ensure the attention of the trainees ❖ Avoid movement during lecture time ❖ Present the lecture in video format 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible to trainees ❖ Speak loudly ❖ Ensure the attention of the trainees ❖ Present the lecture in video format ❖ Ensure the attention of the trainees 	<ul style="list-style-type: none"> ❖ Organize the class room seating arrangement to be accessible for wheelchairs users. ❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note ❖ Provide Orientation on the physical feature of the work shop

		❖ Summarize main points		
Demonstration	<ul style="list-style-type: none"> ❖ Conduct close follow up ❖ Use verbal description ❖ Provide special attention in the process of guidance ❖ facilitate the support of peer trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ use Sign language interpreter ❖ Use video recorded material ❖ Ensure attention of the trainees ❖ Provide structured training ❖ Show clear and short method ❖ Use gesture ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
Group discussion	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member ❖ Brief the thematic issues of the work 	<ul style="list-style-type: none"> ❖ Use sign language interpreters ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Facilitate the integration of trainees with group members ❖ Conduct close follow up ❖ Introduce the trainees with other group member 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers

			❖ Inform the group members to speak loudly	
Exercise	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies 	<ul style="list-style-type: none"> ❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training 	<ul style="list-style-type: none"> ❖ Assign peer trainees ❖ Use additional nominal hours if necessary
Individual assignment	<ul style="list-style-type: none"> ❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	<ul style="list-style-type: none"> ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material 	

ASSESSMENT METHODS:				
Interview		<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Ensure or conform whether the proper communication was conducted with the trainee through the service of the sign language interpreter ❖ Use short and clear questioning ❖ Time extension 	<ul style="list-style-type: none"> ❖ Speak loudly ❖ Using sign language interpreter if necessary 	<ul style="list-style-type: none"> ❖ Use written response as an option for the trainees having speech challenges
Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts ❖ Use interview as an option if necessary ❖ Prepare the exam in audio format ❖ Assign human reader (if necessary) ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, True or False, matching and short answers ❖ Avoid essay writing ❖ Time extension 	<ul style="list-style-type: none"> ❖ Prepare the exam using short sentences, multiple choices, true or false, matching and short answers if necessary. 	<ul style="list-style-type: none"> ❖ Use oral response as an option to give answer for trainees having severe upper limb impairment ❖ Time extension for trainees having severe upper limb impairment
Demonstration /Observation	<ul style="list-style-type: none"> ❖ Brief the instruction or provide them in large text ❖ Time extension 	<ul style="list-style-type: none"> ❖ Use sign language interpreter ❖ Brief on the instruction of the exam ❖ Provide activity-based/practical assessment method ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Brief on the instruction of the exam ❖ Use loud voice ❖ Time extension 	<ul style="list-style-type: none"> ❖ Provide activity based assessment ❖ Conduct close follow up ❖ Time extension

ASSESSMENT CRITERIA:

LO1. Assess technical and user documentation

- Current version of technical and user documentation is reviewed based on the latest operational procedures.
- Accuracy of technical and user documentation is compared with current system functionality.
- Inaccuracies are identified and documented for future reference.

LO2. Update procedures

- Operational procedure requirements are determined using review outcomes.
- Operating procedures are developed / updated for the system.
- Proposed operating procedures are submitted to appropriate person.

LO3. Update documentation

- Feedback is reviewed and appropriate changes are made as needed.
- Technical and user documentation are updated to incorporate changes.
- Technical and user documentation are submitted to appropriate person for final approval.
- Technical and user documentation are distributed as agreed with appropriate person.

Annex: Resource Requirements

Module code EIS WDDBA2 M09 0322		Module title Updating and Documenting Operational Procedures		
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A. Learning Materials				
1.	TTLM	Teacher's made		
		• Learning Guide	25	1:1
		• Teacher Guide	1	
		• Assessment Packet	25	1:1
2.	Textbooks	• Any Relevant Books	25	1:1
3.	Reference Books	• Introduction to presentation package	5	1:5
4.	Journals/Publication/Magazines	- ICT journals (Monthly)	1	1:25
B. Learning Facilities & Infrastructure				
1	Lecture Room	- 8x12m; equipped with IT equipment and internet	1	1:25
2.	Library	- Multipurpose		
C. Consumable Materials				
1.	Blank Disk	- CD-R/RW - DVD/CDRW	5	1:5
2.	Stationery	- Whiteboard marker, printing paper, printer ink		
D. Tools and Equipment				
1	Samples (Soft/Hard) copy	• Presentation document	25	1:1
2	Operating systems	- Windows XP,7,10, Vista,7, Linux,	5	1:5
3	Application Software	• MS-Office	5	1:5
4	UPS	• 750 Volt Ampère	13	1:3
5	Divider	• American socket supporter	13	1:3
6	Desktop Computer including its peripherals	- w/15 inch flat monitor and 120 GB Hard disk; RAM size 1GB; 3Gz or above	25	1:1
7	Multimedia projector	- LCD	1	1:25
8	Printer	Any available printer	1	1:25
9	Locker	- wooden or metal	2	1:25
10	Cabinet	- metal	1	1:25
11	Flash disk	San disk or similar 16GB	8	1:1

Acknowledgement

The **Ministry of Labor and Skills** wishes to thank and appreciation for the trainers who donated their effort and time to develop this outcome based curriculum for the TVET program Web development and database administration Level II. We also thank all regional TVET Colleges, for active facilitation of their trainers for the development of this curriculum.

The trainers who developed the curriculum

No	Name	Qualification	Educational background	Region	College	Mobile number	E-mail
1	Alemayehu tesfaye	MSc	Information technology	Sidama	Daye Polytechnic	0912808069	alextesfaye1620@gmail.com
2	Ezra Alemayehu	MSc	Information Technology Management	SNNPR	Hossana Polytechnic	0912243860	ezanets261@gmail.com
3	Frew Atkilt	M-Tech	Network & Information Security	Oromiya	Bishoftu Polytechnic College	0911787374	frew.frikii@gmail.com
4	Lemlem G/Slasei	MA	Computer Science & Information Technology	Dire Dewa	Ethio Italy Polytechnic College	0929398419	lemlemg34@gmail.com
5	Miskir Solomon	MSc	Information system	Adiss Ababa	Tvet Institute	0921851809	miskirsoll@gmail.com
6	Solomon Yilma	MSc	ICT	Benishangul	Asosa Polytechnic College	0911954729	sollangano@gmail.com