



SODDO POLY TECHNIC COLLEGE

OUTCOME BASED Curriculum

FOOTWEAR PRODUCTION

Level II

Based on
Occupational Standard (OS)
(ADAPTED FOR INCLUSIVE TRAINING)

June 2016
Hawassa

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 **SODDO POLY TECHNIC COLLAGE**.

This curriculum has been developed by a group of experts from **SODDO POLY TECHNIC COLLAGE**. Based on the occupational standard for footwear. It has the character of an **OUT COME BASED** and is an example on how to transform the occupational requirements as defined in the corresponding occupational standard into an adequate curriculum.

The curriculum development process has been actively supported and facilitated by the **SODDO POLY TECHNIC COLLAGE.AND PEOPLE IN NEED** technical support to the regions.

TVET-Program Design

1.1. TVET-Program Title: Footwear Production Level II

1.2. TVET-Program Description

The Program is designed 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 a **footwear production operator** 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 **footwear production**.

The prime objective of this training program is to equip the learners with the identified competences specified in the OS. Graduates are therefore expected to be able to Perform **Leather Grading Operations, Estimate Upper Material Requirement for Footwear, Develop Basic Understanding of Leather Manufacturing Processes, and Perform Closing of Uppers, Perform Bottom Components Operations, Perform Minor Maintenance, Perform Basic Lasting Operations, Perform Footwear Finishing Operations, Apply Basic Ergonomics Principles, Participate in Workplace Communication, Work in Team Environment, Develop Business Practice, Apply Continuous Improvement Processes (Kaizen)** in accordance with the performance criteria described in the OS.

1.3. TVET-Program Learning Outcomes

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

IND FWP2 01 0112	Perform Leather Grading Operations
IND FWP 2 02 0112	Estimate Upper Material Requirement for Footwear
IND FWP2 03 0112	Develop Basic Understanding of Leather Manufacturing Processes
IND FWP2 04 0112	Perform Closing of Uppers
IND FWP2 05 0112	Perform Bottom Components Operations
IND FWP2 06 0112	Perform Minor Maintenance
IND FWP2 07 0112	Perform Basic Lasting Operations
IND FWP2 08 0112	Perform Footwear Finishing Operations

IND FWP2 09 0112	Apply Basic Ergonomics Principles
IND FWP2 10 0112	Participate in Workplace Communication
IND FWP2 11 0112	Work in Team Environment
IND FWP2 12 0112	Develop Business Practice
IND FWP2 13 1012	Apply Continuous Improvement Processes (Kaizen)

1.4. Duration of the TVET-Program

The Program will have duration of **240 hours** excluding the on-the-job practice or cooperative training time but including civic education.

1.5. Qualification Level and Certification

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

The trainee is required to successfully complete all learning modules in this training program to be awarded the equivalent institutional certificate on this level.

1.6 Target Groups

Any citizen who meets the entry requirements under items 1.7 and capable of participating in the learning activities is entitled to take part in the Program.

1.7 Entry Requirements

The prospective participants of this program are required to possess the requirements or directive of the Ministry of Education. And also need to pass level I in leather goods and garment production.

1.8 Mode of Delivery

This TVET-Program is characterized as a formal Program on middle level technical skills. The mode of delivery includes 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 trainees 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 trainees are exposed to the industry environment.

1.9 TVET-Program Structure

Unit of Competence		Module Code and Title		Learning Outcomes	Duration (in Hours)
IND FWP2 01 0112	Perform Leather Grading Operations	IND FWP2 M01 0616	Performing Leather Grading Operation	<ul style="list-style-type: none"> Describe principles, and concepts of leather grading Determine defects of leather Determine and perform measurement of defective area Perform quality check on the leather Assess grade of the leather Determine financial implication on procurement of leather 	30
IND FWP 2 02 0112	Estimate Upper Material Requirement for Footwear	IND FWP2 M02 0616	Estimating upper material Requirement for Footwear	<ul style="list-style-type: none"> Describe principles, and concepts upper material estimation Obtain and convey footwear specification Determine and perform parallelogram area of the pattern Determine second wastage Determine material estimation for one pair Perform synthetic material estimation 	15
IND FWP2 03 0112	Develop Basic Understanding of Leather Manufacturing	IND FWP3 M03 0616	Developing Basic Understanding of Leather manufacturing processes	<ul style="list-style-type: none"> Describe leather processing Describe basic structure of the skin Describe basic tanning process Explain basic crusting process 	18

Processes				<ul style="list-style-type: none"> • Explain basic finishing operation and storage 	
IND FWP2 04 0112	Perform Closing of Uppers	IND FWP2 M04 0616	Performing closing uppers	<ul style="list-style-type: none"> • Set up sewing machine • Perform sewing operation • Perform closing of upper • Check machine performance • Check stitched components • Dispatch completed work • Perform folding operations • Perform eye-letting operations 	35
IND FWP2 05 0112	Perform Bottom Components Operations	IND FWP2 M05 0616	Performing Bottom Components Operations	<ul style="list-style-type: none"> • Identify and prepare tools, materials and equipment • Perform bottom component operations • Assess final quality of the bottom components 	20
IND FWP2 06 0112	Perform Minor Maintenance	IND FWP2 M06 2216	Performing Minor Maintenance	<ul style="list-style-type: none"> • Prepare for basic routine maintenance • Carry out basic routine maintenance • Complete basic routine maintenance 	10
IND FWP2 07 0112	Perform Basic Lasting Operations	IND FWP2 M07 0616	Performing basic lasting operations	<ul style="list-style-type: none"> • Identify tools, materials and equipment • Perform basic lasting procedure • Identify and perform post manual lasting operations • Determine quality check of the finished pair • 	9

IND FWP2 08 0112	Perform Footwear Finishing Operations	IND FWP2 M08 0616	Performing Finishing Operations	<ul style="list-style-type: none"> • Prepare workstation • Finish work • Dispatch footwear • 	22
IND FWP2 09 0112	Apply Basic Ergonomics Principles	IND FWP2 M09 0616	Applying Basic Ergonomics principles	<ul style="list-style-type: none"> • Describe basics of human factors engineering • Design workplace • Apply design 	15
IND FWP2 10 0112	Participate in Workplace Communication	IND FWP2 M10 0616	Participating in workplace communication	<ul style="list-style-type: none"> • Obtain and convey workplace information • Participate in workplace meetings and discussions • Complete relevant work related documents • 	10
IND FWP2 11 0112	Work in Team Environment	IND FWP2 M11 0616	Working in team environment	<ul style="list-style-type: none"> • Describe team role and scope • Identify own role and responsibility within team • Work as a team member • 	11
IND FWP2 12 0112	Develop Business Practice	IND FWP2 M12 0616	Developing Business Practice	<ul style="list-style-type: none"> • Identify business opportunity • Identify personal business skills • Plan for establishment of business operation • Implement establishment plan • Review implementation process 	25

IND FWP2 13 1012	Apply Continuous Improvement Processes (Kaizen)	IND FWP2 M13 0616	Applying continuous Improvement Process	<ul style="list-style-type: none"> • Satisfy quality system requirements in daily work • Analyze opportunities for corrective and/or optimization action • Recommend corrective and/or optimization actions • Participate in the implementation of recommended actions • Participate in the development of continuous improvement strategies 	20
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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 trainee 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, formative evaluation provides information for making instruction and remedial work more effective. The LAP Tests serve as the formative assessment.

Summative Evaluation the other form of evaluation is given when all the modules in the program have been accomplished. It determines the extent to which competence have been achieved. And, the result of this assessment decision shall be expressed in the term 'competent or not yet competent'.

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

1.11 TVET Trainers Profile

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

Other requirements –

- Must have completed Trainer's Methodology Course II (TM II)
- Must have attended relevant training and seminars
- Must have at least 1 year industry experience

1.12 Learning Modules

LEARNING MODULE 01	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Performing Leather Grading Operation	
MODULE CODE: IND FWP2 M01 0616	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers knowledge and skills related to the estimation of the grade of the leather based upon the defects, purchase cost variance.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Describe principles, and concepts of leather grading LO2 Determine defects of leather LO3 Determine and perform measurement of defective area LO4 Perform quality check on the leather LO5 Assess grade of the leather LO6 Determine financial implication on procurement of leather	
MODULE CONTENTS: L01. Describe principles, and concepts of leather grading 1.1 principle and concepts of leather grading 1.2 methods of leather grading 1.3 Types of defects 1.3.1 scar marks 1.3.2 wrinkles 1.3.3 brand marks 1.3.4 flay cuts 1.3.5 scratches 1.3.6 tick marks 1.3.6 warble holes 1.3.7 growth marks 1.4 leather grading 1.4.1 full grain leathers 1.4.2 corrected grain 1.4.3 nap based leathers L02. Determine defects of leather 2.1 Types of defects on the leather 2.2 Defects on the leather 2.3 Effect of defects on the footwear L03. Determine and perform measurement of defective area 3.1 method of determination of the area of grid	

- 3.2 method of measuring
- 3.3 method of measuring on leather
- 3.4 Defect area measurement on leather

L04 Perform quality check on the leather

- 4.1 physical tests (non laboratory) on the leather
- 4.2 Method of physical testing
- 4.3 Method of sample selection
- 4.4 Characteristics of the leather
 - 4.4.1 grading of a leather
 - 4.4.2 measure of the defects
 - 4.4.3 defects on leather
 - 4.4.4 check leather

L05 Assess grade of the leather

- 5.1 grade of leather
- 5.2 cutting value and suitability for the footwear
- 5.3 Storage and bundling of the leather

L06. Determine financial implication on procurement of leather

- 6.1 The reassessment on the value of received consign
- 6.2 The purchase cost variance from the consignment.
- 6.3 Accessories and equipment.
 - 6.3.1 calculator(simple)
 - 6.3.2 grid (leather measuring)
 - 6.3.3 white pencil(glass marking)
 - 6.3.4 markers/ sketch pen
 - 6.3.5 hand cutting knife
 - 6.3.6 white cloth
 - 6.3.7 thickness gauge
 - 6.3.8 cello tape
 - 6.3.9 brown paper

LEARNING STRATEGIES:

	Reasonable Adjustment For Trainees With Disability(TWD)		
	hard of hearing	Visual impairment	Physical disability
Lecture-discussion	<ul style="list-style-type: none"> ➤ Slide presentation during lecture-discussion ➤ Sign language interpreter ➤ Give Softcopy/printed lecture material before class 	<ul style="list-style-type: none"> ➤ Give Braille printed lecture material before class ➤ Bold print for low vision 	<ul style="list-style-type: none"> ➤ Give Softcopy/printed lecture material before class

	➤ Provide the lecture in titled Video/ Film		
Demonstration	➤ Provide recorded video of demonstration ➤ Sign language interpreter	➤ Provide audio recorded demonstration instruction	Making special assistant during work/assignment as per necessary
Group work/individual assignment	➤ Sign language interpreter	➤ Assign Guide/assistant/ ➤ Provide audio recorded work/assignment instruction	Making special assistant during work/assignment as per requirement Group the trainee with Person without disability

ASSESSMENT METHODS:

Written tests	➤ Sign language interpreter Question in written form		
Oral question		➤ Braille printed test ➤ Alter to Oral question ➤ Additional time for assessment	Additional time for assessment ➤ If written exam is not comfortable alter to Oral exam
Demonstration	➤ Sign language interpreter	➤ Guide/assistant ➤ Making special assistant during work/assignment as per requirement ➤ Additional time for assessment if necessary	➤ Making special assistant during work/assignment as per requirement Additional time for assessment if necessary

ASSESSMENT CRITERIA:
L01. Describe principles, and concepts of leather grading

- 1.1 Principle and concepts of leather grading are described.
- 1.2 Methods of leather grading are explained.
- 1.3 Types of **defects** are identified.
- 1.4 Objective of the **leather** grading are described.

L02. Determine defects of leather

- 2.4 Types of defects on the leather are described.
- 2.5 Defects on the leather are identified.

