

# GARMENT PRODUCTION

## LEVEL – II



## TVET CURRICULUM

Based on December, 2021 (V- III) Occupational  
standard (OS)

March, 2022  
Addis Ababa, Ethiopia

## Preface

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

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

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

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

## TVET-Program Design

### 1.1. TVET-Program Title: Garment Production **Level II**

### 1.2. TVET-Program Description

The Program is designed to develop the necessary knowledge, skills and attitude of the trainees to the standard required by the occupation. The contents of this program are in line with the occupational standard. The Trainees who successfully completed the Program will be qualified to work as a Garment producer 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 **Garment Production**.

The prime objective of this training program is to equip the Trainees with the identified competences specified in the OS. Graduates are therefore expected to \_Prepare Design Concept for Collection of Simple Outfits, Develop Pattern and Conduct Grading, Produce cut panels with Delicate Fabrics, Operate Specialized Industrial Machines, Prepare and Perform Embroidery Design and Machine operation, Assemble Garment Parts, Apply Apparel Finishing, Prevent and eliminate MUDA in accordance with the performance criteria and evidence guide described in the OS.

### 1.3. TVET-Program Training Outcomes

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

**IND GAP2 01 1221** \_Prepare Design Concept for Collection of Simple Outfits

**IND GAP2 02 1221** Develop Pattern and Conduct Grading

**IND GAP2 03 1221** Produce cut panels with Delicate Fabrics

**IND GAP2 04 1221** Operate Specialized Industrial Machines

**IND GAP2 05 1221** Prepare and Perform Embroidery Design and Machine operation

**IND GAP2 06 1221** Assemble Garment Parts

**IND GAP2 07 1221** Apply Apparel Finishing

**IND GAP2 08 1221** Prevent and eliminate MUDA

#### 1.4. Duration of the TVET-Program

The Program will have duration of **563 hours** including the on school/ Institution training and on-the-job practice or cooperative training time. Such cooperative training based on realities of the industry, nature of the occupation, location of the TVET institution, and other factors will be considered in the training delivery to ensure that trainees acquire practical and workplace experience.

s.no	Unit competency	TVET Institution training		Cooperative training	Total hours	Remarks
		Theory	Practical			
1.	Prevent and eliminate MUDA	7	10	8	25	
2.	Prepare Design Concept for Collection of Simple Outfits	20	35	5	60	
3.	Develop Pattern and Conduct Grading	30	90	10	130	
4.	Produce cut panels with Delicate Fabrics	15	27	8	50	
5.	Operate Specialized Industrial Machines	15	15	20	50	
6.	Prepare and Perform Embroidery Design and Machine operation	10	30	20	60	
7.	Assemble Garment Parts	28	100	32	160	
8.	Apply Apparel Finishing	6	16	6	28	
Total		131	313	99	563	

### 1.5. Qualification Level and Certification

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

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

### 1.6. Target Groups

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

### 1.7 Entry Requirements

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

### 1.8 Mode of Delivery

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

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

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

### 1.9. TVET-Program Structure

Unit of Competence		Module Code & Title		Training Outcomes	Duration (In Hours)
<b><u>IND GAP2 08</u></b> <b><u>1221</u></b>	Prevent and eliminate MUDA	<b>IND GAP2 M01</b> <b>0322</b>	Preventing and eliminating MUDA	<ul style="list-style-type: none"> <li>• Prepare for work</li> <li>• Identify MUDA and problem</li> <li>• Analyze causes of a problem</li> <li>• Prevent occurrence of wastes and sustain operation</li> </ul>	25
<b><u>IND GAP2 01</u></b> <b><u>1221</u></b>	Prepare Design Concept for Collection of Simple Outfits	<b>IND GAP2 M02</b> <b>0322</b>	Preparing Design Concept for Collection of Simple Outfits	<ul style="list-style-type: none"> <li>• Prepare workstation</li> <li>• Identify fashion trends</li> <li>• Identify influences on fashion design</li> <li>• Carry out fashion design trend&amp; develop a design concept based on a design brief</li> <li>• Develop theme, mood and color boards</li> <li>• Range presentation and Complete work</li> </ul>	60
<b><u>IND GAP2 0</u></b> <b><u>2221</u></b>	Develop Pattern and Conduct Grading	<b>IND GAP2 M03</b> <b>0322</b>	Developing Pattern and Conducting Grading	<ul style="list-style-type: none"> <li>• Prepare workstation</li> <li>• Develop a tech pack/ specification</li> <li>• Select blocks to be used</li> <li>• Apply basic patternmaking principles to develop patterns</li> <li>• Test patterns</li> <li>• Grading task</li> <li>• Complete patternmaking</li> </ul>	130
<b><u>IND GAP2 03</u></b> <b><u>1221</u></b>	Produce cut panels with Delicate	<b>IND GAP2 M04</b> <b>0322</b>	Producing cut panels with Delicate Fabrics	<ul style="list-style-type: none"> <li>• Prepare workstation</li> <li>• Draft lay marker</li> <li>• Lay-up fabric and Positioning marker</li> </ul>	50

