



Ethiopian TVET-System

Curriculum

FURNITURE MAKING

ETQF LEVEL - I

Based on

Ethiopian Occupational Standard
(EOS)

September 2019

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 TVET-Delivery. Curricula help to facilitate the learning 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). Responsibility for Curriculum Development will be given to the Regional TVET-Authorities and TVET-Providers.

This curriculum has been Developed by a group of experts from different Regional TVET-Authorities based on the occupational standard for It has the character of a model curriculum and is an example on how to transform the occupational requirements as defined in the respective occupational standard into an adequate curriculum.

The curriculum development process has been actively supported and facilitated by the Ministry of Education – in line with one of its mandates to provide technical support to the Regions TVET – and by the TVET-Reform Component of the Engineering Capacity Building Program.

TVET-Program Design

1.1. TVET-Program Title: FURNITURE MAKING Level-I

1.2. TVET-Program Description

The Program is revised to develop the necessary knowledge, skills and attitude of the learners to the standard required by the occupation. The contents of this program are in line with the occupational standard. Learners who successfully completed the Program will be qualified to work as **Furniture making with** competencies elaborated in the respective OS. Graduates of the program will have the required qualification to work in the Industry Sector in the field of Furniture making **level-I**.

The prime objective of this training program is to equip the learners with the identified competences specified in the EOS. Graduates are therefore expected to perform in accordance with the performance criteria described in the EOS for Furniture Making Level I.

1.3 TVET-Program Learning Outcomes

The expected outputs of this program are the acquisition and implementation of the following units of competence –

<u>IND FMK1 Mo1- 0919</u>	Apply 3S Procedures
<u>IND FMK1 M02- 0919</u>	Work with Others
<u>IND FMK1 M03- 0919</u>	Carry Out Measurements and Calculation
<u>IND FMK1 M04- 0919</u>	Read and Interpret Plans and Working Drawings
<u>IND FMK1 M05- 0919</u>	Select Materials for Furniture Production
<u>IND FMK1 M06- 0919</u>	Use and Maintain Hand and Power Tool
<u>IND FMK1 M07- 0919</u>	Produce Hand Made Timber Joints
<u>IND FMK1 M08- 0919</u>	Operate Basic Woodworking Machines
<u>IND FMK1 M09- 0919</u>	Prepare Surfaces for Finishing
<u>IND FMK1 M10- 0919</u>	Apply Quality Standards
<u>IND FMK1 M11- 0919</u>	Receive and Respond to Workplace Communication
<u>IND FMK1 M12- 0919</u>	Demonstrate Work Values
<u>IND FMK1 M13- 0919</u>	Develop Understanding of Entrepreneurship

1.3. Duration of the TVET-Programme

The programme will have duration of **930** Hrs training hours(including supportive modules), which will be used both for theoretical teachings and practical exercises.

1.4. Qualification Level and Certification

Based on the descriptors elaborated on the Ethiopian TVET Qualification Framework (ETQF) the qualification of this specific TVET programme will be Level I.

The learner can exit after successfully completing the modules in this level and will be awarded the equivalent institutional certificate of attainment or attendance (this is institutional discretion).

1.5. Target Groups

No special target group is assigned for the program. Any citizen who meet the entry requirements and capable of participating in the learning activities is entitled to take part in the Program.

1.6. Entry Requirements

The prospective participants of this program on are required to possess the following:

- To enter the programme, a candidate shall at least successfully passed grade ‘10’
- Ability to speak, read and understand English
- Computer literate
- Good moral character

1.7. 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 TVET-institution and identified companies have forged an agreement to co-operate with regard to implementation of this program. The time spent by the learners in the 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 lecture-discussion, simulation and actual practice. These modalities will be utilized before the learners are exposed to the industry environment.

Organization of in-company training will be either/both industry attachment or co-operative training. The **651 hrs** of the program duration will be spent in-company training and it will only start after the learner successfully completed the module in this program in addition to this **279hrs** (including the supportive modules) of the program consumed in practical activities in school training.



1.8. TVET-Program Structure

Unit of Competence	Module Code & Title	Learning Outcomes	Duration (In Hours)
<u>IND FMK1 13 -0912</u> Apply 3S Procedures	<u>IND FMK1 M101 -0919</u> Applying 3S Procedures	<ol style="list-style-type: none"> 1. Organize Junior Kaizen Promotion Team (KPT) 2. Prepare for work 3. Sort items 4. Set all items in order 5. Perform Shine activities 	60 hrs
<u>IND FMK1 09 0912</u> Work with Others	<u>IND FMK1 M02 0919</u> Working with Others	<ol style="list-style-type: none"> 1. Develop effective workplace relationship 2. Contribute to work group activities 	30 hrs
<u>IND FMK1 02 0912</u> Carry Out Measurements and Calculations	<u>IND FMK1 M03 0919</u> Carrying Out Measurements and Calculations	<ol style="list-style-type: none"> 1. Obtain measurements 2. Perform simple calculations 3. Estimate approximate quantities 	60 hrs
IND FMK1 01 0912 Read and Interpret Working Drawings and Sketches	IND FMK1 M04- 0919 Reading and Interpreting Working Drawings and Sketches	<ol style="list-style-type: none"> 1. Interpret technical drawing 2. Read and interpret job specifications 3. Interpret details from freehand sketch 	120 hrs
<u>IND FMK1 03 0912</u> Select Materials for Furniture Production	<u>IND FMK1 M05 0919</u> Selecting Materials for Furniture Production	<ol style="list-style-type: none"> 1. Determine materials requirement 2. Evaluate selected materials 3. Treat affected timber 	60 hrs

<u>IND FMK1 07 0912</u> Use and Maintain Hand and Power Tools	<u>IND FMK1 M06-0919</u> Using and Maintaining Hand and Power Tools	<ol style="list-style-type: none"> 1. Select hand tools 2. Use hand tools 3. Maintain hand tools 	120 hrs
<u>IND FMK1 05 0912</u> Produce Hand Made Timber Joints	<u>IND FMK1 M07 0919</u> Producing Hand Made Timber Joints	<ol style="list-style-type: none"> 1. Plan and prepare for work 2. Make joint 3. Complete housekeeping 	140hrs
<u>IND FMK1 04 0912</u> Operate Basic Woodworking Machines	<u>IND FMK1 M08- 0919</u> Operating Basic Woodworking Machines	<ol style="list-style-type: none"> 1. Prepare for work 2. Operate machines 3. Clean up work area and maintain equipment 	120 hrs
<u>IND FMK1 06 0912</u> Prepare Surfaces for Finishing	<u>IND FMK1 M09- 0919</u> Preparing Surfaces for Finishing	<ol style="list-style-type: none"> 1. Prepare for work 2. Prepare surfaces 3. Clean work area and maintain equipment 	80hrs
<u>IND FMK1 08 0912</u> Apply Quality Standards	<u>IND FMK1 M10 0919</u> Applying Quality Standards	<ol style="list-style-type: none"> 1. Assess own work 2. Assess quality of received articles 3. Record information 4. Study causes of quality deviations 5. Complete documentation 	30hrs

<u>IND FMK1 10 0912</u> Receive and Respond to Workplace Communication	<u>IND FMK1 M11 0919</u> Receiving and Responding to Workplace Communication	<ol style="list-style-type: none"> 1. Follow routine spoken messages 2. Perform workplace duties following written notices 	30hrs
<u>IND FMK1 11 0912</u> Demonstrate Work Values	<u>IND FMK1 M12 0919</u> Demonstrating Work Values	<ol style="list-style-type: none"> 1. Define the purpose of work 2. Apply work values/ethics 3. Deal with ethical problems 4. Maintain integrity of conduct in the workplace 	30hrs
<u>IND FMK1 12 0912</u> Develop Understanding of Entrepreneurship	<u>IND FMK1 M13 0919</u> Developing Understanding of Entrepreneurship	<ol style="list-style-type: none"> 1. Describe and explain the principles, concept and scope of entrepreneurship 2. Discuss how to become entrepreneur 3. Discuss how to organize an enterprise 4. Discuss how to operate an enterprise 5. Develop one's own business plan 	60 hrs