2.6 Effects of defects on the footwear are described.

L03. Determine and perform measurement of defective area

3.5 Method of determination of the area by grid method are described and performed on paper.

3.6 Method of measuring by fest method are described and performed.

3.7 Method of measuring of leather are described.

3.8 The defect area measurement on leather through grid system is performed.

L04 Perform quality check on the leather

4.5 Various physical tests (non laboratory) on the leather are described and performed.

4.6 Method of physical testing are performed.

4.7 Method of sample selection are described and demonstrated.

4.8 **Characteristics** of the leather are checked.

L05 Assess grade of the leather

5.4 The average grade of the leather lot is determined.

5.5 The leather is evaluated for the cutting value and suitability for the footwear manufacturing.

5.6 Storage and bundling of the leather is performed.

L06. Determine financial implication on procurement of leather

6.4 The reassessment on the value of received consignment is performed.

6.5 Determine the purchase cost variance from the consignment.

6.6 **Accessories and equipment** to be used are checked.

Module Code and Title : - IND FWP2 M01 0616- Performing Leather Grading Operation					
Item No.	Category/Item	Description/ Specifications	Reasonable Adjustment For TWD	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(soft copy, etc)	25	1:1
2.	Travel goods/upholstery/domestic items making	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
3.	Leather Goods Maker (Travel)	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
4.	Leather Goods and Sports Goods Maker	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
5.	Leather goods designing and manufacturing	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
6	Pattern and template maker	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	5	1:5
7.	Reference Books	New	Braille print	5	1:5
8.	Journals/Publication/Magazines	Recent	In electronic form(soft copy, etc)	3	1:8
B.	Learning Facilities & Infrastructure				

1.	Class room	10X20 CM		1	1:25
2.	Workshop	15 X30 CM		1	1:25
3.	Visual training media (LCD, Laptops, OHP, transparencies, black board, white board, flip chart)			1	1:25
C.	Consumable Materials				
1	Paper	4GOLD A 4		1 Pack	1:5
2	Pencil	HP		25	1:1
D.	Tools and Equipment				
1	Measuring tape			25	1:1
2	Ruler			25	1:1
3	Thickness gauge			25	1:1
4	Try-square			25	1:1
5	Protractor			25	1:1

LEARNING MODULE 02	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Estimating Upper Material Requirement for Footwear	
MODULE CODE: IND FWP2 M02 2216	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers knowledge and skills related to the estimation of the upper material consumption for footwear.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Describe principles, and concepts upper material estimation LO2 Obtain and convey footwear specification LO3 Determine and perform parallelogram area of the pattern LO4 Determine second wastage LO5 Determine material estimation for one pair LO6 Perform synthetic material estimation	
MODULE CONTENTS: L01. Describe principles, and concepts upper material estimation 1.1 The principle and concepts of material estimations 1.2 methods of material estimation 1.3 Purpose of material estimation. L02. Obtain and convey footwear specification 2.1 Obtained and checked for the completeness. 2.2 Determine No. of components per pair 2.3 Type of footwear. Upper and lining patterns of various design such as: <ul style="list-style-type: none"> • derby • oxford • slip on • moccasins • boots 2.4 Determined Material type. L03. Determine and perform parallelogram area of the pattern 3.1 Fundamental of parallelogram . 3.2 Zero degree method of construction of the parallelogram 3.3 One eighty degree method of construction of parallelogram 3.4 Selection of method of construction of the parallelogram ,	

3.5 Determination of the parallelogram area ,

L04. Determine second wastage

4.1 Size of leather.

- cow
- goat/kid
- sheep
- nu buck
- suede

4.2 Relationship between pattern area and leather.

4.3 Use of different methods applicable to different types of leather and pattern.

4.4 Second waste.

L05 Determine material estimation for one pair

5.1 Grade of the leather.

5.2 Estimation of the material consumption.

5.3 Accessories and equipment.

- calculators(simple)
- scale
- pencils
- erasers
- graph sheets (a1 size or equivalent size)
- brown paper

L06 Perform synthetic material estimation

6.1 Synthetic and leather material.

6.2 Tracing method.

6.3 Consumption of synthetic.

6.4 Characteristics of leather.

6.4.1 differentiate between synthetic and leather estimation material

6.4.2 Able to make parallelogram with maximum permissible Error of +/- 2 mm between opposite sides.

6.4.3 Method after verifying the patterns.

6.4.5 Able to compute material estimation per pair of footwear using graphical method (RSM).

6.4.6 Different methods of material estimations.

LEARNING STRATEGIES:

Reasonable Adjustment For Trainees With Disabilities(TWD)

	hard of hearing	Visual Impairment	Physical disability
Lecture/Discussion	<ul style="list-style-type: none"> ➤ Sign language interpreter ➤ use slide presentation 	<ul style="list-style-type: none"> • Recorded lecture/discussion voice 	Provide softcopy/lecture material before class
Demonstration	<ul style="list-style-type: none"> • Sign language interpreter 	<ul style="list-style-type: none"> • Guide/assistant 	
Group work/Individual assignment	<ul style="list-style-type: none"> ➤ Sign language interpreter 		
ASSESSMENT METHODS:			
Oral questioning	<ul style="list-style-type: none"> • Sign language interpreter • Question in written form 		
Written test		<ul style="list-style-type: none"> • Braille written test 	
Demonstration	<ul style="list-style-type: none"> • Sign language Interpreter 	<ul style="list-style-type: none"> • Guide/assistant/peer 	

ASSESSMENT CRITERIA:

L01. Describe principles, and concepts upper material estimation

- 1.4 The principle and concepts of material estimations are described.
- 1.5 The different methods of material estimation are described.
- 1.6 The purpose of material estimation is described.

L02. Obtain and convey footwear specification

- 2.5 Patterns are obtained and checked for the completeness.
- 2.6 No. of components per pair is determined.
- 2.7 Type of **footwear** is determined.
- 2.8 Material type is determined.

L03. Determine and perform parallelogram area of the pattern

- 3.6 Fundamental of parallelogram is described.
- 3.7 Zero degree method of construction of the parallelogram is performed.
- 3.8 One eighty degree method of construction of parallelogram is performed.
- 3.9 Selection of method of construction of the parallelogram is described.
- 3.10 Determination of the parallelogram area is described and performed.

L04. Determine second wastage

- 6.4 Size of **leather** is determined.
- 6.5 Relationship between pattern area and leather size is described.
- 6.6 Use of different methods applicable to different types of leather and pattern condition is described.
- 6.7 Second waste computation is performed.

L05 Determine material estimation for one pair

- 5.4 The average grade of the leather is determined.
- 5.5 Estimation of the material consumption is performed based upon the grade of the material is determined.
- 5.6 **Accessories and equipment** are determined.

L06 Perform synthetic material estimation

- 6.5 Difference between synthetic and leather material is described.
- 6.6 Tracing method is performed.
- 6.7 Consumption of synthetic material is performed.
- 6.8 **Characteristics** of leather materials are determined.

Module Code and Title : - IND FWP2 M02 0616– Estimating upper material Requirement for Footwear					
Item No.	Category/Item	Description/ Specifications	Reasonable Adjustment For(TWD)	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(soft copy, audio, video etc) and Braille form	25	1:1
2.	Travel goods/upholstery/domestic items making	National Instructional Media Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
3.	Leather Goods Maker (Travel)	National Instructional Media Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
4	Pattern and template maker	National Instructional Media Institute, Chennai	In electronic form(soft copy, etc)	5	1:5
5.	Reference Books		Braille print	5	1:5
6.	Journals/Publication/Magazines	Recent	In electronic form(soft copy, etc)	3	1:8
B.	Learning Facilities & Infrastructure				
1.	Class room	10 X20 M		1	1:25
2.	Workshop	15 X 30 M		1	1:25
3.	Library	10 X 20 M		1	1:25
4	Visual training media (LCD, Laptops, OHP, transparencies, black board, white board, flip chart)			1	1:25

C.	Consumable Materials				
1	Paper	Gold A4		1 Pack	1:1
2	Pencil	HB		25	1:1
3	Drawing board	Hard carton		1	1:25
4	Eraser			25	1:1
D.	Tools and Equipment				
1	Drawing table	Metal		1	1:25
2	Pencil sharpener			25	1:1
3	calculators(simple)			1	1:25
4	Scale			1	1:25
5	pencils			1	1:25
6	erasers			1	1:25
7	graph sheets (a1 size or equivalent size)			1	1:25
8	brown paper			1	1:25

LEARNING MODULE 03	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Developing Basic Understanding of Leather Manufacturing Processes	
MODULE CODE: IND FWP2 M03 2216	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers the knowledge, attitudes and skills necessary to the understanding of basic leather technology. This unit also includes basic understanding of types of tanning, crust and finishing processes.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Describe leather processing LO2 Describe basic structure of the skin LO3 Describe basic tanning process LO4 Explain basic crusting process LO5 Explain basic finishing operation and storage	
MODULE CONTENTS: LO1 Describe leather processing <ul style="list-style-type: none"> 1.1 Types and characteristics of leather. <ul style="list-style-type: none"> 1.1.1 Cow 1.1.2 Sheep 1.1.3 Goat 1.1.3 Kid 1.2 Leather classification. 1.3 Processing requirements for leather. 1.4 Leather processing procedures and techniques. LO2 Describe basic structure of the skin <ul style="list-style-type: none"> 2.1 Structure of the skin. 2.2 Difference between hide, side and skin. 2.3 Effect of tanning process on the skin. 2.4 Methods of preservation processes. LO3 Describe basic tanning process <ul style="list-style-type: none"> 3.1 Basic tanning requirements. 	

3.2 Purpose of tanning.

3.3 Different tanning types and stage process.

- Vegetable tanning
- Chrome tanning
- Alum tanning

LO4 Explain basic crusting process

4.1 Different ways or methods of crust stage of leather are explained.

4.2 Procedure for preparing leather for crusting operation is explained

- dyeing
- fat liquoring
- fixing

4.3 Basic crusting operations at the crust stage treatment of leather are described.

- Dying
- Toggling
- Splitting
- Shaving
- Buffing

LO5 Explain basic finishing operation and storage

5.1 corrected grain and full grain leather

5.2 Different methods to finish leather.

5.3 Different types of finished leather

- Nap based leather
- Corrected/printed grain leather
- Full grain leathers

5.4 Quality requirements for finish leather.

5.5 Method of storing leather.

5.6 Demonstration of the leather bundling.

5.7 Measuring method of finished leather.

- Measurement of leather through area.
- Method of measurement of the finished leather

LEARNING STRATEGIES:

Reasonable Adjustment For Trainees With Disabilities(TWD)			
Lecture-discussion	hard of hearing	Visual Impairment	Physical disability
	➤ Sign language interpreter	➤ Braille ➤ Digital recorder	
Demonstration	➤ Sign language interpreter	➤ Guide/assistant	Assisting during

			demonstration
Group work / individual assignment	➤ Sign language interpreter	➤ Guide/assistant	
Assessment Methods:			
Oral questioning	➤ Sign language interpreter ➤ Question in written form		
Written test		➤ Braille printed test	
Demonstration	➤ Sign language interpreter	➤ Guide/assistant	Assisting during demonstration

ASSESSMENT CRITERIA**LO1 Describe leather processing**

- 1.1 Types and characteristics of leather are identified
- 1.2 Leather classification is described
- 1.3 Processing requirements for leather are explained
- 1.4 Leather processing procedures and techniques are identified.

LO2 Describe basic structure of the skin

- 2.1 Structure of the skin is explained
- 2.2 Difference between hide, side and skin is explained
- 2.3 Effect of tanning process on the skin is described
- 2.4 Methods of preservation processes are explained Material type is determined.