	Fabrics			<ul style="list-style-type: none"> <li>• Cut work</li> <li>• Complete work</li> </ul>	
<b><u>IND GAP2 04</u></b> <b><u>1221</u></b>	Operate Specialized Industrial Machines	<b>IND GAP2 M05</b> <b>0322</b>	Operating Specialized Industrial Machines	<ul style="list-style-type: none"> <li>• Prepare workstation</li> <li>• Prepare work pieces and equipment</li> <li>• Perform production assembly tasks</li> <li>• Check and verify machine performance</li> <li>• Dispatch completed work</li> </ul>	50
<b><u>IND GAP2 05</u></b> <b><u>1221</u></b>	Prepare and Perform Embroidery Design and Machine operation	<b>IND GAP2 M06</b> <b>0322</b>	Preparing and Performing Embroidery Design and Machine operation	<ul style="list-style-type: none"> <li>• Identify client design requirements</li> <li>• Create design</li> <li>• Edit design</li> <li>• Present design for feedback</li> <li>• Set up embroidery machine for production operation</li> <li>• Test embroidery machine setting</li> <li>• Prepare work pieces and workstation</li> <li>• Produce Machine embroidery on articles/ garments</li> <li>• Completion of work</li> </ul>	60
<b><u>IND GAP2 06</u></b> <b><u>1221</u></b>	Assemble Garment Parts	<b>IND GAP2 M07</b> <b>0322</b>	Assembling Garment Parts	<ul style="list-style-type: none"> <li>• Prepare sewing machine for operation</li> <li>• Prepare cut parts</li> <li>• Sew and assemble garment parts</li> <li>• Incorporate modifications</li> </ul>	160
<b><u>IND GAP2 07</u></b> <b><u>1221</u></b>	Apply Apparel Finishing	<b>IND GAP2 M08</b> <b>0322</b>	Applying Apparel Finishing	<ul style="list-style-type: none"> <li>• Apply finishing</li> <li>• Trim excess threads</li> <li>• Press finished garments</li> <li>• Packing finished product</li> </ul>	28