*The time duration (Hours) indicated for the module should include all activities in and out of the TVET institution

1.9. Sequencing Structure

Sequencing Structure				
TVET-Programme Title: <u>Furniture Making Level – I</u>				
S.n	Module title	School training hrs.	Cooperative training hrs.	Total hrs.
1	Applying 3S Procedures	18 hrs	42 hrs	60hrs
2	Working with Others	6 hrs	14 hrs	20 hrs
3	Carrying Out Measurements and Calculations	18 hrs	42 hrs	60hrs
4	Reading and Interpreting Working Drawings and Sketches	36 hrs	84 hrs	120 hrs
5	Selecting Materials for Furniture Production	18 hrs	42 hrs	60 hrs
6	Using and Maintaining Hand and Power Tools	36 hrs	84 hrs	120 hrs
7	Producing Hand Made Timber Joints	42 hrs	98 hrs	140 hrs
8	Operating Basic Woodworking Machines	36 hrs	84 hrs	120hrs
9	Preparing Surfaces for Finishing	24 hrs	56 hrs	80 hrs
10	Applying Quality Standards	9 hrs	21 hrs	30hrs
11	Receive and Respond to Workplace Communication	9 hrs	21 hrs	30 hrs
12	Demonstrating Work Values	9 hrs	21 hrs	30 hrs
13	Developing Understanding of Entrepreneurship	18 hrs	42 hrs	60 hrs
Total		<u>279hrs</u>	<u>651 hrs</u>	<u>930 hrs</u>

1.10 Institutional Assessment

Two types of evaluation will be used in determining the extent to which learning outcomes are achieved. The specific learning 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 learning modules and form part of the learning process. Formative evaluation provides the learner with feedback regarding success or failure in attaining learning outcomes. It identifies the specific learning errors that need to be corrected, and provides reinforcement for successful performance as well. For the trainer/facilitator, 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 unit of competence 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 ‘competent or not yet competent’.

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

1.10. Trainer’s / Facilitator’s Profile

For this particular TVET Program and especially for the main modules, trainers / facilitators are expected to have “C” Level & above in related fields of studies and satisfactory practical experiences, or equivalent qualifications and relevant experience.

Other requirements –

- Must have completed Trainer’s Methodology Course(TM)
- Must have a good moral character
- Must have competent certificate(COC) on KSA
- Must have knowledge about TVET
- Must fulfill a good quality teacher
 - ✚ Creativity
 - ✚ Commitment
 - ✚ Punctual



LEARNING MODULE 01	Logo of TVET Provider
TVET PROGRAM TITLE: Furniture Making Level I	
MODULE TITLE: Applying 3S	
MODULE CODE: IND FMK1 M01 0919	
NOMINAL DURATION: 60 Hours	
MODULE DESCRIPTION: This module aims to cover the knowledge, skills and attitudes required by an employee or worker to apply 3S technique to their own job and work area.	
LEARNING OUTCOMES: At the end of this module the trainees will be able to LO1 Organize Junior Kaizen Promotion Team (KPT) LO2 Prepare for work LO3 Sort items LO4 Set all items in order LO5 Perform Shine activities	

MODULE CONTENTS:

LO1 Organize Junior Kaizen Promotion Team (KPT)

1.1 Kaizen basics

1.1.1. The meaning of Kaizen and its concept

1.1.2 The origin of Kaizen

1.1.3 The dissemination of Kaizen in Ethiopia

1.1.4 The three pillars of Kaizen

1.1.4.1 Kaizen as a Philosophy

1.1.4.2 Kaizen Systems

1.1.4.3 Kaizen Tools

1.1.5 Kaizen principles

1.1.6 The key characteristics of Kaizen

1.1.6.1 Continuity

1.1.6.2 Participatory approach

1.1.6.3 Accumulation of small Improvement

1.1.6.4 Needs small investment

1.1.7 Kaizen targets or elements

1.1.7.1 Productivity

1.1.7.2 Quality

1.1.7.3 Cost

1.1.7.4 Delivery time

1.1.7.5 Moral

1.1.7.6 Safety

1.1.7.7 Environment

1.1.7.8 Gender equality

1.1.8 Wastes/'Muda'

1.1.8.1 Definition of Waste/ Muda

1.1.8.2 Muda identified by TOYOTA Company

1.1.8.2.1 Over production

- 1.1.8.2.2 Inventory
- 1.1.8.2.3 Motion
- 1.1.8.2.4 Transportation
- 1.1.8.2.5 Waiting
- 1.1.8.2.6 Over-processing
- 1.1.8.2.7 Defect making

1.2 5S basics

- 1.2.1 Definition of 5S
- 1.2.2 The five pillars of 5S
 - 1.2.1.1 Sort
 - 1.2.1.2 Set in order
 - 1.2.1.3 Shine
 - 1.2.1.4 Standardize
 - 1.2.1.5 Sustain
- 1.2.3 Benefits of 5S
- 1.2.4 Three stages of 5S implementation
 - 1.2.4.1 Planning
 - 1.2.4.2 Implementation
 - 1.2.4.3 Sustaining

1.3 Junior Kaizen Promotion Team (KPT)

- 1.3.3 Basics of KPT
- 1.3.4 Aims and benefits of KPT
- 1.3.5 The principles of KPT
- 1.3.6 The structure and role of the components of KPT
- 1.3.7 Stages of KPT
 - 1.3.7.1 Junior KPT
 - 1.3.7.2 Middle KPT
 - 1.3.7.3 Higher KPT
- 1.3.8 Establish Junior KPT

1.3.9 Method of communication in a team

1.3.10 Concept and parts of Kaizen board (Visual Management board)

LO2 Prepare for work

2.1 Job requirements

2.1.1 Work instructions

2.1.2 Job specification

2.1.3 Working manual

2.2 OHS requirements

2.2.1 Legislation/ regulations/codes

2.2.2 Safety equipment and tools

2.2.3 Safe operating procedures

2.2.4 Emergency procedures

2.3 Material preparation and selection for work

LO3 Sort items

3.1 Definition of the first pillar of 5S

3.2 Benefits of sort activity

3.3 Sort activity

3.4.1 Plan and procedures for sort activity

3.4.2 Record and quantify all items in the work area

3.4.3 Red tag strategy for unnecessary items

3.4.3.1 Overview of red tagging

3.4.3.2 Red-tag Holding areas

3.4.3.3 Steps/procedures in Red tagging

3.4.4 Types of unnecessary items

3.4.5 Places where unnecessary items accumulate

3.4.6 Reporting methods and formats for sort results

LO4 Set all items in order

4.1 Definition of the second pillar of 5S

4.2 Benefits of set in order

4.3 Set in order

4.3.1 Plan and procedures for set in order

4.3.2 Set in order strategies

4.3.2.1 Motion Economy strategy

4.3.2.2 Visual control Strategy

4.3.2.2.1 Signboard strategy

4.3.2.2.2 Painting strategy

4.3.2.2.3 Color-code strategy

4.3.2.2.4 Outlining strategy

4.3.2.2.5 Visual Management Board (Kaizen board)

Strategy

4.3.3 Reporting methods and formats for set in order results

LO5 Perform Shine activities

5.1 Definition of the third pillar of 3S

5.2 Benefits of shine

5.3 Shine activity

5.3.1 Plan and procedures for shine activities

5.4 Inspection

5.4.1 The relationship of shine and inspection

5.4.2 The need for inspection

5.4.3 Inspection steps

5.4.4 Inspection methods

5.5 Reporting methods and formats for shine results



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<ul style="list-style-type: none"> attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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. Develop understanding of quality system

- Discuss quality assurance procedures of the enterprise or organization
- Understand the relationship of quality system and continuous improvement in the workplace
- Identify and relate to workplace requirements the purpose and elements of quality assurance (QA) system
- Explain the 5S system as part of the quality assurance of the work organization

LO-2. Sort needed items from unneeded

- Identify all items in the work area
- Distinguish between essential and non-essential items
- Sort items to achieve deliverables and value expected by downstream and final customers
- Sort items required for regulatory or other required purposes
- Place any non-essential item in a appropriate place other than the workplace
- Regularly check that only essential items are in the work area