LO3 Describe basic tanning process

- 3.1 Basic tanning requirements are discussed
- 3.2 Purpose of tanning is explained
- 3.3 Different **tanning types** and stage process are explained

LO4 Explain basic crusting process

- 4.1 Different ways or methods of crust stage of leather are explained.
- 4.2 Procedure for **preparing leather** for crusting operation is explained
- 4.3 **Basic crusting operations** at the crust stage treatment of leather are described.

LO5 Explain basic finishing operation and storage

- 5.1 Explain basic difference between corrected grain and full grain leather
- 5.2 Different methods to finish leather are explained.
- 5.3 Different types of **finished leather** is described

- 5.4 Quality requirements for finish leather are described.
- 5.5 Method of storing leather is explained and demonstrated
- 5.6 Demonstration of the leather bundling is carried out.
- 5.7 **Measuring method** of finished leather is described.

Module Code and Title : - IND FWP3 M03 0616– Developing Basic Understanding of Leather manufacturing processes					
Item No.	Category/Item	Description/ Specifications	Reasonable Adjustment For TWD	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(Soft copy, etc)	25	1:1
2.	Travel goods/upholstery/domestic items making	National Instructional Media Institute, Chennai	In electronic form(Soft copy, etc)	25	1:1
3.	Leather Goods Maker (Travel)	National Instructional Media Institute, Chennai	In electronic form(Soft copy, etc)	25	1:1
4.	Leather goods designing and manufacturing	National Instructional Media Institute, Chennai	In electronic form(Soft copy, etc)	25	1:1
5.	Reference Books		Braille print	5	1:5
6	Journals/Publication/Magazines		In electronic form(Soft copy, etc)	3	1:8
B.	Learning Facilities & Infrastructure				
1.	Class room			1	1:25

2.	Workshop			1	1:25
3.	Visual training media (LCD, Laptops, OHP, transparencies, black board, white board, flip chart)			1	1:25
C.	Consumable Materials				
1	Developed pattern			1	1;25
2	Finished product			1	1;25

LEARNING MODULE 04	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Performing Closing of Uppers	
MODULE CODE: IND FWP2 M04 2216	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers the skills, attitudes and knowledge required to prepare and assemble upper, operate and monitor flat bed, post bed, zigzag, cylinder bed, and strobble stitching machine using defined procedures / methods.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Set up sewing machine LO2 Perform sewing operation LO3 Perform closing of upper LO4 Check machine performance LO5 Check stitched components LO6 Dispatch completed work LO7 Perform folding operations LO8 Perform eye-letting operations	
MODULE CONTENTS: LO1 Set up sewing machine <ul style="list-style-type: none"> 1.1 Sewing machine is set-up and adjustment <ul style="list-style-type: none"> 1.1.1 threading the machine 1.1.2 winding and inserting bobbin i 1.1.3 operating the sewing machine 1.1.4 adjustment of thread density 1.1.5 inserting the appropriate type of needle 1.1.6 cleaning the work place 1.1.7 adjustment of folding machine 1.2 Stitching tools and attachments <ul style="list-style-type: none"> 1.2.1 scissors and trimmer 1.2.2 thread burning tool 1.2.3 screw driver 1.2.4 folding hammer 1.2.5 hand punches 1.2.6 dies for eye-letting machine 1.2.7 attachment for gimping and punching machine 1.2.8 guides 1.2.9 pressure foots 1.2.10 piping attachments 1.2.11 binding attachments 1.3 Tension set according to specifications 1.4 Clean and maintain Sewing machine . <ul style="list-style-type: none"> 1.4.1 post bed single needle sewing machine 1.4.2 post bed double needle sewing machine 1.4.3 storable machine 	

- 1.4.4 seam rubbing and taping
- 1.4.5 cylinder bed machine
- 1.4.6 folding machine
- 1.4.7 eye-letting machine
- 1.4.8 gimping and punching machine
- 1.4.9 Records are maintained.

LO2 Perform sewing operation

- 2.1 Material** position leather
 - 2.1.1** synthetic materials
 - 2.1.2** fabrics
 - 2.1.3** reinforcements
- 2.2** Material is sewn.
- 2.3** Sewing of the components are carried out according to **OHS practices.**
 - 2.3.1** manual handling techniques
 - 2.3.2** standard operating procedures
 - 2.3.3** personal protective equipment
 - 2.3.4** safe materials handling
 - 2.3.5** ergonomic arrangement of workplace
 - 2.3.6** safe storage of equipment
 - 2.3.7** reporting accidents and incidents
 - 2.3.8** environmental practices

LO3 Perform closing of upper

- 3.1 Sequence of operation for.
- 3.2 Machine and tools
- 3.3 The various allowances on the cut components
- 3.4 The sewing is performed as per the sequence of operation.

LO4 Check machine performance

- 4.1 The performance of the machine faulty operations
- 4.2** Minor problems in the sewing machine needle breakages
 - 4.2.3 thread breakages
 - 4.2.4 tension adjustments
- 4.3 Appropriate action is undertaken in workplace procedures
- 4.4** machine oiled and cleaned

LO5 Check stitched components

- 5.1 Checked against job specifications and workplace standards.
- 5.2 Handling of upper operating instructions
- 5.3 address Faults or irregularities
- 5.4 Stitched **components** are checked.
 - 5.4.1 leather
 - 5.4.2 synthetic material
 - 5.4.3 fabric
 - 5.4.4 reinforcement

LO6 Dispatch completed work

- 6.1 Completed component parts, panels or pieces
- 6.2 Sewing faults.
- 6.3 Record and complete workplace procedures and format as applicable.

LO7 Perform folding operations

- 7.1 Folding by hand
- 7.2 Folding machine adjustments
- 7.3 Folding machine operate.
- 7.4 Folding machine maintenance.

LO8 Perform eye-letting operations

- 8.1 Punching by hand
- 8.2 Eye-letting by hand
- 8.3 Eye-letting machine
- 8.4 Eye-letting machine is operate
- 8.5 Quality of eye-letting.

LEARNING STRATEGIES:

	Reasonable adjustment for trainees with disability (TWD)		
	hard of hearing	Visual impaired	Physical disability
Lecture-discussion	<ul style="list-style-type: none"> ➤ Slide presentation during lecture ➤ Sign language interpreter ➤ Give Softcopy/printed lecture material before class 	<ul style="list-style-type: none"> ➤ Give Braille printed lecture material before class ➤ Bold print for low vision 	<ul style="list-style-type: none"> ➤ Give Softcopy/printed lecture material before class
Demonstration	<ul style="list-style-type: none"> ➤ Provide recorded video of demonstration ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Provide audio recorded demonstration instruction 	Making special assistant during work/assignment as per necessary
Group work / Individual assignment	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Guide/assistant/ ➤ Provide audio recorded work/assignment instruction 	Making special assistant during work/assignment as per requirement

ASSESSMENT METHODS:			
➤ Oral questioning	➤ Sign language interpreter Question in written form		
➤ Written test		➤ Braille printed test ➤ Alter to Oral question	
➤ Demonstration	➤ Sign language interpreter Practice	➤ Guide/assistant ➤ Making special assistant during work/assignment as per requirement	Making special assistant during work/assignment as per requirement
ASSESSMENT CRITERIA:			
LO1 Set up sewing machine			
1.1	Sewing machine is set-up and adjusted for operation according to task requirements.		
1.2	Stitching tools and attachments are selected and prepared according to specified work.		
1.3	Tension is set according to specifications		
1.4	Sewing machine is routinely cleaned and maintained.		
1.5	Records are maintained.		
LO2 Perform sewing operation			
2.1	Material is positioned accurately consistent with stitch requirement		
2.2	Material is sewn according to specification		
2.3	Sewing of the components are carried out according to OHS practices .		
LO3 Perform closing of upper			
3.1	Sequence of operation for the assembly is determined.		
3.2	Machine and tools required for the making of the uppers are identified.		
3.3	The various allowances on the cut components are identified.		
3.4	The sewing is performed as per the sequence of operation of the upper		
LO4 Check machine performance			
4.1	The performance of the machine is routinely monitored for signs of faulty operations according to manufacturer's specification		
4.2	Minor problems in the sewing machine are diagnosed and rectified		
4.3	Appropriate action is undertaken in accordance with workplace procedures		
4.4	The machine is oiled and cleaned following manufacturer's instructions		
LO5 Check stitched components			
5.1	Uppers are checked against job specifications and workplace standards.		
5.2	Handling of upper is carried out as per the operating instructions.		

5.3 Faults or irregularities are addressed or resolved

5.4 Stitched **components** are checked.

L06 Dispatch completed work

6.1 Completed component parts, panels or pieces are bundled, stacked, stored or dispatched in accordance with workplace procedures.

6.2 Sewing faults are recorded in accordance with workplace standard procedures.

6.3 Records are completed in accordance with workplace procedures and format as applicable.

L07 Perform folding operations

7.1 **Folding** by hand is performed in accordance with standards procedures

7.2 Folding machine adjustments is performed in accordance with job requirements.

7.3 Folding machine is operated in accordance with manufacturer's instructions and OHS measures.

7.4 Folding machine maintenance is performed in accordance with enterprise standard procedures.

L08 Perform eye-letting operations

8.1 Punching by hand is performed in accordance with job specifications and requirements following OHS measures

8.2 Eye-letting by hand is performed in accordance with job specifications and requirements following OHS measures

8.3 Eye-letting machine is set up in accordance with job specifications and requirements following OHS measures

8.4 Eye-letting by machine is operated in accordance with manufacturer's instructions and OHS measures.

8.5 Quality of eye-letting is checked and appropriate action undertaken to correct faults.

Module Code and Title : - IND FWP2 M04 0616- Performing closing uppers					
Item No.	Category/Item	Description/ Specifications	Description/ Specifications for TWD	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(Soft copy, etc)	25	1:1
2.	Travel goods/upholstery/domestic items making	National Instructional Media Institute, Chennai	In electronic form(Soft copy, etc)	25	1:1
3.	Leather Goods Maker (Travel) National Instructional Media Institute, Chennai	National Instructional Media Institute, Chennai	In electronic form(Soft copy, etc)	25	1:1
4.	Leather goods designing and manufacturing National Instructional Media Institute, Chennai	National Instructional Media Institute, Chennai	In electronic form(Soft copy, etc)	25	1:1
5.	Pattern and template maker National Instructional Media Institute, Chennai	National Instructional Media Institute, Chennai	In electronic form(Soft copy, etc)	5	1:5
6.	Reference Books	New	Braille print	5	1:5
7.	Journals/Publication/Magazines	Recent	In electronic form(Soft copy, etc)	3	1:8
B.	Learning Facilities & Infrastructure				
1.	Class room	10 X20 m		1	1:25
2.	Workshop	15 X 30 M		1	1:25
3.	Visual training media (LCD, Laptops, OHP, transparencies, black board, white board, flip chart)			1	1:25

C.	Consumable Materials				
1	Leather	Cow Napa, sheep Napa, ...		25	1:1
2	Lining	Polestar,		25	1:1
3	Reinforcement material			25	1:1
4	Wading material			25	1:1
5	Cutter blade	Metal /standard		25	1:1
6	<i>Accessories</i>			25	1:1
D.	Tools and Equipment				
1	Clicking machine			25	1:1
2	Cutting table			25	1:1
3	Cutting mat			25	1:1
4	Cutter	Metal /standard		25	1:1
5	Scissors	Metal /standard		25	1:1

LEARNING MODULE 05	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Performing Bottom Component Operation	
MODULE CODE: IND FWP2 M05 2216	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers the knowledge, attitudes and skills required to perform bottom component operations.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Identify and prepare tools, materials and equipment LO2 Perform bottom component operations LO3 Assess final quality of the bottom components	
MODULE CONTENTS: LO1 Identify and prepare tools, materials and equipment <ul style="list-style-type: none"> 1.1 Identify and select Materials <ul style="list-style-type: none"> 1.1.1 steel shank 1.1.2 toe puff sheets 1.1.3 stiffener sheets 1.1.4 sole:- leather 1.1.5 heels:- wedge heel 1.1.6 types and characteristics 1.1.7 Generic and trade names 1.1.8 Uses and care 1.2 identify and made Machines and tools <ul style="list-style-type: none"> 1.2.1 cutting knives 1.2.2 cutting machines- travel head 1.2.3 insole molding 1.2.4 insole beveling 1.2.5 shank skiving 1.2.6 toe puff and stiffener skiving 1.3 Handling and care requirements of materials . 1.4 Common problems and faults of materials are identified. 1.5 personal protective equipment <ul style="list-style-type: none"> 1.5.1 hearing protection 1.5.2 safety harness LO2 Perform bottom component operations <ul style="list-style-type: none"> 2.1 Sequence of operation for the preparation of the bottom components. 2.2 Insole, toe puffs, counters of the footwear procedure. 2.3 Molds for the molding of the insoles. 2.4 Molding of insoles in relation to the last. 	