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

### 1.10 Institutional Assessment

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

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

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

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

### 1.11 TVET Teachers Profile

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



LEARNING MODULE 01	
TVET-PROGRAMME TITLE: Garment Production <b>Level II</b>	
MODULE TITLE : <b>Preventing and Eliminating MUDA</b>	
MODULE CODE: <b>IND GAP2 M01 0322</b>	
NOMINAL DURATION: 25 Hours	
<p><b>MODULE DESCRIPTION:</b> This module covers the knowledge, skills and attitude required by a worker to prevent and eliminate MUDA/wastes in his/her workplace by applying scientific problem-solving techniques and tools to enhance quality, productivity and other kaizen elements on continual basis It covers responsibility for the day-to-day operation of the work and ensures Kaizen Elements are continuously improved and institutionalized.</p>	
<p><b>LEARNING OUTCOMES</b></p> <p>At the end of the module the learner will be able to:</p> <p><b>LO1. Prepare for work</b></p> <p><b>LO2. Identify MUDA and problem</b></p> <p><b>LO3. Analyze causes of a problem</b></p> <p><b>LO4. Eliminate MUDA and Assess effectiveness of the solution.</b></p> <p><b>LO5. Prevent occurrence of wastes and sustain operation</b></p>	
<p><b>MODULE CONTENTS:</b></p> <p><b>LO1 Prepare for work</b></p> <ol style="list-style-type: none"> <li>1.1. Using work instructions</li> <li>1.2. Reading and interpreting job specifications</li> <li>1.3. Observing OHS requirements,</li> <li>1.4. Selecting appropriate material</li> <li>1.5. Identifying and checking safety equipment and tools.</li> </ol> <p><b>LO2 Identify MUDA and problem</b></p> <ol style="list-style-type: none"> <li>2.1. Preparing plan of MUDA and implementing problem identification</li> <li>2.2. Discussing causes and effects of MUDA</li> <li>2.3. Listing possible problems related to the process /Kaizen elements using statistical tools and techniques.</li> <li>2.4. Identifying and listing problems of kaizen on Visual Management Board/Kaizen Board.</li> <li>2.5. Using tools and techniques</li> <li>2.6. Identifying and measuring wastes/MUDA based on relevant procedures.</li> <li>2.7. Reporting identified and measured wastes</li> </ol>	

### **LO3. Analyze causes of a problem**

- 3.1. Listing all possible causes of a problem
- 3.2. Analyzing cause relationships using 4m1e.
- 3.3. Identifying causes of the problems
- 3.4. Selecting the root cause directly related to the problem
- 3.5. Listing all possible ways using creative idea generation
- 3.6. Testing and evaluating The suggested solutions
- 3.7. Preparing detailed summaries of the action plan

### **LO4. Eliminate MUDA and Assess effectiveness of the solution.**

- 4.1. Preparing and implementing Plan of MUDA elimination.
- 4.2. Adopting necessary attitude and ten basic principles for improvement
- 4.3. Using tools and techniques to eliminate wastes/MUDA
- 4.4. Reducing and eliminating Wastes/MUDA
- 4.5. Identifying tangible and intangible results are.
- 4.6. Comparing tangible results using various types of diagrams.
- 4.7. Reporting improvements

### **LO5. Prevent occurrence of wastes and sustain operation.**

- 5.1. Preparing and implementing Plan of MUDA prevention.
- 5.2. Preparing and discussing Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement
- 5.3. Preventing occurrences of wastes/MUDA
- 5.4. Creating waste-free workplace using 5W and 1Hsheet.
- 5.5. Doing the completion of required operation
- 5.6. Facilitating the updating of standard procedures and practices
- 5.7. Training and ensuring capability of the work team on the new Standard Operating Procedures (SOPs).

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
<b>Lecture-discussion</b>	<ul style="list-style-type: none"> <li>❖ Provide large print text</li> <li>❖ Prepare the lecture in <b>Audio/video</b></li> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Write short notes on the black/white board using large text</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Use normal tone of voice</li> <li>❖ Encourage trainees to record the lecture in audio format</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assign sign language interpreter</li> <li>❖ Arrange the class room seating to be conducive for eye to eye contact</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Introduce new and relevant vocabularies</li> <li>❖ Use short and clear sentences</li> <li>❖ Give emphasis on visual lecture and ensure the attention of the trainees</li> <li>❖ Avoid movement during lecture time</li> <li>❖ Present the lecture in video format</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Speak loudly</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Present the lecture in video format</li> <li>❖ Ensure the attention of the trainees</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible for wheelchairs users.</li> <li>❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> </ul>
<b>Demonstration</b>	<ul style="list-style-type: none"> <li>❖ Conduct close follow up</li> <li>❖ Use verbal description</li> <li>❖ Provide special attention in the process of guidance</li> <li>❖ facilitate the support of peer trainees</li> <li>❖ Prepare &amp; use simulation</li> </ul>	<ul style="list-style-type: none"> <li>❖ use Sign language interpreter</li> <li>❖ Use video recorded material</li> <li>❖ Ensure attention of the trainees</li> <li>❖ Provide structured training</li> <li>❖ Show clear and short method</li> <li>❖ Use gesture</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Illustrate in clear &amp; short method</li> <li>❖ Use Video recorded material</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines</li> <li>❖ Assign peer trainees to assist</li> <li>❖ Conduct close follow up</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>
<b>Group discussion</b>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees with group members</li> </ul>	<ul style="list-style-type: none"> <li>❖ Use sign language interpreters</li> <li>❖ Facilitate the integration of</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees</li> </ul>	<ul style="list-style-type: none"> <li>❖ Introduce the trainees with their peers</li> </ul>