LO-3. Shine work area

- Identify the best location for each essential item
- Place each essential item in its assigned location
- After use immediately return each essential item to its assigned location
- Regularly check that each essential item is in its assigned location

LO-4. Set workplace in order

- Keep the work area clean and tidy at all times
- Conduct regular housekeeping activities during shift
- Ensure the work area is neat, clean and tidy at both beginning and end of shift

LO-5.Sustain 5S system

- Follow procedures
- Follow checklists for activities, where available
- Keep the work area to specified standard

LO-6.Standardize activities

- Clean up after completion of job and before commencing next job or end of shift
- Identify situations where compliance to standards is unlikely and take actions specified in procedures
- Inspect work area regularly for compliance to specified standard
- Recommend improvements to lift the level of compliance in the workplace



Annex: Resource Requirements

(IND FMK1 M01-0919 Applying 3S)				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	Containing: LAP TEST, Information Sheet, Operation sheet	5	1:5
B.	Learning Facilities and Infrastructure			
1.	Lecture Room[working area]	Area- 5*5m ²	1	1:25
2.	Library	Area- 15X15 m ²	1	1:25
3.	Laboratory	Area- 5*5 m ²	1	1:25
C.	Consumable Materials			
1.	Paper	A4	5rim	1:5
2.	Posters	Remanding posters	10pcs	2:5
		safety posters	10pcs	2:5
3.	Kerosene	White	20L	4:5
4.	Metallic painting	Yellow	2	2:25
		Green	2	2:25
		White	2	2:25
5. G	Marker	Black	25	1:1
		Red	25	1:1
		Blue	25	1:1
		Green	25	1:1
D.	Tools and Equipment			
1.	Waste can	Made from plastics	3	3:25
2.	Painting brush	Standard	3	3:25
3	dust masks / goggles	Standard	25	1:1
3.	glove working cloth	Standard	25	1:1
4.	first aid	Standard	25	1:1
5.	safety shoe	Standard	25	1:1



LEARNING MODULE-09	
TVET-PROGRAMME TITLE:- FURNITURE MAKING Level I	
MODULE TITLE:- Working With Others	
MODULE CODE:- IND FMK1 M02 0919	
NOMINAL DURATION:- <u>30 hrs</u>	
MODULE DESCRIPTION: This module covers the skills, knowledge and attitudes required to develop workplace relationship and contribute in workplace activities.	
LEARNING OUTCOMES At the end of the module the learner will be able to: <ul style="list-style-type: none"> LO1. Develop effective workplace relationship LO2. Contribute to work group activities 	
MODULE CONTENTS: LO1 Develop effective workplace relationship <ul style="list-style-type: none"> 1.1 Essential Skills of Working with Others 1.2 Desirable Work Values of a Production Worker LO2 Contribute to work group activities <ul style="list-style-type: none"> 1.1 Strategies for Working with Others 1.2 Providing and Accepting Feedbacks 	



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<ul style="list-style-type: none"> attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Develop effective workplace relationship

- Duties and responsibilities are done in a positive manner to promote cooperation and good relationship
- Assistance is sought from workgroup when difficulties arise and addressed through discussions.
- Feedback provided by others in the team is encouraged, acknowledged and acted upon.
- Differences in personal values and beliefs are respected and acknowledged in the development.

LO2 Contribute to work group activities

- Support provided to team members to ensure workgroup goals are met.
- Constructive contribution to workgroup goals and tasks are made according to organizational requirements.
- Information relevant to work is shared with team members to ensure designated goals are met..

RESOURCE REQUIREMENTS

Working With Others				
<u>IND FMK1 M02-0919</u>				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A. Learning Materials				
1.	TTLM	Developed by trainers	25	1:1
2.	Textbooks			
3.	Reference Books	<ul style="list-style-type: none"> Workplace communication; The Basics by George J. Searles General wood working by CHRIS H. GRONEMAN/ Six Edition The motivate wood work technology by J.K.N SACEY 	5	1:5
4.	Journals/Publication/ Magazines	Training Journals		
B. Learning Facilities & Infrastructure				
1.	Lecture Room	25m ²	1	1:25
2.	Library	50 m ²	1	1:25
3	Work shop			
C. Consumable Materials				
1.	Notebook			1:1
2.	A4 paper			
3.	Graphing papers			1:1
D. Tools and Equipment				
1	Tools and equipment	According to assigned work		



LEARNING MODULE-03	
TVET-PROGRAMME TITLE: FURNITURE MAKING Level -I	
MODULE TITLE: Carrying-out Measurements and Calculations	
MODULE CODE: IND FMK1 M03-0919	
NOMINAL DURATION: 60 hrs	
MODULE DESCRIPTION:- This module covers the knowledge, skills and attitudes required to accurately complete measurements and calculations of materials related to work requirements in furniture making.	
LEARNING OUTCOMES At the end of the module the learner will be able to: <ul style="list-style-type: none"> LO1. Obtain measurements LO2. Perform simple calculations LO3. Estimate approximate quantities 	
MODULE CONTENTS <ul style="list-style-type: none"> 1. Obtain measurements <ul style="list-style-type: none"> 1.1 Purpos of obtain measurements 1.2 Methods ofobtainig measurement 1.3 Obtain accurate measurment 2. Performing simple calculations <ul style="list-style-type: none"> • Perform purpose of calculations • Perform simple calculations • Involv simple calculations(length, perimeter, mass and volume 3. Estimate approximate quantities <ul style="list-style-type: none"> 1Types and standard unit packaging of materials 2. Quantities of materials suitable for the work 3 Bill of quantity/ relevant furnishing material cost estimates $\pm 10\%$ 	



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<p>attention of the trainees</p> <ul style="list-style-type: none"> ❖ Provide tutorial support (if necessary) 	<p>to operate equipments/ machines</p> <ul style="list-style-type: none"> ❖ 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Obtain measurements

- Purpose of obtaining measurements is clarified and confirmed.
- Most appropriate method of obtaining the measurement is selected and applied.
- Accurate measurements are obtained, confirmed and recorded.
- Quality assurance requirements, standards and tolerances associated with the company's operations are recognized and adhered to.

LO2 Perform simple calculations

- Purpose of performing the calculations is clarified and confirmed.
- Method or formula for achieving the required result is selected.
- Simple calculations involving length, perimeter, mass and volume are carried out.
- Results are confirmed and recorded.

LO3 Estimate approximate quantities

- Types and standard unit packaging of materials are identified from workplace documentation.
- Dimensions of the job are obtained from workplace documentation/plans.
- Quantities of materials suitable for the work to be undertaken are calculated, confirmed and recorded.
- Material costs for simple jobs are estimated to within $\pm 10\%$.

Annex: Resource Requirements

Carrying out measurements and calculations IND FMK1 M03- 0919				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommend ed Ratio (Item: Learner)
A.	Learning Materials			
1.	TTLM	Developed by trainers	25	1:1
2.	Textbooks			
3.	Reference Books	<ul style="list-style-type: none"> ✓ General wood working By Groneman ✓ Wood working Fundamentals. By Walansky ✓ Working with wood By Hutchings, Martin & Coleman 	5	1:5
4.	Journals/Publication/ Magazines			
B.	Learning Facilities & Infrastructure			
1.	Lecture Room	25m ²	1	1:25
2.	Library	50 m ²	1	1:25
3	Work shop			
C.	Consumable Materials			
1.	Papers	A4	1 carton	1:25
2.	Pencile		25	1:1
D.	Tools and Equipments			
1	Measuring tapes and rulers		5	1:5
2	squares and calculator		25	1:1

LEARNING MODULE -04

TVET-PROGRAMME TITLE: FURNITURE MAKING Level –I

MODULE TITLE: Reading and Interpreting Working Drawings and Sketches

MODULE CODE: IND FMK1 M04 0919

NOMINAL DURATION: 120 hrs

MODULE DESCRIPTION: This module covers the knowledge, skills and attitudes required to read and interpret drawings in furniture production.