- 2.5 Method of heal attaching to the leather sole.
- 2.6 Problems and faults.
- 2.7 Clean and maintain Work area OHS and enterprise requirements.
- 2.7.1 identifying and reporting hazards
 - 2.7.2 safe lifting, carrying and manual handling
 - 2.7.3 the provision of safety decals and signage
 - 2.7.4 the safe handling and storage of hazardous substances
 - 2.7.5 the appropriate use, maintenance and storage of personal protective equipment
 - 2.7.6 working in confined spaces
 - 2.7.7 the protection of people in the workplace
 - 2.7.8 protection from hazardous noise, organic and other dusts
 - 2.7.9 Routine maintenance of the machine is carried out.

LO3 Assess final quality of the bottom components

- 3.1 Critical stages of the inspections.
- 3.2 Quality checks design of footwear and last.
- 3.3 Report and record.

LEARNING STRATEGIES:

	Reasonable adjustment for trainees with disability (TWD)		
	hard of hearing	Visual impaired	Physical disability
Lecture-discussion	<ul style="list-style-type: none"> ➤ Slide presentation during lecture ➤ Sign language interpreter ➤ Give Softcopy/printed lecture material before class ➤ Provide the lecture in titled Video/ Film 	<ul style="list-style-type: none"> ➤ Give Braille printed lecture material before class ➤ Bold print for low vision 	<ul style="list-style-type: none"> ➤ Give Softcopy/printed lecture material before class
Demonstration	<ul style="list-style-type: none"> ➤ Provide recorded video of demonstration ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Provide audio recorded demonstration instruction 	<ul style="list-style-type: none"> ➤ Making special assistant during work/assignment as per necessary
Group work / Individual assignment	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Guide/assistant/ ➤ Provide audio recorded work/assignment instruction 	<ul style="list-style-type: none"> ➤ Making special assistant during work/assignment as per requirement ➤ Group Work Activity/Group

			Partner with Person without disability
ASSESSMENT METHODS:			
Oral questioning	<ul style="list-style-type: none"> ➤ Sign language interpreter ➤ Question in written form 		
Written test		<ul style="list-style-type: none"> ➤ Braille printed test ➤ Alter to Oral question if must ➤ Additional time for assessment 	<ul style="list-style-type: none"> ➤ Additional time for assessment ➤ If written exam is not comfortable alter to Oral exam
Demonstration	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Guide/assistant ➤ Making special assistant during work/assignment as per requirement ➤ Additional time for assessment 	<ul style="list-style-type: none"> ➤ Making special assistant during work/assignment as per requirement ➤ Additional time for assessment

ASSESSMENT CRITERIA:

LO1 Identify and prepare tools, materials and equipment

1.1 **Materials** used as bottom component are identified and selected for appropriateness.

1.2 **Machines** and **tools** are identified and made ready for operation

1.3 Handling and care requirements for materials are performed.

1.4 Common problems and faults of materials are identified.

1.5 Suitable **personal protective equipment** is selected, used and maintained according to OHS requirements.

LO2 Perform bottom component operations

2.1 Sequence of operation for the preparation of the bottom components is identified.

2.2 Insole, toe puffs, counters are prepared as per the specification of the footwear and procedure.

2.3 Molds for the molding of the insoles are identified.

2.4 Molding of insoles in relation to the last is performed.

2.5 Method of heel attaching to the leather sole is performed.

2.6 Problems and faults are identified and analyzed.

2.7 Work area is cleaned and maintained according to OHS and enterprise requirements.

2.8 Routine maintenance of the machine is carried out.

LO3 Assess final quality of the bottom components

3.1 Critical stages of the inspections are identified.

3.2 Quality checks in relation to the design of footwear and last is performed.

3.3 Report and record is maintained is communicated and maintained.

Module Code and Title : - IND FWP2 M05 0616 -Performing Bottom Components Operations

Item No.	Category/Item	Description/ Specifications	Description/ Specifications for TWD	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(Soft copy, etc)	25	1:1
2.	Travel goods/upholstery/domestic items making	National Instructional Medial Institute, Chennai	In electronic form(Soft copy, etc)	25	1:1
3.	Leather Goods Maker (Travel)	National Instructional Medial Institute, Chennai	In electronic form(Soft copy, etc)	25	1:1
6.	Leather goods designing and manufacturing	National Instructional Medial Institute, Chennai	In electronic form(Soft copy, etc)	25	1:1
7.	AFPA stitching machinery and related science	National Instructional Medial Institute, Chennai	In electronic form(Soft copy, etc)	5	1:5
8.	Tandy Leather Co. Sewing with leather	National Instructional Medial Institute, Chennai	In electronic form(Soft copy, etc)	5	1:5
9.	Ladbury, Ann Make the most of your sewing machine	National Instructional Medial Institute, Chennai	In electronic form(Soft copy, etc)	5	1:5
10.	FDDI the skill of cored flatbed sewing machine.	National Instructional Medial Institute, Chennai		25	1:1
11.	Reference Books		Braille print	5	1:5
B.	Learning Facilities & Infrastructure				
1.	Class room	10 X20 M		1	1:25
2.	Workshop	15 X30 M		1	1:25

3.	Visual training media (LCD, Laptops, OHP, transparencies, black board, white board, flip chart)			1	1:25
C.	Consumable Materials				
1	Components (leather/fabric)	Cow Napa ,cow softy ...		25	1:1
2	Thread	40,60		25	1:1
3	Needle	90,100,110		25	1:1
4	Glue	Rubber solution		25	1:1
5	Velcro			25	1:1
6	Accessories	D, O, Rectangular...		25	1:1
D.	Tools and Equipment				
1	Sewing machine	Post bed, flat bed		25	1:1
2	Thread trimmer	Metal		25	1:1
3	Bon folder	Horn, bon		25	1:1
4	glue cane	Plastic		25	1:1

LEARNING MODULE 06	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Performing Minor Maintenance	
MODULE CODE: IND FWP2 M06 2216	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers the knowledge, attitudes and skills required to perform basic routine equipment/machine maintenance	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Prepare for basic routine maintenance LO2 Carry out basic routine maintenance LO3 Complete basic routine maintenance	
MODULE CONTENTS: LO1 Prepare for basic routine maintenance <ul style="list-style-type: none"> 1.1 Tools and supplies <ul style="list-style-type: none"> 1.1.1 hand tools 1.1.2 personal protective equipment 1.1.3 hand held power tools 1.1.4 grease guns 1.1.5 cleaning and maintenance supplies including: 1.1.6 grease, fuel, oil 1.1.7 chemicals, water steam 1.1.8 power and air 1.1.9 dismantling and assembling, 1.1.10 testing 1.1.11 tightening 1.1.12 minor adjustments and repairs 1.1.13 routine servicing procedures including: 1.1.14 lubricating, and checks of cooling system 1.1.15 fuel, grease and oil, and battery levels 1.2 Carried out Routine pre-operational checks of machinery and equipment <ul style="list-style-type: none"> 1.2.1 Routine safety and pre-start checks and preparatory procedures <ul style="list-style-type: none"> 1.2.1.1 cleaning 1.2.1.2 lubricating 1.2.1.3 hand sharpening 1.2.1.4 riming pumps 1.2.1.5 clearing filters 1.2.1.6 tightening 1.2.1.7 basic repairs and adjustments 1.3 Faulty or unsafe machinery and equipment. <ul style="list-style-type: none"> 1.3.1 Standard Operating Procedures (SOPs) 1.3.2 industry standards 1.3.3 production schedules 1.3.4 material safety data sheets (MSDS) 1.3.5 work notes and plans 1.3.6 product labels 	

- 1.3.7 manufacturers specifications
- 1.3.8 operators' manuals
- 1.4 enterprise policies and
- 1.5 OHS hazards.**
 - 1.5.1 safe maintenance of equipment
 - 1.5.2 identifying and reporting hazards
 - 1.5.3 safe lifting, carrying and manual handling
 - 1.5.4, the provision of safety decals and signage
 - 1.5.5 the safe handling and storage of hazardous substances
 - 1.5.6 use, maintenance and storage of personal protective equipment
 - 1.5.7 outdoor work including protection from solar radiation
 - 1.5.8 working in confined spaces
 - 1.5.9 the protection of people in the workplace
 - 1.5.9 protection from hazardous noise, organic and other dusts

LO2 Carry out basic routine maintenance

2.1. *personal protective equipment*

- 2.1.1 hat/hard hat
- 2.1.2 overalls
- 2.1.3 gloves
- 2.1.4 protective eyewear
- 2.1.5 hearing protection
- 2.1.6 safety harness, respirator or face mask
- 2.1.7 sun protection (sun hat, sunscreen)
- 2.2 Greasing, lubrication and other basic servicing of machinery and equipment
- 2.3 Routine adjustments and repairs.
- 2.4 OHS requirements.

LO3 Complete basic routine maintenance

- 3.1 Tools cleaned, returned.
- 3.2 Environmental procedures.
- 3.3 measures to reduce excessive noise and exhaust emissions,
- 3.3 Work area is cleaned and maintained.
- 3.4 Malfunctions, faults, wear or damage to enterprise requirements.

LEARNING STRATEGIES:

	Reasonable Adjustment For Trainees With Disability(TWD)		
	hard of hearing	Visual impairment	Physical disability
Lecture-discussion	<ul style="list-style-type: none"> ➤ Slide presentation during lecture-discussion ➤ Sign language interpreter ➤ Give Softcopy/printed lecture material before class ➤ Provide the lecture in titled Video/ Film 	<ul style="list-style-type: none"> ➤ Give Braille printed lecture material before class ➤ Bold print for low vision 	<ul style="list-style-type: none"> ➤ Give Softcopy/printed lecture material before class
Demonstration	<ul style="list-style-type: none"> ➤ Provide recorded video 	<ul style="list-style-type: none"> ➤ Provide audio 	Making special assistant

	of demonstration ➤ Sign language interpreter	recorded demonstration instruction	during work/assignment as per necessary
Group work/individual assignment	➤ Sign language interpreter	➤ Assign Guide/assistant/ ➤ Provide audio recorded work/assignment instruction	Making special assistant during work/assignment as per requirement Group the trainee with Person without disability

ASSESSMENT METHODS:

Written tests	➤ Sign language interpreter Question in written form		
Oral question		➤ Braille printed test ➤ Alter to Oral question ➤ Additional time for assessment	Additional time for assessment ➤ If written exam is not comfortable alter to Oral exam
Demonstration	➤ Sign language interpreter	➤ Guide/assistant ➤ Making special assistant during work/assignment as per requirement ➤ Additional time for assessment if necessary	➤ Making special assistant during work/assignment as per requirement Additional time for assessment if necessary

ASSESSMENT CRITERIA:

LO1 Prepare for basic routine maintenance

- 2 **Tools and supplies** required to carry out **basic routine maintenance** tasks are identified, selected and provided on site according to supervisor's instructions.
- 3 **Routine pre-operational checks** of machinery and equipment are carried out and adjustments made according to manufacturer's specifications and/or enterprise procedures.
- 4 Faulty or unsafe machinery and equipment are identified and segregated for repair or replacement according to **enterprise requirements**.
- 5 **OHS** hazards in the workplace are identified and reported to the supervisor.