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

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

## **ASSESSMENT CRITERIA:**

### **LO1 Prepare for work**

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

### **LO2 Identify MUDA and problem**

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

### **LO3. Analyze causes of a problem**

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

### **LO4. Eliminate MUDA and Assess effectiveness of the solution.**

- Plan of MUDA elimination is prepared and implemented by medium KPT members.
- Necessary attitude and the ten basic principles for improvement are adopted to eliminate waste/MUDA.

- Tools and techniques are used to eliminate wastes/MUDA based on the procedures and OHS.
- Wastes/MUDA are reduced and eliminated in accordance with OHS and organizational requirements.
- Tangible and intangible results are identified.
- Tangible results are compared with targets using various types of diagrams.
- Improvements gained by elimination of waste/MUDA are reported to relevant bodies.

**LO5. Prevent occurrence of wastes and sustain operation.**

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

## Annex: Resource Requirements

IND GAP2 M01 0322		Preventing and Eliminating MUDA		
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
<b>A.</b>	<b>Learning Materials</b>			
1.	TTLM	To be Prepared by Trainers	25	1:1
2.	Textbooks			
3.	Reference Books	The motive series Macmillan text for industrial vocation & technical education any book related to developing business practice	25	1:1
4.	Journals/Publication/Magazines	-		
<b>B.</b>	<b>Learning Facilities &amp; Infrastructure</b>			
1.	Lecture ,processing Room, Chalk board	5*6M2	1	1:25
2.	Library , Sample documents	Equipped with full facility	1	1:25
<b>C.</b>	<b>Consumable Materials</b>			
1	Copy paper	A <sub>4</sub> , A <sub>3</sub> ,	5packs each	1:5
2	Pencil	Pcs	25	1:1
3	pen	Pcs	25	1:1
4	Eraser	Standard	25	1:1
<b>D.</b>	<b>Tools and Equipment</b>			
1.	Dust masks		25	1:1
2	Goggles		25	1:1
3	Glove		25	1:1
4	Working cloth		25	1:25
5	First aid	Full packed	1	1:25
6	Safety shoes		25	1:1
7	Screens	Standard	1	1:25
8	Separators	Standard	25	1:1
9	washing machines		1	1:25
10	materials handling equipment		25	1:1



<b>LEARNING MODULE 02</b>	
TVET-PROGRAMME TITLE: Garment Production <b>Level II</b>	
MODULE TITLE: <b>Preparing Design Concept for Collection of Simple Outfits</b>	
MODULE CODE: <b>IND GAP2 M02 0322</b>	
NOMINAL DURATION: 60 Hours	
<b>MODULE DESCRIPTION:</b> This module covers the knowledge, skills and attitudes required to prepare a design concept to develop a collection of outfits. It includes skills to perform garment design and trend analysis for the particular season and identifying a theme for the collection; skills to develop a design brief based on the entire range of outfits.	
<b>LEARNING OUTCOMES</b> At the end of the module the trainee will be able to: <b>LO1. Prepare workstation</b> <b>LO2. Identify fashion trends</b> <b>LO3. Identify influences on fashion design</b> <b>LO4. Carry out fashion design trend&amp; develop a design concept based on a design brief</b> <b>LO5 Develop theme, mood and color boards</b> <b>LO 6 Range presentation and Complete work</b>	
<b>MODULE CONTENTS:</b> <b>LO1. Prepare workstation</b> <ul style="list-style-type: none"> <li>1.1 Setting up Workstation</li> <li>1.2 Preparing sketching tools and equipment</li> <li>1.3 Selecting material for mood and theme boards</li> <li>1.4 Resources for research and inspiration               <ul style="list-style-type: none"> <li>1.1.1. Templates for fashion illustration</li> <li>1.1.2. Fabric swatches</li> <li>1.1.3. Samples of accessories</li> </ul> </li> </ul> <b>LO2. Identify fashion trends</b> <ul style="list-style-type: none"> <li>2.1 Identifying 20<sup>th</sup> – 21<sup>st</sup> century Fashion trends</li> <li>2.2 Identifying cultural fashion trends</li> <li>2.3 Identifying Fashion circles and garments</li> </ul> <b>LO3. Identify influences on fashion design</b> <ul style="list-style-type: none"> <li>3.1 Significant events</li> </ul>	