LEARNING OUTCOMES

At the end of the module the learner will be able to:

- LO1.** Interpret technical drawing
- LO2.** Read and interpret job specifications
- LO3.** Interpret details from freehand sketch

MODULE CONTENTS

1. Interpreting technical drawing

- 1.1 Drawing Tools & equipment
 - Drawings
 - Sketches,
 - Blue prints
- 1.2 Drawing materials as consumable
- 1.3 Dimensioning techniques
- 1.4 Calculate Tolerance, limits & fits

2. Reading and interpret job specifications

- 2.1 formal Job specifications of key features
- 2.2 drawing Signs and symbols
- 2.3 identify Material attributes

3. Interpreting details from freehand sketch

- 3.1** Recogniz Components, assemblies or objects
- 3.2** Identify specifications, notes and descriptions
- 3.3** Identify material requirements
- 3.4** Identify instruction& working orders.



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<p>attention of the trainees</p> <ul style="list-style-type: none"> ❖ Provide tutorial support (if necessary) 	<p>to operate equipments/ machines</p> <ul style="list-style-type: none"> ❖ 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Interpret technical drawing

- Components, assemblies or objects are recognized as required.
- Dimensions are identified as appropriate.
- Instructions are identified and followed as required.
- Material requirements are identified as required.
- Tolerance, limits and fits are identified in drawing.

LO2 Read and interpret job specifications

- Job specifications are identified from drawings, notes and descriptions.
- Standards of work, finishes and tolerances are identified from project specifications.
- Material attributes are identified from specifications

LO3 Interpret details from freehand sketch

- Components, assemblies or objects are recognized as required.
- Dimensions are identified as appropriate.
- Instructions are identified and followed as required.
- Material requirements are identified in accordance to job specifications and work orders.



RESOURCE REQUIREMENT

IND FMK1 MO4-0919 Reading and Interpreting Working Drawings and Sketches				
Item no.	Category/item	Description or Specifications	Quantity	Recommended ratio (item: learner)
A	Learning Materials			
	CBLM/TTLM	To be Prepared by the Trainer	25	1:1
	Reference Books	<ul style="list-style-type: none"> ✓ Visual hand book of wood work. ✓ General W-work (Grade 9-10) ✓ General wood working By Groneman ✓ Wood working Fundamentals. By Walansky ✓ Working with wood By Hutchings, Martin & Coleman 	5	1:5
B	Learning Facilities & Infrastructure			
	Lecture Room	25m ²	1	1:25
	Library	50m ²	1	1:25
	Work shop	50m ²	1	1:25
C	Consumable Materials			
	Eraser		25	1:1
	Masking tape		25	1:1
	Drawing Paper	A1	25	1:1
	Drawing Paper	A2	25	1:1
	Drawing Paper	A3	25	1:1
	Drawing Paper	A4	25	1:1
	Drawing pencil	Dot	25	1:1
	Fixer	0.5 ,0.7	25	1:1
D	Tools & Equipment			
	Drawing Instrument			
	☞ Drawing board		25	1:1
	☞ Set-square	30 ,60	25	1:1
	☞ Set-square	45	25	1:1
	☞ Triangular scale		25	1:1
	☞ Arch Template		25	1:1
	☞ T- square/Try-square		25	1:1
	☞ Compass		25	1:1
	☞ Divider		25	1:1

LEARNING MODULE- 05	
TVET-PROGRAMME TITLE:- FURNITURE MAKING Level- I	
MODULE TITLE:- Selecting Materials for Furniture Production	
MODULE CODE:- IND FMK1 M05 0919	
NOMINAL DURATION 60 <u>Hours</u>	
MODULE DESCRIPTION: This module covers the knowledge, skills and attitudes required to select timber and manufactured materials for use in the production of furniture.	
LEARNING OUTCOMES At the end of the module the learner will be able to: <ul style="list-style-type: none"> LO1. Determine materials requirement LO2. Evaluate selected materials LO3. Treat affected timber 	
MODULE CONTENTS Lo 1. Determine materials requirement <ul style="list-style-type: none"> 1.1 Observing relevant safety rules/OHS structure of wood 1.2 Properties of wood 1.3 Differentiating hard wood and soft wood • Indigenous trees and exotic 1.4 Manufactured material Lo 2. Evaluate selected materials <ul style="list-style-type: none"> 2.1 production plan 2.2 Moisture content of timber 2.3 density and working properties of timber: hardness....: 	

2.4 Defects of timber

2.5 Evaluation qualities of timber requirements.

LO 3. Treat affected timber

3.1 Arrangement of timbres according their sizes

3.2 Methods of drying/seasoning of timber

3.3 Grading of lumber

3.4. Timber treated with chemicals to eradicated wood parasites



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<p>attention of the trainees</p> <ul style="list-style-type: none"> ❖ Provide tutorial support (if necessary) 	<p>to operate equipments/ machines</p> <ul style="list-style-type: none"> ❖ 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Determine materials requirement

- Structural requirements for materials are determined from workplace documentation.
- Timber/manufactured materials are assessed for suitability in accordance with selection criteria.
- Written report is prepared substantiating selection of materials.

LO2 Evaluate selected materials

- Other materials which may be incorporated into furnishing item are identified.
- Compatibility factors to be considered are recorded for inclusion in production plans.
- Moisture content of timber selected is determined to ensure compliance with production requirements based on guideline and using appropriate tools/equipment.
- Density and working properties of timber are determined to ensure compliance with production requirements in line with working guideline.
- Any faults or features in the timber are identified and strategies are suggested to overcome/minimize their effects
- Timber is checked for fungus and insects according to the observed defect.
- Recommendations on any changes to appropriate finishes and adhesives are recorded for inclusion in production plans.

LO3 Treat affected timber

- Arrange timber according to thickness.
- Timber is dried with kiln or air drying according to specification.
- Timber is treated with appropriate chemicals to eradicate identified wood parasites.
- Timber is sent for production in accordance with job order
- OHS procedures and measures are observed throughout the process.

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Selecting Materials for Furniture Production IND FMK1 M05 0919				
Item No.	Category/Item	Description / Specifications	Quantity	Recommended Ratio (Item: learner)
A	Learning Materials			
	CBLM/TTLM	To be Developed by the Trainer	25	1:1
	Reference Books	❖ Visual hand book of wood work. ❖ General W-work (Grade 9-10) ❖ The essential Guide to wood work. ❖ Motive wood work Technology. ❖ General wood working by CHRIS H. GRONEMAN/ Third Edition ❖ General wood working by CHRIS H. GRONEMAN/ Six Edition	5	1:5
			5	1:5
B	Learning Facilities & Infrastructure			
	Lecture Room	25 ^{m2}	1	1:25
	Library	50 ^{m2}	1	1:25
	Work shop	50 ^{m2}	1	1:25
C	Consumable Materials			
	1.Wooden materials			
	Hard wood	Different Species		-
	Soft wood	Different Species		-
	2.Non wooden materials			
	☞ Metal ☞ Plastic ☞ Cotton ☞ Fabric ☞ Synthetic Lather ☞ Sponge	Deferent species		
D	Tools & Equipment			
	Moisture Meter	Censer and pin	5	1:5
	Weighting Instrument	-	1	1:25
	Kiln Instrument	-		



LEARNING MODULE-06

TVET-PROGRAMME TITLE: FURNITURE MAKING Level –I

MODULE TITLE:Using and Maintaining Hand and Power Tools

MODULE CODE:IND FMK1 M06 - 0919

NOMINAL DURATION 120 Hours

MODULE DESCRIPTION:This module covers the knowledge, skills and attitudes required to use and maintain hand and power tools in furniture making.

LEARNING OUTCOMES

At the end of the module the learner will be able to:

- LO1.** Select hand tools
- LO2.** Use hand tools
- LO3.** Maintain hand tools

MODULE CONTENTS

LO1. Select hand tools

- 1.1 safety rules and regulations on wood work shop
- 1.2 Hand Tools
 - 1.1 Measuring and testing tools
 - 1.2 Marking tools
 - 1.3 Hand saw;
 - 1.4 Chiseling tools
 - 1.5 Boring tools
 - 1.6 Smoothing & shaping tools
 - 1.7 Striking & fastening tools
 - 1.8 Holding & supporting tools
 - 1.9 Tightening tools.