LO2 Carry out basic routine maintenance

- 6 Suitable **personal protective equipment** is stored, selected, used and maintained according to OHS requirements.
- 7 Greasing, lubrication and other basic servicing of machinery and equipment is carried out according to operator's manual/manufacturers specifications and supervisor's instructions.
- 8 Routine adjustments and repairs are made to machinery and equipment according to operators' manual/manufacturers' specifications and supervisors instructions.
- 9 Work is conducted according to OHS requirements and completed to supervisor's satisfaction.

LO3 Complete basic routine maintenance

- 3.5 Tools are cleaned, returned to operating order and stored according to manufacturers' specifications and enterprise requirements.
- 3.6 **Environmental procedures** are followed and waste from maintenance activities is collected, treated and disposed or recycled according to enterprise requirements.
- 3.7 Work area is cleaned and maintained according to OHS and enterprise requirements.
- 3.8 Malfunctions, faults, wear or damage to tools are reported to the supervisor according to enterprise requirements.

Module Code and Title : - IND FWP2 M06 2216- Performing Minor Maintenance					
Item No.	Category/Item	Description/ Specifications	Reasonable Adjustment For TWD	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(soft copy, etc)	25	1:1
2.	Travel goods/upholstery/domestic items making	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
3.	Leather Goods Maker (Travel)	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
4.	Leather Goods and Sports Goods Maker	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
5.	Leather goods designing and manufacturing	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
6	Pattern and template maker	National Instructional Medial Institute, Chennai	In electronic form(soft copy, etc)	5	1:5
7.	Reference Books	New	Braille print	5	1:5
8.	Journals/Publication/Magazines	Recent	In electronic form(soft copy, etc)	3	1:8
B.	Learning Facilities & Infrastructure				
1.	Class room		Standard	1	1:25

2.	Workshop		Standard	1	1:25
3.	Visual training media (LCD, Laptops, OHP, transparencies, black board, white board, flip chart)			1	1:25
C.	Consumable Materials				
1	Paper	Gold A4		1 packet	1:5
2	Pencil	HP		25	1:1
D.	Tools and Equipment				
1	Measuring tape			25	1:1
2	Ruler			25	1:1
3	Thickness gauge			25	1:1
4	Try-square			25	1:1
5	Protractor			25	1:1

LEARNING MODULE 07	
TVET-PROGRAMME TITLE: Basic Footwear Production Operations Level I	
MODULE TITLE: Performing Basic Lasting Operation	
MODULE CODE: IND FWP2 M07 2216	
NOMINAL DURATION: 16 Hours	
MODULE DESCRIPTION: This module covers the skills and knowledge required to perform basic lasting operation.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Identify tools, materials and equipment LO2 Perform basic lasting procedure LO3 Identify and perform post manual lasting operations LO4 Determine quality check of the finished pair	
MODULE CONTENTS: LO1 Identify tools, materials and equipment <ol style="list-style-type: none"> 1.1 Hand lasting materials and tools. <ol style="list-style-type: none"> 1.1.1 insole 1.1.2 toe puff 1.1.3 stiffener 1.1.4 upper 1.1.5 last 1.1.6 sole such as- leather, PVC, PU 1.1.7 adhesive 1.1.8 finishes 1.1.9 solvents 1.1.10 waxes 1.1.11 laces 1.1.12 lining materials 1.1.13 packing materials 1.1.14 pincer 1.1.15 tack remover 1.1.16 lasting jack 1.1.17 scissors 1.1.17 brushes for adhesives 1.1.18 hammer 1.2 Identify, arrange and made ready Machines for products. <ol style="list-style-type: none"> 1.2.1 roughing machine 1.2.2 wrinkle chasing 1.2.3 heat setting 1.2.4 adhesive activator 1.2.5 sole pressing 1.2.6 polishing machine 1.3 Basic methods of lasting 	

LO2 Perform basic lasting procedure

- 2.1 Essential drafting pulls
- 2.2 Sequences of drafting.
- 2.3 Correct methods of toe-puff and counter stiffener attachment.
- 2.4 Appropriate method of attaching insoles with enterprise procedures.

LO3 Identify and perform post manual lasting operations

- 3.1 Heat setting temperature and timing.
- 3.2 Soles preparation.
- 3.3 Uses and application of the adhesive.
- 3.4 Sole press pressure and timing.
- 3.5 Clean and maintain Work area is according to OHS and enterprise requirements.

3.6 *Environmental procedures*

LO4 Determine quality check of the finished pair

- 4.1 Final checks on footwear.
- 4.2 Method of handling of the complete finished
- 4.3 Method of packing the finished shoe.

LEARNING STRATEGIES:

	Reasonable Adjustment For Trainees With Disabilities(TWD)		
	hard of hearing	Visual Impairment	Physical disability
Lecture/Discussion	<ul style="list-style-type: none"> ➤ Sign language interpreter ➤ use slide presentation 	<ul style="list-style-type: none"> • Recorded lecture/discussion voice 	Provide softcopy/lecture material before class
Demonstration	<ul style="list-style-type: none"> • Sign language interpreter 	<ul style="list-style-type: none"> • Guide/assistant 	
Group work/Individual assignment	<ul style="list-style-type: none"> ➤ Sign language interpreter 		

ASSESSMENT METHODS:

Oral questioning	<ul style="list-style-type: none"> • Sign language interpreter • Question in written form 		
Written test		<ul style="list-style-type: none"> • Braille written test 	
Demonstration	<ul style="list-style-type: none"> • Sign language Interpreter 	<ul style="list-style-type: none"> • Guide/assistant/peer 	

ASSESSMENT CRITERIA:**LO1 Identify tools, materials and equipment**

- 1.1 Hand lasting **materials** and **tools** are identified and checked for appropriateness and functionality.
- 1.2 **Machines** are identified, arranged and made ready for specified products.
- 1.3 Basic methods of lasting are described and appropriate method identified for the job order or specification.

LO2 Perform basic lasting procedure

- 2.1 Essential drafting pulls are identified.
- 2.2 Sequences of drafting are performed in accordance with standard procedures.
- 2.3 Correct methods of toe-puff and counter stiffener attachment are performed.
- 2.4 Appropriate method of attaching insoles are identified and performed in accordance with enterprise procedures.

LO3 Identify and perform post manual lasting operations

- 3.1 Heat setting temperature and timing is determined.
- 3.2 Soles preparation is performed as per the specification and procedure.
- 3.3 Uses and application of the adhesive is described and performed.
- 3.4 Sole press pressure and timing are determined and performed.
- 3.5 Work area is cleaned and maintained according to OHS and enterprise requirements.
- 3.6 **Environmental procedures** are followed and waste from maintenance activities is collected, treated and disposed or recycled according to enterprise requirements.

LO4 Determine quality check of the finished pair

- 4.1 Final checks on the footwear is identified and performed.
- 4.2 Method of handling of the complete finished shoe is described and demonstrated.
- 4.3 Method of packing the finished shoe is described and performed.
- 4.4 Work area is cleaned and maintained according to OHS and enterprise requirements.

Module Code and Title : - IND FWP2 M07 0616– Performing basic lasting operations					
Item No.	Category/Item	Description/ Specifications	Reasonable Adjustment For(TWD)	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(soft copy, audio, video etc) and Braille form	25	1:1
2.	Travel goods/upholstery/domestic items making	National Instructional Media Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
3.	Leather Goods Maker (Travel)	National Instructional Media Institute, Chennai	In electronic form(soft copy, etc)	25	1:1
4	Pattern and template maker	National Instructional Media Institute, Chennai	In electronic form(soft copy, etc)	5	1:5
5	Reference Books		Braille print	5	1:5
6.	Journals/Publication/Magazines	Recent	In electronic form(soft copy, etc)	3	1:8
B.	Learning Facilities & Infrastructure				
1.	Class room	10 X20 M		1	1:25
2.	Library	10 X20 M			
3	Workshop	15 X30 M		1	1:25
4	Visual training media (LCD, Laptops, OHP, transparencies, black board, white board, flip chart)			1	1:25
C.	Consumable Materials				
1	Paper	Gold A4		25	1:1
2	Pencil	HB			

3	Drawing board	Hard carton		25	1:1
4	Eraser			25	1:1
D.	Tools and Equipment			25	1:1
1	Drawing table	Metal		25	1:1
2	Pencil sharpener			25	1:1

LEARNING MODULE 08	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Performing Footwear Finishing Operations	
MODULE CODE: IND FWP2 M08 2216	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers the skills and knowledge to perform footwear finishing operations.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Prepare workstation LO2 Finish work LO3 Dispatch footwear	
MODULE CONTENTS: LO1 Prepare workstation <ul style="list-style-type: none"> 1.1 Workbench and seating are set up and prepared according to safety standards and OHS practices. <ul style="list-style-type: none"> 1.1.1 manual handling techniques 1.1.2 standard operating procedures 1.1.3 personal protective equipment 1.1.4 safe materials handling 1.1.5 taking of rest breaks 1.1.6 ergonomic arrangement of workplaces 1.1.7 following marked walkways 1.1.8 safe storage of equipment 1.1.9 housekeeping 1.1.10 reporting accidents and incidents 1.1.11 environmental practices 1.2 Components are laid out in correct sequence <ul style="list-style-type: none"> 1.2.1 buckles 1.2.2 labels 1.2.3 heel pads 1.2.4 laces LO2 Finish work <ul style="list-style-type: none"> 2.1 Finishing operations. <ul style="list-style-type: none"> 2.1.1 trimming loose threads 2.1.2 checking 2.1.3 spraying 2.1.4 cleaning 2.1.5 polishing 2.1.6 hand or machine sewing buckles 2.1.7 attaching accessories or trims 2.1.8 inserting heel cushion pads 2.1.9 flaring 2.1.10 lining trimming 2.1.11 attaching labels 	

2.1.12 pairing up 2.1.13 boxing 2.1.14 dispatching 2.2 Footwear. 2.3 Identify , report and return faults 2.4 Production and other records... LO3 Dispatch footwear 3.1 Pieces are bundled, stacked and stored or dispatched. 3.2 Recorded production faults.			
LEARNING STRATEGIES:			
Lecture-discussion	Reasonable adjustment for trainees with disability (TWD)		
	hard of hearing	Visual impaired	Physical disability
	<ul style="list-style-type: none"> ➤ Slide presentation during lecture ➤ Sign language interpreter ➤ Give Softcopy/printed lecture material before class 	<ul style="list-style-type: none"> ➤ Give Braille printed lecture material before class ➤ Bold print for low vision 	<ul style="list-style-type: none"> ➤ Give Softcopy/printed lecture material before class
Group work / Individual	<ul style="list-style-type: none"> ➤ Guide/assistant/ ➤ Provide audio recorded work/assignment instruction 	Making special assistant during work/assignment as per requirement <ul style="list-style-type: none"> ➤ Group Partner with Person without disability 	<ul style="list-style-type: none"> ➤ Guide/assistant/ ➤ Provide audio recorded work/assignment instruction
Role-play	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Guide/assistant 	Make special assistant if necessary
ASSESSMENT METHODS			
Oral questioning	<ul style="list-style-type: none"> ➤ Sign language interpreter ➤ Question in written form 		
Written test		<ul style="list-style-type: none"> ➤ Braille printed test ➤ Alter to Oral question if must ➤ Additional time for assessment 	<ul style="list-style-type: none"> ➤ Additional time for assessment ➤ If written exam not comfortable alter to Oral ex