3.2 Identifying Influences on fashion trends

3.3 Identifying and analyzed Seasonal fashion

**LO4. Carry out fashion design trend& develop a design concept based on a design brief**

4.1 Identifying upcoming season fashion trends

4.2 Identifying Target market.

4.3 Illustrate series of sketches use design principle

4.4 Identifying required materials, equipment and skills to develop the collection.

**LO5 Develop theme, mood and color boards**

5.1 Defending trend and style according to fashion trend and rules

5.2 Developing a theme boards

5.3 Developing mood boards

5.4 Developing color boards

5.5 Developing garment Trim and accessory board

5.6 Developing Client boards

**LO 6 Range presentation and Complete work**

6.1 Presenting work

6.2 Visualizing Collection.

6.3 Presenting the design concept

6.4 Carrying out Any changes or adjustment

6.5 Observing OHS procedures

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
<b>Lecture-discussion</b>	<ul style="list-style-type: none"> <li>❖ Provide large print text</li> <li>❖ Prepare the lecture in <b>Audio/video</b></li> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Write short notes on the black/white board using large text</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Use normal tone of voice</li> <li>❖ Encourage trainees to record the lecture in audio format</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assign sign language interpreter</li> <li>❖ Arrange the class room seating to be conducive for eye to eye contact</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Introduce new and relevant vocabularies</li> <li>❖ Use short and clear sentences</li> <li>❖ Give emphasis on visual lecture and ensure the attention of the trainees</li> <li>❖ Avoid movement during lecture time</li> <li>❖ Present the lecture in video format</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Speak loudly</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Present the lecture in video format</li> <li>❖ Ensure the attention of the trainees</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible for wheelchairs users.</li> <li>❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> </ul>
<b>Demonstration</b>	<ul style="list-style-type: none"> <li>❖ Conduct close follow up</li> <li>❖ Use verbal description</li> <li>❖ Provide special attention in the process of guidance</li> <li>❖ facilitate the support of peer trainees</li> <li>❖ Prepare &amp; use simulation</li> </ul>	<ul style="list-style-type: none"> <li>❖ use Sign language interpreter</li> <li>❖ Use video recorded material</li> <li>❖ Ensure attention of the trainees</li> <li>❖ Provide structured training</li> <li>❖ Show clear and short method</li> <li>❖ Use gesture</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Illustrate in clear &amp; short method</li> <li>❖ Use Video recorded material</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines</li> <li>❖ Assign peer trainees to assist</li> <li>❖ Conduct close follow up</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>
<b>Group discussion</b>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow up</li> <li>❖ Introduce the trainees with other group</li> </ul>	<ul style="list-style-type: none"> <li>❖ Use sign language interpreters</li> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow up</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow</li> </ul>	<ul style="list-style-type: none"> <li>❖ Introduce the trainees with their peers</li> </ul>

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

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

## ASSESSMENT CRITERIA

### LO1 Prepare workstation

- Workstation and seating are set up according to OHS practices and specifications for work.
- Sketching tools and equipment are set up ready for use.
- Material for mood and theme boards in place, e.g. scissors, glue, tape, paper, printer are ready to use.
- Resources (library, internet access, books, magazines) are available for research and inspiration
- OHS practices and workplace practices for dealing with hazards are identified and followed.