1.10 Panches

1.11 Oil stonor girniding ston

1.3 Identify un save or dfactive tools

LO2. Use hand tools

2.1 Hand tools

2.2 power tools

2.2.1 portable jig saw

2.2.2 portable hand saw

2.2.3 portable router

2.2.4 portable drill

2.2.5 portable planer

2.2.6 portable electric sander

2.2.7 Giraniding Machine

LO 3. Maintain hand tools

3.1 Maintenance

3.2 Routine maintenance

3.3 handling of hand and power tools

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I





LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<p>attention of the trainees</p> <ul style="list-style-type: none"> ❖ Provide tutorial support (if necessary) 	<p>to operate equipments/ machines</p> <ul style="list-style-type: none"> ❖ 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Select hand tools

- Hand tools selected are appropriate to the requirements of task.
- Unsafe or defective tools are identified and marked for repair according to procedure..

LO2 Use hand tools

- Hand tools are used to produce the desired outcomes to job specifications.
- Grinding machine is used for sharpening blades
- Oil stone or grinding stone is used for sharpening blades finely.
- Task is performed in accordance with company or industry safety procedure.

LO3 Maintain hand tools

- Routine maintenance of hand tools is undertaken according to standard operating procedures, principles and techniques.
- Leveling blade by its angle is carried out for operation
- Fixing of jigs is done according to working procedure.
- Hand tools are stored in designated location in accordance with manufacturer's instruction/standard operating procedure.

Annex: Resource Requirements

Using and Maintaining Hand and Power Tools IND FMK1 M06- 0919				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A. Learning Materials				
1.	TTLM	Developed by trainers	25	1:1
2.	Textbooks			
3.	Reference Books	<ul style="list-style-type: none"> ☞ General wood working by CHRIS H. GRONEMAN/ Third Edition ☞ General wood working by CHRIS H. GRONEMAN/ Six Edition ☞ The motivate wood work technology by J.K.N SACKEY 	5	1:5
B. Learning Facilities & Infrastructure				
1.	Lecture Room	25m ²	1	1:25
2.	Library	50 m ²	1	1:25
3	Work shop	50 m ²		50 m ²
C. Consumable Materials				
1.	Grease	standard	1kg	1:25
2.	Lubricated oils	Standard	1 Liter	1:25
3.	Cleaning cloths	Fabric /Cotton	Meter	1:25
D. Tools and Equipment				
1	Hand tools	Standard	25	1:5
2	Power tools	Standard	5	1:5
3	Gloves, work clothes and shoes	Standard	25	1:1

LEARNING MODULE-07	
TVET-PROGRAMME TITLE: FURNITURE MAKING Level- I	
MODULE TITLE: Producing Hand Made Timber Joints	
MODULE CODE: IND FMK1 M07-0919	
NOMINAL DURATION: <u>140 Hours</u>	
MODULE DESCRIPTION: This module covers the knowledge, skills and attitudes required to join timber by producing joints using hand and portable power tools.	
LEARNING OUTCOMES At the end of the module the learner will be able to: <ul style="list-style-type: none"> LO1. Plan and prepare for work LO2. Make joint LO3. Complete housekeeping 	
MODULE CONTENTS 1. Plan and preparation of work <ul style="list-style-type: none"> 1.1 OHS requirements 1.2 Wood Joints 1.3 Selection of hand tools and raw materials 2. Make joint <ul style="list-style-type: none"> 2.1 interpret design 2.2 Lay out/mark lines 2.3 methods of cutting and joining 2.4 Fasteners/joining materials and adhesives 2.5 Joint quality finish requirements, accurate measurement & calculation 3. Complete House keeping <ul style="list-style-type: none"> 3.1 Unused materials are stored and recycled 3.2 Cleaning of tools and work area 	



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<p>attention of the trainees</p> <ul style="list-style-type: none"> ❖ Provide tutorial support (if necessary) 	<p>to operate equipments/ machines</p> <ul style="list-style-type: none"> ❖ 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Plan and prepare for work

- Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
- Tools, equipment and materials are selected and checked prior to use to ensure that all are appropriate for the work, serviceable and in a safe condition.
- Product purpose, furniture style and joint type are identified from workplace documentation/design.
- Tools, adhesives and fasteners are selected to match the joint type.

LO2 Make joint

- Cutting and joining lines are marked out to suit joint type based on design.
- Measurements and calculations are checked for accuracy to ensure quality outcomes.
- Timber is joined in accordance with work requirements..
- Fasteners and adhesives are used to make joints firm where required.
- Finished joint is checked against quality requirements.

LO3 Complete housekeeping

- Unused materials are stored or recycled as required.
- Tools and equipment are cleaned and stored appropriately.
- Work area is cleaned and rubbish disposed off in line with safety rules.
- Workplace documentation and/or reports are completed



Annex: Resource Requirements

Producing Hand Made Timber Joints IND FMK1 M07- 0919				
Item No.	Category/Item	Description / Specifications	Quantity	Recommended Ratio (Item: learner)
A	Learning Materials			
	CBLM/TTLM	To be Prepared by the Trainer	25	1:1
	Reference Books	☞ Visual hand book of wood work.	5	1:5
		☞ General W-work (Grade 9-10) ☞ he essential Guide to wood work. ☞ Motive wood work Technology.	5	1:5
B	Learning Facilities &Infrastructure			
	Lecture Room	25m ²	1	1:25
	Library	50m ²	1	1:25
	Work shop	50m ²	1	1:25
C	Consumable Materials			
	1.Wooden materials			
	✓ pines wood ✓ wanza ✓ kerero/Australia/	Well-seasoned		
D	Tools &Equipment			
	•Impelling Tools			
	✓ wooden mallet		25	1:1
	✓ Rubber mallet		25	1:1
	✓ Claw hammer		25	1:1
	•Marking Tools			
	✓ Marking gauge		25	1:2
	✓ Cutting gauge		25	1:2
	✓ Curve edge gauge		25	1:2
	✓ Trammels		25	1:2
	✓ Awl		25	1:2
	✓ Center punch		25	1:2
	✓ Mortise gauge		25	1:2



LEARNING MODULE-08

TVET-PROGRAMME TITLE: FURNITURE MAKING Level- I

MODULE TITLE: Operating Basic Woodworking Machines

MODULE CODE: IND FMK1 M09 0919

NOMINAL DURATION: 120 hrs

MODULE DESCRIPTION: This module covers the knowledge, skills and attitudes required to operate basic woodworking machines used for sawing, planing, sanding and drilling operations for the production of furniture.

LEARNING OUTCOMES

At the end of the module the learner will be able to:

- LO1.** Prepare for work
- LO2.** Operate machines
- LO3.** Clean up work area and maintain equipment

MODULE CONTENTS

1. prepare for work

- 1.1 OHS requirements: ventilation
- 1.2 Identify work instructions
- 1.3 Select materials Quality & quantity

2 Operate machines

- 2.1 Basic wood working machines
- 2.2 Check safety equipment
- 2.2** Set and adjust machines in accordance with manufacturers' instructions
- 2.3** Operate machines in accordance with manufacturers' instructions/in standard
- 2.4 Methods of minimizing wastes
- 2.5 Defected machines reported

3 Clean up work area and maintain equipment

- 3.1 methods of collecting and storing reused materials
- 3.2 Workplace procedures in dealing with wastes or scraps
- 3.3 Maintenance requirement for equipment serviceability
- 3.4 house keeping requirements



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<p>attention of the trainees</p> <ul style="list-style-type: none"> ❖ Provide tutorial support (if necessary) 	<p>to operate equipments/ machines</p> <ul style="list-style-type: none"> ❖ 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Prepare for work

- Work instructions are used to identify job requirements, including quality, materials, equipment, and quantities
- Workplace health and safety requirements, including ventilation requirements and personal protection needs, are observed throughout the work
- Material for machining is selected and inspected for quality
- Tools, equipment and machines, cutting tools and jigs are identified and checked for safe and effective operation

LO2 Operate machines

- Safety equipment, including emergency stops, gauges, guards and controls are checked.
- Machine start-up procedure is carried out in accordance with manufacturers' instructions.
- Material is fed into machine in accordance with manufacturers' instructions, safe handling procedures and standard workplace operating procedures.
- Machine is operated in accordance with its designed capacity and purpose, tooling requirements and to manufacturers' recommendations.
- Machine operation is monitored to ensure product quality and output.
- Waste quantities are checked and minimized.
- Items that do not meet quality requirements are recycled or discarded according to workplace procedures.
- Defective machines are identified and reported to appropriate persons

LO3 Cleanup work area and maintain equipment

- Material that can be reused is collected and stored following storage

procedure.