Demonstration	➤ Sign language interpreter	<ul style="list-style-type: none"> ➤ Guide/assistant ➤ Making special assistant during demonstration requirement ➤ Additional time for assessment 	Making special assistant during demonstration requirement <ul style="list-style-type: none"> ➤ Additional time for assessment
<p>ASSESSMENT CRITERIA:</p> <p>LO1 Prepare workstation</p> <p>1.1 Workbench and seating are set up and prepared according to safety standards and OHS practices.</p> <p>1.2 Components are laid out in correct sequence</p> <p>LO2 Finish work</p> <p>2.1 Finishing operations are performed according to customer specifications.</p> <p>2.2 Footwear is checked against specifications to ensure correct sizing.</p> <p>2.3 Faults are identified, reported and returned to appropriate section for repair according to quality standards.</p> <p>2.4 Production and other records are completed.</p> <p>2.5 Action is taken according to OHS practices to prevent accidents and to eliminate risks to personal safety.</p> <p>LO3 Dispatch footwear</p> <p>3.3 Pieces are bundled, stacked and stored or dispatched.</p> <p>3.4 Production faults are recorded.</p> <p>3.5 Records are completed following standards and formats</p>			

Module Code and Title : - IND FWP2 M08 0616– Performing Footwear Finishing Operations						
Item No.	Category/Item	Description/ Specifications	Description/ Specifications for TWD	Quantity	Recommended Ratio (Item: Trainee)	
A.	Learning Materials					
1.	TTLM	Learning guide	In electronic form(Soft copy, etc	25	1:1	
2.	Travel goods/upholstery/domestic items making	National Instructional Medial Institute, Chennai	In electronic form(Soft copy, etc	25	1:1	
3.	Leather Goods Maker (Travel)	National Instructional Medial Institute, Chennai	In electronic form(Soft copy, etc	25	1:1	
4.	Reference Books		Braille print	5	1:5	
5.	Journals/Publication/Magazines			3	1:8	
B.	Learning Facilities & Infrastructure					
1.	Class room	10 X20 M		1	1:25	
2.	Library	15 X 30 M		1	1:25	
3	Workshop			1	1:25	
4.	Visual training media (LCD, Laptops, OHP, transparencies, black board, white board, flip chart)			1	1:25	
C.	Consumable Materials					
1	Raw material (leather, lining...)			25	1:1	
2	Finished product			25	1:1	
D.	Tools and Equipment					
1	Calculator			25	1:1	

LEARNING MODULE 09	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Applying Basic Ergonomics	
MODULE CODE: IND FWP2 M09 2216	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers the knowledge, attitudes and skills required to perform basic ergonomics principles	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Describe basics of human factors engineering LO2 Design workplace LO3 Apply design	
MODULE CONTENTS: LO1 Describe basics of human factors engineering <ul style="list-style-type: none"> 1.1 Causes of stress in work area lack of training <ul style="list-style-type: none"> 1.1.1 uncomfortable work place 1.1.2 working long hours 1.1.3 health problems 1.1.4 responsibility increase 1.2 Causes of fatigue in work area. 1.3 Identify Work load. 1.4 Hazards <ul style="list-style-type: none"> 1.4.1 mechanical hazards 1.4.2 chemical hazards 1.4.3 physical hazards LO2 Design workplace <ul style="list-style-type: none"> 2.1 Requirements to design the work place 2.2 The distance between the machines and the operator. LO3 Apply design <ul style="list-style-type: none"> 3.1 Application of the ergonomics in clicking and stitching operations 3.2 Design Workplace economy of movements. <ul style="list-style-type: none"> 3.2.1 production room design 3.2.2 application of reaches 3.2.3 considering resource available 3.2.4 type of work performed 3.3 Safety procedures and OHS practices. <ul style="list-style-type: none"> 3.3.1 safe maintenance of equipment 3.3.2 identify and report hazards 3.3.4 safe lifting, carrying and manual handling 3.3.5 use, maintenance and storage of personal protective equipment 3.3.6 protection from hazardous noise, organic and other dusts 	
LEARNING STRATEGIES:	

	Reasonable adjustment for trainees with disability (TWD)		
	hard of hearing	Visual impaired	Physical disability
➤ Lecture-discussion	➤ Sign language interpreter	➤ Braille ➤ Digital recorder	
➤ Group working	➤ Sign language interpreter	➤ Guide/assistant ➤ Peer	
➤ Role- playing	➤ Sign language .interpreter	➤ Guide/assistant ➤ Peer	
ASSESSMENT METHODS:			
➤ written tests	➤ Sign language interpreter Question in written form		
➤ Oral questioning		➤ Braille/peer	
➤ Demonstration	➤ Sign language interpreter Practice	➤ Guide/assistant	
ASSESSMENT CRITERIA:			
LO1 Describe basics of human factors engineering			
3	Causes of stress in work area are identified.		
4	Causes of fatigue in work area are identified.		
5	Work load is considered and identified.		
6	Hazards that will occur are identified		
LO2 Design workplace			
2.3	Requirements to design the work place are identified.		
2.4	The reach concept is addressed.		
2.5	The distance between the machines and the operator is identified.		
LO3 Apply design			
3.4	Application of the ergonomics in clicking and stitching operations is implemented.		
3.5	Workplace is designed following economy of movements.		
3.6	Safety procedures and OHS practices are incorporated in the workplace.		

Module Code and Title : - IND FWP2 M09 0616- Applying Basic Ergonomics principles					
Item No.	Category/Item	Description/ Specifications	Description/ Specifications for TWD	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials				
1	TTLM	Learning guide	In electronic form(Soft copy, etc	1	1:25
2	Hand out	Note on team work principle	In electronic form(Soft copy, etc	25	1:1
B.	Learning Facilities & Infrastructure				
1.	Lecture room	10 X20 M		1	1:25
2.	Library	10 X20 M		1	1:25
3	Work Shop	15 X30 M		1	1:25
C.	Consumable Materials				
1.	Paper	Gold 4 A		25pcs	1:1
D.	Tools and Equipment				
1.	Computer	Dell 7010		1	1:25
2.	LCD projector	Sony		1	1:25

LEARNING MODULE 10	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Participating in Workplace Communication	
MODULE CODE: IND FWP2 M10 2216	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers the knowledge, attitudes and skills required to gather, interpret and convey information in response to workplace requirements.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Obtain and convey workplace information LO2 Participate in workplace meetings and discussions LO3 Complete relevant work related documents	
MODULE CONTENTS: LO1 Obtain and convey workplace information <ul style="list-style-type: none"> 1.1 Specific and relevant information. <ul style="list-style-type: none"> 1.1.1 Team members 1.1.2 Different athletics club athletes 1.1.3 Local government 1.1.4 institutional bodies 1.2 Effective questioning, active listening and speaking. 1.3 Appropriate medium to transfer information and ideas. <ul style="list-style-type: none"> 1.3.1 Memorandum 1.3.2 Circular 1.3.3 Notice 1.3.4 Information discussion 1.3.5 Follow-up or verbal instructions 1.3.6 Face to face communication 1.4 Appropriate non- verbal communication. 1.5 Appropriate lines of communication with coach and colleagues 1.6 Defined workplace procedures for the location and storage of information. 1.7 Personal interaction is carried out clearly and concisely. LO2 Participate in workplace meetings and discussions <ul style="list-style-type: none"> 2.1 Team meetings. 2.2 Own opinions are clearly expressed and those of others are listened to without interruption. 2.3 Meeting inputs are consistent with the meeting purpose and established protocols. 	

	1.4	Observing meeting
	1.5	Compliance with meeting decisions
	1.6	Obeying meeting instructions
2.4	Workplace interactions.	
	2.4.1	Face to face
	2.4.2	Telephone
	2.4.3	Written including.
2.5	Meetings outcomes.	
LO3 Complete relevant work related documents		
3.1	Training place data	
3.2	Basic mathematical processes for routine calculations.	
3.3	Errors in recording information on forms/ documents Reporting.	

LEARNING STRATEGIES:			
	Reasonable adjustment for trainees with disability (TWD)		
	hard of hearing	Visual impaired	Physical disability
Lecture-discussion	<ul style="list-style-type: none"> ➤ Slide presentation during lecture ➤ Sign language interpreter ➤ Provide the lecture in titled Video/ Film 	<ul style="list-style-type: none"> ➤ Give Braille printed lecture material before class ➤ Bold print for low vision 	<ul style="list-style-type: none"> ➤ Give Softcopy/printed lecture material before class
Group work / Individual assignment	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Guide/assistant/ ➤ Provide audio recorded work/assignment instruction 	Making special assistant during work/assignment as per requirement <ul style="list-style-type: none"> ➤ Group Partner with Person without disability
Role-play	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Guide/assistant 	Making special assistant during roleplay as per requirement
ASSESSMENT METHODS:			
Written tests	<ul style="list-style-type: none"> ➤ Sign language interpreter ➤ Question in written 		

	form		
Oral question	➤ Written test		
Demonstration	➤ Sign language interpreter Practice	➤ Guide/assistant	

ASSESSMENT CRITERIA:**LO1 Obtain and convey workplace information**

- 1.1 Specific and relevant information from **appropriate sources** is accessed.
- 1.2 Effective questioning, active listening and speaking skills to gather and convey information are used.
- 1.3 Appropriate **medium** to transfer information and ideas is used.
- 1.4 Appropriate non- verbal communication is used.
- 1.5 Appropriate lines of communication with coach and colleagues are identified and followed.
- 1.6 Defined workplace procedures for the location and **storage** of information are used.
- 1.7 Personal interaction is carried out clearly and concisely.

LO2 Participate in workplace meetings and discussions

- 2.1 Team meetings are attended on time.
- 2.2 Own opinions are clearly expressed and those of others are listened to without interruption.
- 2.3 Meeting inputs are consistent with the meeting purpose and established **protocols**.
- 2.4 **Workplace interactions** in a courteous manner are conducted.
- 2.5 Questions about simple routine workplace procedures and matters concerning working conditions are asked and responded.
- 2.6 Meetings outcomes are interpreted and implemented.

LO3 Complete relevant work related documents

- 3.1 Training place data on standard workplace forms and documents is recorded.
- 3.2 Basic mathematical processes for routine calculations are used.
- 3.3 Errors in recording information on forms/ documents are identified and properly acted upon.
- 3.4 Reporting requirements to coaches according to organizational guidelines are completed.

Module Code and Title : - IND FWP2 M10 0616- Working in team environment					
Item No.	Category/Item	Description/ Specifications	Description/ Specifications for TWD	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(Soft copy, etc	25	1:1
2.	Textbooks	Module	In electronic form(Soft copy, etc	25	1:1
3.	Reference Books	Recent ed.	Braille print	5	1:5
4.	Journals/Publication/Magazines	Recent ed.	In electronic form(Soft copy, etc	2	1:12
B.	Learning Facilities & Infrastructure				
1.	Lecture Room			1	1:25
2.	Library			1	1:25
C.	Consumable Materials				
1.	Paper	Gold A 4		25	1:1
2	CD	RW 700MB		5	1:5
D.	Tools and Equipment				
1.	LCD	Sony		1	1:25
2	Computers	Dell 7010		1	1:25

LEARNING MODULE 11	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Working in Team Environment	
MODULE CODE: IND FWP2 M11 0616	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module covers the knowledge, attitudes and skills required to identify role and responsibility as a member of a team.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Describe team role and scope LO2 Identify own role and responsibility within team LO3 Work as a team member	
MODULE CONTENTS: LO1 Describe team role and scope <ul style="list-style-type: none"> 1.1 Identify role and objectives of the team. <ul style="list-style-type: none"> 1.1.1 Work activities in a team environment 1.1.2 Limited discretion, initiative and judgment 1.1.3 Standard training procedures 1.1.4 Institution specifications and instructions 1.1.5 institutional or external personnel 1.1.6 athletes and coach instructions 1.1.7 Quality standards 1.1.8 OHS and environmental standards LO2 Identify own role and responsibility within team <ul style="list-style-type: none"> 2.1 Individual role and responsibilities within the team environment 2.2 Roles and responsibility of other team members 2.3 Reporting relationships within team and external to team LO3 Work as a team member <ul style="list-style-type: none"> 3.1 Effective and appropriate forms of communications 3.2 Effective and appropriate contributions made to complement team activities and objectives, in workplace context <ul style="list-style-type: none"> 3.2.1 Training procedures and practices 3.2.2 Conditions of training environments 3.2.3 Legislation and institutional agreements 3.2.4 Safety, environmental, housekeeping and quality guidelines 3.3 Observed protocols in reporting 3.4 Contribute to the development of team work. 	