### LO 2 Identify fashion trends

- Fashion trends from 20th – 21st century are identified.
- cultural fashion trends are identified
- Fashion circles and garments are identified with significant different design principles.

### LO3 Identify influences on fashion design

- events are Significant
- Influences on fashion trends are identified and analyzed.
- Seasonal fashion are identified and analyzed

### LO4 Carry out fashion design trend& develop a design concept based on a design brief

- significant trends of the upcoming season and related fashion trends are Identified
- Target market are Identified.
- A series of sketches are drawn to illustrate design principles, develop drawing templates of figures.
- a design brief are developed, Identified and listed in details fabric, garment manufacturing techniques and process steps in converting the design to a garment (quality, quantity)
- Required materials, equipment and skills are identified to develop the collection.

#### **LO5 Develop theme, mood and color boards**

- Trend and style are defined according to fashion trend and rules.
- a theme boards are developed in accordance with specifications
- mood boards are developed
- color boards are developed
- Trim (zipper, button, thread, etc) board is developed
- Client boards

#### **LO6 Range presentation and Complete work**

- Sketches, mood, color and theme boards are presented and inspected regarding fashion trend and rules.
- Collection is visualized.
- The design concept is presented for an entire collection and highlights the significance of the design concept.
- Any changes or adjustment are carried out as required.
- OHS procedures are observed in the application of this unit.

## Annex: Resource Requirements

IND GAP2 M03 0322 Preparing Design Concept for Collection of Simple Outfits				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
<b>A.</b>	<b>Learning Materials</b>			
1.	TTLM	Information sheet, operation sheet and lab test	25	1:1
2.	Reference Books			
2.1	Patternmaking for Fashion Design	Helen Joseph, Armstrong, Pearson Education Pte. Ltd 2005	5	1:5
2.2	Matric Pattern Cutting for Menswear,	Winifred Aldrich, BSP Professional Books, London,	5	1:5
2.3.	Designing Clothes With The Flat Pattern Method: Customize Fitting Shells To Create Garments In Any Style	ALM, SARA	5	1:5
2.4	Historical Fashion in detail the 17th and 18th Centuries”,	Hart A North S V and A Museum, McMillan, India,. (1998)	5	1:5
3	Journals/Publication/Magazines			
<b>B.</b>	<b>Learning Facilities &amp; Infrastructure</b>			
1.	Lecture Room	Standard	1	1:25
2.	Work shop	Standard	1	1:25
3.	Library			
4.	Visual training media (LCD, laptops, whiteboard)			1:25
<b>C.</b>	<b>Consumable Materials</b>			
1.	Paper	A4	2 pac	1:12
2	Paper	A0	250	10:1



3	Marker		4pcs	1:1
4	Eraser		25	1:1
5	UHU		4	2:12
6	Pin	Long		
7	Scotch	Plaster	5	1:5
<b>D.</b>	<b><i>Tools and Equipments</i></b>			
1.	Dress form	Women & men	<b>4</b>	<b>4:25</b>
2.	Pencil & sharpener	<b>HB</b>	<b>25</b>	<b>1:1</b>
3.	Tape measure		25	1:1
4.	Standard size table		2	1:13
5.	Record book	Not book format	25	1:1
6.	Ruler	<b>1m&amp;50cm metal</b>	25	1:1
7.	T-Square	<b>Metal</b>	25	1:1
8.	French Curve	Armhole curve #6	25	1:1
9.	Hip curve	Plastic	25	1:1
10.	L-square	Metal	25	1:1
11.	Tracing Wheel		25	1:1
12.	Pencil & sharpener		25	1:1
13.	Standard size table	Standard	25	1:1