- Waste and scrap are removed following OHS procedures.
- Equipment and work area are cleaned and inspected for serviceable condition in accordance with workplace procedures
- Replacing and adjusting minor problems on hand tools and portable machines is performed according to guidelines.
- Unserviceable/un adjustable equipment is reported in accordance with workplace procedures

Annex: Resource Requirements

IND FMK1 MO8-0919 Operating basic wood working machines.

Item No.	Category/Item	Description / Specifications	Quantity	Recommended Ratio (Item: learner)
A	Learning Materials			
	•CBLM/TTLM	To be Prepared by the Trainer	25	1:1
	•Reference Books	✓ Visual hand book of wood work.	5	1:5
		✓ General wood work(grade 9-10) ✓ The essential Guide to wood work. ✓ Motive wood work Technology.	5	1:5

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



		✓ General wood working by CHRIS H. GRONEMAN/ three and Six Edition ✓ Working with Wood by SACKY		
B	Learning Facilities &Infrastructure			
	Lecture Room	10x10 Standard	1	1:25
	Library	10x10 Standard	1	1:25
	Work shop	20x25 standard	1	1:25
	-Lubricants			
	-Oils			
D	Tools &Equipment			
❖	Electric power Machines			
	➤ Radial Arm Saw	Germany	1	1:25
	➤ Jointer planer	Germany	1	1:25
	➤ Thickness Planer	Germany	1	1:25
	➤ Circular Saw	Germany	1	1:25
	➤ Drill Machine	Sweden	1	1:25
	➤ Mortise machine	Germany	1	1:25
	➤ Grinder Machine	Italy	1	1:25
	➤ Disk sander	Sweden	1	1:25



LEARNING MODULE-09

TVET-PROGRAMME TITLE: FURNITURE MAKING Level- I

MODULE TITLE:- Preparing Surfaces for Finishing

MODULE CODE: -IND FMK1 M09- 0919

NOMINAL DURATION:- 60 Hrs

MODULE DESCRIPTION: This module covers the knowledge, attitudes and skills required to carry-out surface preparation for finishing process.

LEARNING OUTCOMES

At the end of the module the learner will be able to:

- LO1.** Prepare for work
- LO2.** Prepare surfaces
- LO3.** Clean work area and maintain equipment

MODULE CONTENTS

1. Preparing for work

- 1.1. Determination of purpose of preparation of surface for finishing
- 1.2. OHS requirements
- 1.3 select tools and equipments with engineering control
- 1.4. Preparation of selective work area for the task
- 1.5 Identify work place procedures for surface preparation

2. Prepare surface

- 2.1 Surface preparation according to job specification for finishing/coating
- 2.2 Coating materials
- 2.2 Repairing wood surface defects/report

3. Clean work area and maintaining equipment

- 3.1. Methods of properly collecting and storage of materials
- 3.2 Maintenance & lubrication of equipments
- 3.3 Report defective equipments inspected for quality products

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I





LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<ul style="list-style-type: none"> attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Prepare for work

- Characteristics of the surface and the required surface coating materials are identified.
- OHS requirements, including personal protection needs, are observed throughout the work.
- Tools and equipment required are selected with related engineering controls identified and set up.
- Sources of contamination in work area are identified and excluded.
- Workplace procedures for surface preparation are identified and followed according to the surface and surface coating materials being used.

LO2 Prepare surfaces

- Surfaces are prepared according to specification, surface coating materials or finishing and workplace procedures.
- Surface preparation is checked for conformity with job specifications throughout the process.
- Rectification of surface preparation faults are made as required.
- Products are inspected and approved for suitability for further processing.
- Defects are rectified and/or reported in accordance with workplace procedures.

LO3 Clean work area and maintain equipment

- Prepared products are packed, stored and labeled ready for next process.
- Equipment used is cleaned and inspected for serviceable condition and stored appropriately.
- Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed.
- Chemicals used are stored or disposed off correctly according to safety regulations.
- Work area is cleaned ready for next process or task.

RESOURCE REQUIREMENTS

IND FMK1 MO09-0919 Prepare Surfaces for Finishing.

Item No.	Category/Item	Description / Specifications	Quantity	Recommended Ratio (Item: learner)
A	Learning Materials			
	CBLM/TTLM	To be Prepared by the Trainer	25	1:1
	Reference Books	☞ Visual hand book of wood work.	5	1:5
		☞ General W-work (Grade 9-10)	5	1:5
		☞ The essential Guide to wood work. ☞ Motive wood work Technology.		
B	Learning Facilities & Infrastructure			
	Lecture Room	25m ²	1	1:5
	Library	50m ²	1	1:5
	Work shop	50m ²	1	1:5
C	Consumable Materials			
	1.Wooden materials			
	✓ pines wood ✓ wanza ✓ kerero/Australia/	Well seasoned		

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



D	Tools &Equipment			
	clamp			
	✓ Vice			
	✓ Vice			
	✓ Wooden Bench			
	✓ Smoothing plane		25	1:1
	✓ oil stone		25	1:1
	✓ cabinet scrapers		25	1:1
	✓ chisels		25	1:1
	✓ File		25	1:1
	✓ air compressor and hoses		3	1.10
	✓ spanners		25	1:1
	✓ Different types of Glue		25	1:1
	✓ Varnish		25	1:1
	✓ Stucco /filler		25	1:1



LEARNING MODULE-10	
TVET-PROGRAMME TITLE: FURNITURE MAKING Level I	
MODULE TITLE: Applying Quality Standards	
MODULE CODE: IND FMK1 M010- 0919	
NOMINAL DURATION: 30 hrs	
MODULE DESCRIPTION: This module covers the skills and knowledge required in applying quality standards in furniture making.	
LEARNING OUTCOMES At the end of the module the learner will be able to: LO1. Assess own work. LO2. Assess quality of received articles LO3. Record information LO4. Study causes of quality deviations LO5. Complete documentation	
MODULE CONTENTS: LO1 Assess own work. 1.1 Quality Systems in a furniture industry 1.2 Impact of Work to Quality System LO 2 Assess quality of received articles 2.1 Concepts of Product Quality 2.2 Identification of Deviations from Standards 2.3 Recording and Reporting Procedures LO3 Record information 3.1 Characteristics of Materials/Articles 3.2 Quality Checks <ul style="list-style-type: none"> • Visual Inspection • Physical Measurements • Check Against Design/Specifications 4.1 Analyses on Quality Déviations LO4 Study causes of quality deviations 4.2 Préventive Actions LO5 Complete documentation 5.1 Quality Performance Indicators 5.2 Documentation Procedures	
Furniture Making Level I	Version:1 September 2019
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Page 75 of 106	



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ trainees ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<ul style="list-style-type: none"> attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 own work

- Instructions and procedures are followed and duties performed according to requirements of a quality system.
- Impact of quality system on own work is identified.

LO2 Assess quality of received articles

- Concepts of product quality in the workplace are identified.
- Work is continuously checked for compliance with quality standards relevant to the operation being undertaken.
- Impact of work activities on next in line process or final product outcomes is identified.
- Faulty pieces or final products are identified.
- Where required, the faults and any identified causes are recorded and reported to designated personnel.

LO3 Record information

- Received materials, component parts or final products are checked for compliance with quality standards and specifications.
- Impact of the received materials or component parts on next in line process or final outcomes is identified.
- Materials, component parts or products are measured, if and as required, using appropriate measuring techniques.
- Faulty materials or component parts related to the operator's work are identified and isolated.
- Where required, the faults and any identified causes are recorded and/or reported to the designated personnel.
- Causes of any identified faults are investigated and addressed by corrective action or referral to designated personnel.