LEARNING STRATEGIES:			
	Reasonable adjustment for trainees with disability (TWD)		
	hard of hearing	Visual impaired	Physical disability
Lecture-discussion	<ul style="list-style-type: none"> ➤ Slide presentation during lecture ➤ Sign language interpreter ➤ Give Softcopy/printed lecture material before class ➤ Provide the lecture in titled Video/ Film 	<ul style="list-style-type: none"> ➤ Give Braille printed lecture material before class ➤ Bold print for low vision 	<ul style="list-style-type: none"> ➤ Give Softcopy/printed lecture material before class
Group work / Individual assignment	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Guide/assistant/ ➤ Provide audio recorded work/assignment instruction 	Making special assistant during work/assignment as per requirement <ul style="list-style-type: none"> ➤ Group Partner with Person without disability
Role-play	<ul style="list-style-type: none"> ➤ Sign language interpreter 	Making special assistant during role play as per requirement	Making special assistant during role play as per requirement
ASSESSMENT METHODS:			
Written tests	<ul style="list-style-type: none"> ➤ Sign language interpreter ➤ Question in written form 		
Oral question		<ul style="list-style-type: none"> ➤ Braille printed test ➤ Alter to Oral question if must ➤ Additional time for assessment 	<ul style="list-style-type: none"> ➤ Additional time for assessment ➤ If written exam is not comfortable alter to Oral exam
<ul style="list-style-type: none"> ➤ Demonstration 	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Guide/assistant ➤ Making special assistant during work/assignment as per requirement ➤ Additional time for assessment 	<ul style="list-style-type: none"> ➤ Making special assistant during work/assignment as per requirement ➤ Additional time for assessment

ASSESSMENT CRITERIA:

LO1 Describe team role and scope

- 1.1 The **role and objectives of the team** are identified from available **sources of information**
- 1.2 Team parameters, reporting relationships and responsibilities are identified from team discussions and appropriate external sources

LO2 Identify own role and responsibility within team

- 2.1 Individual role and responsibilities within the team environment are identified
- 2.2 Roles and responsibility of other team members are identified and recognized
- 2.3 Reporting relationships within team and external to team are identified

LO3 Work as a team member

- 3.1 Effective and appropriate forms of communications used and interactions undertaken with team members who contribute to known team activities and objectives
- 3.2 Effective and appropriate contributions made to complement team activities and objectives, based on individual skills and competencies and **workplace context**
- 3.3 Observed protocols in reporting using standard operating procedures
- 3.4 Contribute to the development of team work plans based on an understanding of team's role and objectives and individual competencies of the members.

Module Code and Title : - IND FWP2 M11 0616- Working in team environment					
Item No.	Category/Item	Description/ Specifications	Description/ Specifications for TWD	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(Soft copy, etc	25	1:1
2.	Textbooks	Module	In electronic form(Soft copy, etc	25	1:1
3.	Reference Books	Recent ed.	Braille print	5	1:5
4.	Journals/Publication/Magazines	Recent ed.	In electronic form(Soft copy, etc	2	1:12
B.	Learning Facilities & Infrastructure				
1.	Lecture Room	10 X20 M		1	1:25
2.	Library	10 X20 M		1	1:25
3	Work shop	15 X 30 M		1	1:25
C.	Consumable Materials				
1.	Paper	Gold A 4		25	1:1
2	CD	RW 700MB		5	1:5
D.	Tools and Equipment				
1.	LCD	Sony		1	1:25
2	Computers	Dell 7010		1	1:25

LEARNING MODULE 12	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Developing Business Practice	
MODULE CODE: IND FWP2 M12 0616	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module specifies the outcomes required to establish a business operation from a planned concept. It includes researching the feasibility of establishing a business operation, planning the setting up of the business, implementing the plan and reviewing operations once commenced	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Identify business opportunity LO2 Identify personal business skills LO3 Plan for establishment of business operation LO4 Implement establishment plan LO5 Review implementation process	
MODULE CONTENTS: LO1 Identify business opportunity <div style="margin-left: 40px;"> 1.1 Business opportunities. 1.1.1 expected financial viability 1.1.2 skills of operator 1.1.3 amount and types of finance available 1.1.4 returns expected or required by owners 1.1.5 likely return on investment 1.1.6 finance required 1.1.7 lifestyle issues 1.2 Feasibility study <i>business viability</i>. 1.2.1 opportunities available 1.2.2 market competition 1.2.3 timing/ cyclical considerations 1.2.4 skills available 1.2.5 resources available 1.2.6 location and/ or premises available 1.2.7 risk related to a particular business opportunity, especially 1.2.8 in regard to Occupational Health and Safety and 1.2.9 environmental considerations 1.3 Market research on product or service 1.4 Assistance with feasibility study of <i>specialist and relevant parties</i> 1.4.1 Chamber of Commerce 1.4.3 financial planners and financial institution accountants 1.4.3 lawyers and providers of legal advice 1.4.4. government agencies </div>	

- 1.4.5 Industry/trade associations
- 1.4.6 online gateways
- 1.4.7 business brokers/business consultants

1.5 Impact of emerging or changing technology

1.6 Practicability of business opportunity.

1.7 Business plan.

LO2 Identify personal business skills

2.1 Financial and business skills business opportunities.

2.2 Personal skills/attributes business opportunity.

2.2.1 technical and/ or specialist skills

2.2.2 business knowledge and skills

2.2.3 entrepreneurship

2.3.4 willingness to take risks

2.3 Business risks.

2.3.1 occupational health and safety and environmental

2.3.2 considerations

2.3.3 relevant legislative requirements

2.3.4 security of investment

2.3.5 market competition

2.3.6 security of premises/ location

2.3.7 supply and demand

2.3.8 resources available

LO3 Plan for establishment of business operation

3.1 Business structure and operations.

3.2 Procedures to guide operations.

3.3 Financial backing for business operation.

3.4 Business legal and regulatory requirements

3.5 **Human and physical resources**

3.5.1 software and hardware

3.5.2 office premises

3.5.3 communications equipment

3.5.4 specialist services through outsourcing, contracting and

3.5.5 consultancy

3.5.6 staff

3.5.7 vehicles

3.5 Recruitment strategies.

LO4 Implement establishment plan

4.1 Marketing of business operation.

4.2 Physical and human resources to implement business operation.

4.3 office location staffed with required personnel and equipped

4.4 home-based site or other location such as leased or owned property

4.5 Monitoring process for managing operation

4.6 Legal documents

4.7 partnership agreements, constitution documents, statutory books

	for companies
	4,8 Recordkeeping including personnel, financial, taxation, OHS and environmental
4.1	Contractual procurement rights for goods and services
4.1.1	Owners
4.1.2	Suppliers
4.1.3	employees
4.1.4	landlords
4.1.5	agents
4.1.6	distributors
4.1.7	customers
4.2	Options for leasing/ownership of business premises
LO5 Review implementation process	
5.1	Review process for implementation of business operation
5.2	Improvements in business operation and associated management process.
5.3	Identified improvements are implemented and monitored for effectiveness.
5.4	Complete and records Necessary documentation

LEARNING STRATEGIES:

	Reasonable adjustment for trainees with disability (TWD)		
	hard of hearing	Visual impaired	Physical disability
Lecture-discussion	<ul style="list-style-type: none"> ➤ Slide presentation during lecture ➤ Sign language interpreter ➤ Give Softcopy/printed lecture material before class ➤ Provide the lecture in titled Video/ Film 	<ul style="list-style-type: none"> ➤ Give Braille printed lecture material before class ➤ Bold print for low vision 	<ul style="list-style-type: none"> ➤ Give Softcopy/printed lecture material before class
Demonstration	<ul style="list-style-type: none"> ➤ Provide recorded video of demonstration ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Provide audio recorded demonstration instruction 	<ul style="list-style-type: none"> ➤ Making special assistant during work/assignment as per necessary
Group work / Individual	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Guide/assistant / ➤ Provide audio 	<ul style="list-style-type: none"> ➤ Making special assistant during work/assignment

		recorded work/assignment instruction	as per requirement ➤ Group Partner with Person without disability
ASSESSMENT METHODS:			
Written tests	<ul style="list-style-type: none"> ➤ Sign language interpreter ➤ Question in written form 		
Oral question		<ul style="list-style-type: none"> ➤ Braille printed test ➤ Alter to Oral question, if must ➤ Additional time for assessment 	<ul style="list-style-type: none"> ➤ Additional time for assessment ➤ If written exam is not comfortable alter to Oral exam
Demonstration	<ul style="list-style-type: none"> ➤ Sign language interpreter 	<ul style="list-style-type: none"> ➤ Making special assistant during work/assignment as per requirement ➤ Additional time for assessment 	<ul style="list-style-type: none"> ➤ Making special assistant during work/assignment as per requirement ➤ Additional time for assessment

ASSESSMENT CRITERIA:

LO1 Identify business opportunity

- 1.1 **Business opportunities** are investigated and identified.
- 1.2 Feasibility study is undertaken to determine likely **business viability**.
- 1.3 Market research on product or service is undertaken.
- 1.4 Assistance with feasibility study of **specialist and relevant parties** is sought as required.
- 1.5 Impact of emerging or changing technology including e-commerce, on business operations is evaluated.
- 1.6 Practicability of business opportunity assessed in line with perceived risks, returns sought and resources available.
- 1.7 Business plan for operation is completed.

LO2 Identify personal business skills

- 2.1 Financial and business skills available are identified and taken into account when business opportunities are researched.

- 2.2 **Personal skills/attributes** are assessed and matched against those perceived as necessary for a particular business opportunity.
- 2.3 **Business risks** are identified and assessed according to resources available and personal preferences.

LO3 Plan for establishment of business operation

- 3.1 Business structure and operations are determined and documented.
- 3.2 Procedures to guide operations are developed and documented.
- 3.3 Financial backing for business operation is secured.
- 3.4 Business legal and regulatory requirements are identified and complied.
- 3.5 **Human and physical resources** required to commence business operation are determined.
- 3.6 Recruitment strategies are developed and implemented.

LO4 Implement establishment plan

- 4.1 Marketing of business operation is undertaken.
- 4.2 Physical and human resources to implement business operation are obtained.
- 4.3 **Operational unit** to support and coordinate business operation is established.
- 4.4 Monitoring process for managing operation is developed and implemented.
- 4.5 **Legal documents** are carefully maintained and relevant records are kept and updated to ensure validity and accessibility.
- 4.6 Contractual procurement rights for goods and services including **contracts with relevant people**, negotiated and secured as required in accordance with the business plan.
- 4.7 Options for leasing/ownership of business premises identified and contractual arrangements completed in accordance with the business plan.

LO5 Review implementation process

- 5.1 Review process for implementation of business operation is developed and implemented.
- 5.2 Improvements in business operation and associated management process are identified.
- 5.3 Identified improvements are implemented and monitored for effectiveness.
- 5.4 Necessary documentation are completed and records organized and kept securely.

Module Code and Title : - IND FWP2 M12 0616- Developing Business Practice					
Item No.	Category/Item	Description/ Specifications	Description/ Specifications for TWD	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(Soft copy, etc	25	1:1
2.	Textbooks	Module	In electronic form(Soft copy, etc	25	1:1
3.	Reference Books	Recent ed.	Braille print	5	1:5
4.	Journals/Publication/Magazines	Recent ed.	In electronic form(Soft copy, etc	2	1:12
B.	Learning Facilities & Infrastructure				
1.	Lecture Room			1	1:25
2.	Library			1	1:25
C.	Consumable Materials				
1.	Stationery			25	1:1
2	CD	RW 700MB		5	1:5
D.	Tools and Equipment				
1.	LCD			1	1:25
2	Computers			1	1:25

LEARNING MODULE 13	
TVET-PROGRAMME TITLE: Footwear Production Level II	
MODULE TITLE: Applying Continuous Improvement Processes (Kaizen)	
MODULE CODE: IND FWP2 M13 0616	
NOMINAL DURATION:	
MODULE DESCRIPTION: This module of competence covers the exercise of good workplace practice and effective participation in quality improvement teams. Personnel are required to ensure the quality and integrity of their own work, detect non-conformances and work with others to suggest improvements in productivity and quality.	
LEARNING OUTCOMES: At the end of the module the learner will be able to: LO1 Satisfy quality system requirements in daily work LO2 Analyze opportunities for corrective and/or optimization action LO3 Recommend corrective and/or optimization actions LO4 Participate in the implementation of recommended actions LO5 Participate in the development of continuous improvement strategies	
MODULE CONTENTS: LO1 Satisfy quality system requirements in daily work <ul style="list-style-type: none"> 1.1 Access information on quality system requirements for own job function 1.2 Record and report quality control data with quality system 1.3 quality control procedures <ul style="list-style-type: none"> 1.3.1 standards imposed by regulatory and licensing bodies 1.3.2 enterprise quality procedures 1.3.3 working to a customer brief or batch card 1.3.4 checklists to monitor job progress time, costs and quality standards 1.3.5 preparation of sampling plans 1.3.6 the use of hold points to evaluate conformance 1.3.7 the use of inspection and test plans to check compliance 1.4 Recognize and report non-conformances or problems 1.5 sustainable energy work practices <ul style="list-style-type: none"> 1.5.1 examining work practices that use excessive electricity 1.5.2 switching off equipment when not in use 1.5.3 regularly cleaning filters 1.5.4 insulating rooms and buildings to reduce energy use 1.5.5 recycling and reusing materials wherever practicable 1.5.6 minimizing process waste 1.6 Promote sustainable energy principles and work practices to other workers LO2 Analyze opportunities for corrective and/or optimization action	

- 2.1 Compare current work practices, procedures and process or equipment performance
- 2.2 Recognize variances that indicate abnormal or sub-optimal performance
- 2.3 Collect and/or evaluate batch and/or historical records to determine possible causes for sub-optimal performance
- 2.4 Use appropriate quality improvement techniques to rank the probabilities of possible causes

LO3 Recommend corrective and/or optimization actions

- 3.1 Analyze causes to predict likely impacts of changes and decide on the appropriate actions
- 3.2 Identify required changes to standards and procedures and training
- 3.3 **Report** recommendations to designated personnel
 - 3.3.1 verbal responses
 - 3.3.2 data entry into laboratory or enterprise database
 - 3.3.3 brief written reports using enterprise performs

LO4 Participate in the implementation of recommended actions

- 4.1 Implement approved actions and monitor performance following changes to evaluate results
- 4.2 Implement changes to systems and procedures to eliminate possible causes
- 4.3 Document outcomes of actions and communicate them to **relevant personnel**
 - 4.3.1 supervisors, managers and quality managers
 - 4.3.2 administrative, laboratory and production personnel
 - 4.3.3 internal/external contractors, customers and suppliers

LO5 Participate in the development of continuous improvement strategies

- 5.1 Review all relevant features of work practice to identify possible contributing factors leading to sub-optimal performance
- 5.2 Identify options for removing or controlling the risk of sub-optimal performance
- 5.3 Assess the adequacy of current controls, quality methods and systems
- 5.4 Identify opportunities to continuously improve performance
- 5.5 Develop recommendations for continual improvements of work practices, methods, procedures and equipment effectiveness
- 5.6 Consult with appropriate personnel to refine recommendations before implementation of approved improvement strategies
- 5.7 Document outcomes of strategies and communicate them to relevant personnel

LEARNING STRATEGIES:

	Reasonable adjustment for trainees with disability (TWD)		
	hard of hearing	Visual impaired	Physical disability
Lecture-discussion	<ul style="list-style-type: none"> ➤ Slide presentation during lecture ➤ Sign language interpreter ➤ Give Softcopy/printed lecture material before class ➤ Provide the lecture in titled Video/ Film 	<ul style="list-style-type: none"> ➤ Give Braille printed lecture material before class ➤ Bold print for low vision 	<ul style="list-style-type: none"> ➤ Give Softcopy/printed lecture material before class
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ASSESSMENT METHODS:

Written tests	<ul style="list-style-type: none"> ➤ Sign language interpreter ➤ Question in written form 		
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ASSESSMENT CRITERIA:

LO1 Satisfy quality system requirements in daily work

- 1.7 Access information on quality system requirements for own job function
- 1.8 Record and report quality control data in accordance with quality system
- 1.9 Follow **quality control procedures** to ensure products, or data, are of a defined quality as an aid to acceptance or rejection
- 1.10 Recognize and report non-conformances or problems
- 1.11 Conduct work in accordance with **sustainable energy work practices**
- 1.12 Promote sustainable energy principles and work practices to other workers

LO2 Analyze opportunities for corrective and/or optimization action

- 2.5 Compare current work practices, procedures and process or equipment performance with requirements and/or historical data or records
- 2.6 Recognize variances that indicate abnormal or sub-optimal performance
- 2.7 Collect and/or evaluate batch and/or historical records to determine possible causes for sub-optimal performance
- 2.8 Use appropriate quality improvement techniques to rank the probabilities of possible causes

LO3 Recommend corrective and/or optimization actions

- 3.4 Analyze causes to predict likely impacts of changes and decide on the appropriate actions
- 3.5 Identify required changes to standards and procedures and training
- 3.6 **Report** recommendations to designated personnel

LO4 Participate in the implementation of recommended actions

- 4.4 Implement approved actions and monitor performance following changes to evaluate results
- 4.5 Implement changes to systems and procedures to eliminate possible causes
- 4.6 Document outcomes of actions and communicate them to **relevant personnel**

LO5 Participate in the development of continuous improvement strategies

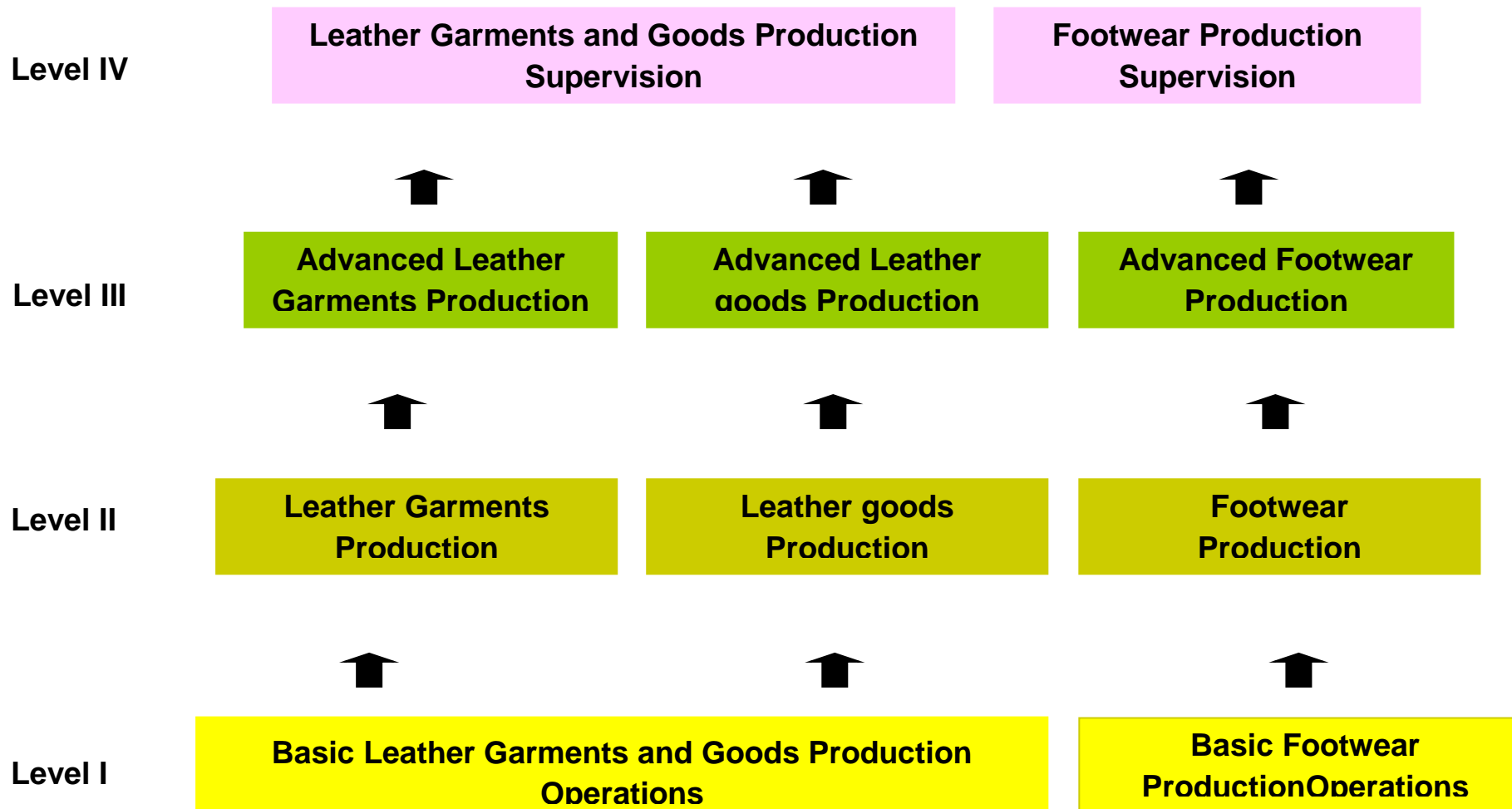
- 5.8 Review all relevant features of work practice to identify possible contributing factors leading to sub-optimal performance
- 5.9 Identify options for removing or controlling the risk of sub-optimal performance
- 5.10 Assess the adequacy of current controls, quality methods and systems
- 5.11 Identify opportunities to continuously improve performance
- 5.12 Develop recommendations for continual improvements of work practices, methods, procedures and equipment effectiveness
- 5.13 Consult with appropriate personnel to refine recommendations before implementation of approved improvement strategies

Document outcomes of strategies and communicate them to relevant personnel

Module Code and Title : - IND FWP2 M13 0616- Applying continuous Improvement Process					
Item No.	Category/Item	Description/ Specifications	Description/ Specifications for TWD	Quantity	Recommended Ratio (Item: Learner)
A.	Learning Materials				
1.	TTLM	Learning guide	In electronic form(Soft copy, etc	25	1:1
2.	Textbooks	Module	In electronic form(Soft copy, etc	5	1:5
3.	Reference Books	Recent ed.	Braille print	1	1:25
4.	Journals/Publication/Magazines	Recent ed.	In electronic form(Soft copy, etc		
B.	Learning Facilities & Infrastructure				
1.	Lecture Room	10 X 20 M		1	1:25
2.	Library	10 X 20 M		1	1:25
3	Work shop	15 x30 m		1	1:25
C.	Consumable Materials				
1.	Paper	A 4Gold		1 Pack	1:5
2	CD	R-CD		25	1:1
D.	Tools and Equipment				
1.	LCD	Sony		1	1:25
2	Computers	Dell 7010		1	1:25

Sector: Industry Development

Sub-Sector: Leather Products



Acknowledgement

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We would like also to express our appreciation to the following Staff and Officers people in need who facilitated the development of this curriculum

This outcome based curriculum was developed on June 2016

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The Management and Staff of DILLA TVET COLLAGE Ato girma dorri (dean) and Ato asfaw kebede (v /dean)

We would like also to express our appreciation to the following Staff and Officers of **PEOPLE IN NEED** especially Ato **Admasseged Alemayehu** who made the development of this curriculum possible.