LO4 Study causes of quality deviations

- Causes of deviations from specified quality standards for materials, component parts or final products are investigated and reported, as required, using appropriate measuring techniques.
- Suitable preventative action is recommended based on workplace quality standards.
- Deviations due to skill limitations are identified and further skill development sought.

LO5 Complete documentation

- Information on quality and other indicators of production performance is recorded
- All production processes and outcomes are recorded.



Annex: Resource Requirements

Applying Quality Standards IND FMK1 M10-0919				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A. Learning Materials				
1.	TTLM	Developed by trainers	25	1:1
2.	Textbooks			
3.	Reference Books	<ul style="list-style-type: none"> ○ General wood working by CHRIS H. GRONEMAN/ Third Edition ○ General wood working by CHRIS H. GRONEMAN/ Six Edition ○ The motivate wood work technology by J.K.N SACKKEY ○ The Quality Technician's Handbook, 6th Edition by Gary K. Griffith 	5	1:5
4.	Journals/Publication/ Magazines			
B. Learning Facilities & Infrastructure				
1.	Lecture Room	25m ²	1	1:25
2.	Library	50 m ²	1	1:25
3	Work shop			
C. Consumable Materials				
1.	Notebook			1:1
2.	A4 paper			
3.	Graphing papers			
4.	Calculator			1:1
D. Tools and Equipments				
1	Hand tools		25	1:5
2	Power tools		5	1:5
3	Gloves, work clothes and shoes		25	1:1



LEARNING MODULE-11	
TVET-PROGRAMME TITLE: FURNITURE MAKING Level I	
MODULE TITLE: Receiving and Responding to Workplace Communication	
MODULE CODE: IND FMK1 M11-0919	
NOMINAL DURATION: <u>30 hrs</u>	
MODULE DESCRIPTION: This module covers the knowledge, skills and attitudes required to receive, respond and act on verbal and written communication.	
LEARNING OUTCOMES At the end of the module the learner will be able to: <ul style="list-style-type: none"> LO1. Follow routine spoken messages LO2. Perform workplace duties following written notices 	
MODULE CONTENTS: Lo 1 Follow routine spoken messages. <ul style="list-style-type: none"> √ Gathering information by listening. √ Accuracy or in recording messages/information. √Applying or acting instruction or information. √ Clarification of work place instruction/ information Lo 2 Perform workplace duties following written notices. <ul style="list-style-type: none"> √ Reading written notes and instruction. √ Routine written instruction. √ Give feedback to workplace supervisor based on the instructions/information received. 	



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<ul style="list-style-type: none"> attention of the trainees ❖ Provide tutorial support (if necessary) 	<ul style="list-style-type: none"> 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Follow routine spoken messages

- Required information is gathered by listening attentively and correctly interpreting or understanding information/instructions
- Instructions/Information are properly recorded
- Instructions are acted upon immediately in accordance with information received
- Clarification is sought from workplace supervisor on all occasions when any instruction/information is not clear.

LO2 Perform workplace duties following written notices

- Written notices and instructions are read and interpreted correctly in accordance with organizational guidelines.
- Routine written instructions are followed in sequence.
- Feedback is given to workplace supervisor based on the instructions/information received.

Annex: Resource Requirements

Receiving and Responding to Workplace Communication IND FMK1 M11-0919				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A	Learning Materials			
1.	TTLM	Developed by trainers	25	1:1
2.	Textbooks			
3.	Reference Books	<ul style="list-style-type: none"> Workplace communication; The Basics by George J. Searles Workplace Communication: Process and Product by Steven Gerson 	5	1:5
4.	Journals/Publication/Magazines			
B	Learning Facilities & Infrastructure			
1.	Lecture Room	25m ²	1	1:25
2.	Library	50 m ²	1	1:25
3	Work shop			
4.	Joint samples (different types)			1:5
C	Consumable Materials			
1.	Notebook			1:1
2.	A4 paper			1:1
3.	Pens			1:1
D	Tools and Equipments			
1	Production tools and equipment	According to assigned work		

LEARNING MODULE-12	
TVET-PROGRAMME TITLE:- FURNITURE MAKING Level I	
MODULE TITLE:- Demonstrating Work Values	
MODULE CODE:- IND FMK1 M11 0919	
NOMINAL DURATION:- <u>30 Hrs</u>	
MODULE DESCRIPTION: This module covers the knowledge, skills, and attitude needed in demonstrating proper work values.	
LEARNING OUTCOMES At the end of the module the learner will be able to: <ul style="list-style-type: none"> LO1. Define the purpose of work LO2. Apply work values/ethics LO3. Deal with ethical problems LO4. Maintain integrity of conduct in the workplace 	
MODULE CONTENTS: LO1 Define the purpose of work <ul style="list-style-type: none"> 1.1 Self-awareness 1.2 Company's Values and Ethical Standards LO2 Apply work values/ethics <ul style="list-style-type: none"> 1.1 Desirable Work Values/Ethics Towards <ul style="list-style-type: none"> 2.1.1. Co-workers 2.1.2. Clients 2.1.3. Company Resources 2.2 Work Practices 2.3 Fundamental Rights at Work 2.4 Company resources 	

LO3 Deal with ethical problems

- 3.1. Types of Work Incidents/Situations
- 3.2. Ways of Dealing with Ethical Problems

LO4 Maintain integrity of conduct in the workplace

- 4.1. Application of Good Manners and Right Conduct
 - 4.1.1. Interpersonal Skills
 - 4.1.2. Communication Skills
 - 4.1.3. Compliance to Company Code of Conduct/Values



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<p>attention of the trainees</p> <ul style="list-style-type: none"> ❖ Provide tutorial support (if necessary) 	<p>to operate equipments/ machines</p> <ul style="list-style-type: none"> ❖ 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 members to speak loudly 	<ul style="list-style-type: none"> ❖ Introduce the trainees with their peers
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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Define the purpose of work

- 1.1 One's unique sense of purpose for working and the 'whys' of work are identified, reflected on and clearly defined for one's development as a person and as a member of society.
- 1.2 Personal mission is in harmony with company's values

LO2 Apply work values/ethics

- 2.1 Work values/ethics/concepts are classified and reaffirmed in accordance with the transparent company ethical standards, policies and guidelines.
- 2.2 Work practices are undertaken in compliance with industry work ethical standards, organizational policy and guidelines
- 2.3 Personal behavior and relationships with co-workers and/or clients are conducted in accordance with ethical standards, policy and guidelines.
- 2.4 Company resources are used in accordance with transparent company ethical standard, policies and guidelines.

LO3 Deal with ethical problems

- 3.1 Company ethical standards, organizational policy and guidelines on the prevention and reporting of unethical conduct are accessed and applied in accordance with transparent company ethical standard, policies and guidelines.
- 3.2 Work incidents/situations are reported and/or resolved in accordance with company protocol/guidelines.
- 3.3 Resolution and/or referral of ethical problems identified are used as learning opportunities.

LO4 Maintain integrity of conduct in the workplace

- 4.1 Personal work practices and values are demonstrated consistently with acceptable ethical conduct and company's core values.
 - 4.2 Instructions to co-workers are provided based on ethical, lawful and reasonable directives.
- Company values/practices are shared with co-workers using appropriate behavior and language.



Annex: Resource Requirements

Demonstrating Work Values IND FMK1 M12- 0919				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A. Learning Materials				
1.	TTLM	Developed by trainers	25	1:1
2.	Textbooks			
3.	Reference Books	<ul style="list-style-type: none"> ○ Organisational Behaviour: Core Concepts. 6th Edition by Vecchio (2006). ○ Behaviour in organizations: Understanding and managing the Human side of work, 6th ed by Greenberg, J. & Baron, R. A ○ 'Work value and job rewards: A theory of job satisfaction' By Kalleberg, A. L. ○ Working with Wood by SACKY 	5	1:5
B. Learning Facilities & Infrastructure				
1.	Lecture Room	25m ²	1	1:25
2.	Library	50 m ²	1	1:25
3	Work shop			
C. Consumable Materials				
1.	Notebook			
2.	A4 paper			
D. Tools and Equipments				
1	Production tools and equipment	According to assigned work		



LEARNING MODULE-13	
TVET-PROGRAMME TITLE: FURNITURE MAKING Level I	
MODULE TITLE: Developing Understanding of Entrepreneurship	
MODULE CODE: IND FMK1 M13 0919	
NOMINAL DURATION: <u>60 Hrs</u>	
<p>MODULE DESCRIPTION: This module covers skills, knowledge and attitude required to understand the principles, functions, strategies and methods of entrepreneurship. It also covers identifying and developing the major entrepreneurial competences.</p>	
<p>LEARNING OUTCOMES</p> <p>At the end of the module the learner will be able to:</p> <ul style="list-style-type: none"> LO1. Describe and explain the principles, concept and scope of entrepreneurship LO2. Discuss how to become entrepreneur LO3. Discuss how to organize an enterprise LO4. Discuss how to operate an enterprise LO5. Develop one's own business plan 	
<p>MODULE CONTENTS</p> <p>LO1 Describe and explain the principles, concept and scope of entrepreneurship</p> <ul style="list-style-type: none"> 1.1 Meaning and Scope of enterprising 1.2 Defining entrepreneurship and entrepreneurs 1.3 Functions of entrepreneurship 1.4 Principles of entrepreneurship 1.5 Entrepreneurial motivation <p>LO2 Discuss how to become an entrepreneur</p> <ul style="list-style-type: none"> 2.1 Assessing own potential to be future entrepreneur 2.2 Basic competencies of successful entrepreneurship 2.3 Risk assessment and their management 2.4 Meaning of self-employment 	

LO3 Discuss how to organize an enterprise

- 3.1 Importance of entrepreneurship in the society
- 3.2 Meaning of small and medium enterprises
- 3.3 The importance and role of small and medium enterprises
- 3.4 Key success factors in setting up small and medium enterprises
- 3.5 Generating business ideas using appropriate tools and techniques
- 3.6 Identifying and selecting suitable market for a business
- 3.7 Money needed to start an enterprise
- 3.8 Obtaining money to start an enterprises

LO4 Discuss how to operate an enterprise

- 4.1 Identifying ways of getting into business
- 4.2 Managing time
- 4.3 Managing sales
- 4.4 Selecting suppliers
- 4.5 Using technology in small and medium enterprises
- 4.6 Knowing business costs and their management
- 4.7 Financial record keeping and preparing financial statement

LO5 Develop one's own business plan

- 5.1 Meaning and concepts of business plan
- 5.2 The reason for preparing a business plan
- 5.3 Process of preparing/ writing a business plan
- 5.4 Standard structure and format of a business plan
- 5.5 Interpreting, assessing and analyzing findings of the business plan /optional



LEARNING METHODS:

For None Impaired Trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision and Blind	Deaf	Hard of hearing	Physical impairment
Lecture-discussion	<ul style="list-style-type: none"> ❖ Provide large print text ❖ Prepare the lecture in Audio/video & in Brail format ❖ 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 ❖ Summarize main points 	<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
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 	<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 	<ul style="list-style-type: none"> ❖ Illustrate in clear & short method ❖ Use Video recorded material ❖ Ensure the 	<ul style="list-style-type: none"> ❖ Facilitate and support the trainees having severe upper limbs impairment



	<ul style="list-style-type: none"> ❖ Prepare & use simulation 	<ul style="list-style-type: none"> ❖ Use gesture ❖ Provide tutorial support(if necessary) 	<p>attention of the trainees</p> <ul style="list-style-type: none"> ❖ Provide tutorial support (if necessary) 	<p>to operate equipments/ machines</p> <ul style="list-style-type: none"> ❖ Assign peer trainees to assist ❖ Conduct close follow up ❖ Provide tutorial support (if necessary)
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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

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



Written test	<ul style="list-style-type: none"> ❖ Prepare the exam in large texts/Brail ❖ 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/Brail ❖ 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 extensionn 	<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 Describe and explain the principles, concepts and scope of entrepreneurship

- The principles, concept and terminology of entrepreneurship are analyzed and discussed
- The various forms of enterprises in the community are identified and their roles understood.
- The identified enterprises are categorized and classified
- The terms and elements involved in the concept of enterprising, both on a personal level and in the context of being enterprising in business are identified and interpreted.
- Functions of entrepreneurship in business and how the entrepreneurs improved business and economic development are explained..

LO2 Discuss how to become an entrepreneur

- Self-employment as an alternative option for an individual economic independence and personal growth is discussed and analyzed.
- Advantages and disadvantages of self-employment are discussed and explained
- Entrepreneurial characteristics and traits are identified and discussed.
- Self-potential is assessed to determine if qualified to become a future entrepreneur.
- Major competences of successful entrepreneurship are identified and explained.



LO3 Discuss how to organize an enterprise

- The importance and role of business entrepreneurship in the society are discussed and correlated to the operations of the economy.
- Facts about small and medium enterprises are discussed, clarified and understood.
- Key success factor in setting-up small and medium business are identified and explained.
- Business opportunities are identified and assessed.
- Business ideas are generated using appropriate tools, techniques and steps.
- Procedures for identifying suitable market for business are discussed and understood
- .Major factors to consider in selecting a location for a business are identified and discussed.
- Basic types of business ownership are identified and explained.
- Amount of money needed to start an enterprise estimated and distinction between pre-operations and initial operation payments clarified.
- Advantages and disadvantages of using various sources of capital to start an enterprise are identified.

LO4 Discuss how to operate an enterprise

- Disadvantages and advantages of three alternative means of becoming an entrepreneur are identified and understood
- Process of hiring and managing people is discussed and explained



- The importance and techniques of managing time are discussed and understood
- The techniques and procedures of managing sales are discussed and explained
- Factors to consider in selecting suppliers and the steps to follow when doing business with them are identified and discussed
- Awareness of how new technologies can affect small and medium business are developed
- Characteristics of appropriate technology for use in small and medium business are identified and explained
- Different types of cost that occur in a business and how to manage them are discussed and understood
- Factors and procedures in knowing the cost of the enterprise are discussed and understood
- Importance of financial record keeping and preparing simple financial statement are explained and understood
- The application of self-management skills and negotiation skills are discussed in operating a business
- Risk assessment and management of business enterprise are performed

L05 Develop one's own business plan



- Process of preparing/ writing a business plan is discussed and applied
- Standard structure and format are applied in preparing business plan
- Findings of the business plan are interpreted, assessed and analyzed
- Feasibility of the business idea is made clear and understandable
- Problems that may arise or encounter when starting a business are identified and understand
- Techniques and procedures in obtaining and sourcing information are discussed and understood



Annex: Resource Requirements

Developing Understanding of Entrepreneurship IND FMK1 M13 0919				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommend ed Ratio (Item: Learner)
A. Learning Materials				
1.	TTLM	Developed by trainers	25	1:1
2.	Textbooks			
3.	Reference Books	<ul style="list-style-type: none"> Entrepreneurial Competencies, motivation, Performance and Rewards By: Jyotsna Sethi, Dr. Anand Saxena The Entrepreneur: Mainstream Views and Radical Critiques, 2nd edition by Hebert, R.F. and Link, A.N. 	5	1:5
4.	Journals/Publication/Magazines			

Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



B.	Learning Facilities & Infrastructure			
1.	Lecture Room	25m ²	1	1:25
2.	Library	50 m ²	1	1:25
3.	Work shop			
C.	Consumable Materials			
1.	Notebook			1:1
2.	A4 paper			
3.	Graphing papers			
4.	Calculator			1:1
D.	Tools and Equipments			
1	Production tools and equipment	According to assigned work		

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Furniture Making Level I	Version:1 September 2019	Page 105 of 106
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Ethiopian TVET-System Curriculum For FURNITURE MAKING LEVEL I



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Furniture Making Level I	Version:1 September 2019	Page 106 of 106
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