LEARNING MODULE 03	
TVET-PROGRAMME TITLE: Garment Production <b>Level II</b>	
MODULE TITLE: <b>Developing Pattern and Conduct Grading</b>	
MODULE CODE: <b>IND GAP2 M03 0322</b>	
NOMINAL DURATION: .130... Hours	
<b>MODULE DESCRIPTION:</b> This module covers the knowledge, skills and attitudes required to develop patterns from a fashion illustration by using basic patternmaking and grading principles. The module includes the development of tech packs skills for the entire selected outfit of the range.	
<b>LEARNING OUTCOMES</b> At the end of the module the trainee will be able to: <b>LO1. Prepare workstation</b> <b>LO2. Develop a tech pack/ specification</b> <b>LO3. Select blocks to be used</b> <b>LO4. Apply basic patternmaking principles to develop patterns</b> <b>LO5. Test patterns</b> <b>LO6. Grading task</b> <b>LO7 Complete patternmaking</b>	
<b>MODULE CONTENTS:</b> <b>LO1. Prepare drawing tools, equipment and workstation</b> <ul style="list-style-type: none"> <li>1.1 Setting up workstation</li> <li>1.2 Set up Patternmaking tools and equipment</li> <li>1.3 Apply OHS practice</li> </ul> <b>LO2. Develop a tech pack/ specification</b> <ul style="list-style-type: none"> <li>2.1 Identifying entire outfit</li> <li>2.2 Interpreting and understand garment tech pack</li> <li>2.3 Preparing garment tack pack for entire outfit</li> </ul> <b>LO3. Select blocks to be used</b> <ul style="list-style-type: none"> <li>3.1 Analyzing block design</li> <li>3.2 Identify fabric performance characteristic to affect pattern piece</li> <li>3.3 Preparing plan to develop pattern</li> <li>3.4 Determining ease allowance</li> <li>3.5 Selecting appropriate block</li> </ul>	

#### **LO4. Apply basic patternmaking principles to develop patterns**

- 4.1 Applying basic patternmaking and grading principles to develop pattern
- 4.2 Documenting basic formula and methods
- 4.3 Checking a pattern piece accurately
- 4.4 Labeling All pattern pieces

#### **LO5. Test patterns**

- 5.1 Check fitting with toile (chip piece of fabric )
- 5.2 Alternating a pattern piece to improve fitting
- 5.3 Documenting alternated pattern piece
- 5.4 Developing Facing, closure

#### **LO6. Grading task**

- 6.1 Determine grading requirement
- 6.2 Applying grading rule
- 6.3 Grading a pattern with manually
- 6.4 Identifying stack points or lines if stacking is happened
- 6.5 Pattern attributes preserve and Integrate during grading
- 6.6 Labeling all pattern piece
- 6.7 Checking and rectify pattern piece

#### **LO7. Complete patternmaking**

- 7.1 Completing pattern piece and pattern specification sheet
- 7.2 Labeling and storing finished pattern piece
- 7.3 Observing OHS practice

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
<b>Lecture-discussion</b>	<ul style="list-style-type: none"> <li>❖ Provide large print text</li> <li>❖ Prepare the lecture in <b>Audio/video</b></li> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Write short notes on the black/white board using large text</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Use normal tone of voice</li> <li>❖ Encourage trainees to record the lecture in audio format</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assign sign language interpreter</li> <li>❖ Arrange the class room seating to be conducive for eye to eye contact</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Introduce new and relevant vocabularies</li> <li>❖ Use short and clear sentences</li> <li>❖ Give emphasis on visual lecture and ensure the attention of the trainees</li> <li>❖ Avoid movement during lecture time</li> <li>❖ Present the lecture in video format</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Speak loudly</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Present the lecture in video format</li> <li>❖ Ensure the attention of the trainees</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible for wheelchairs users.</li> <li>❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> </ul>
<b>Demonstration</b>	<ul style="list-style-type: none"> <li>❖ Conduct close follow up</li> <li>❖ Use verbal description</li> <li>❖ Provide special attention in the process of guidance</li> <li>❖ facilitate the support of peer trainees</li> <li>❖ Prepare &amp; use simulation</li> </ul>	<ul style="list-style-type: none"> <li>❖ use Sign language interpreter</li> <li>❖ Use video recorded material</li> <li>❖ Ensure attention of the trainees</li> <li>❖ Provide structured training</li> <li>❖ Show clear and short method</li> <li>❖ Use gesture</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Illustrate in clear &amp; short method</li> <li>❖ Use Video recorded material</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines</li> <li>❖ Assign peer trainees to assist</li> <li>❖ Conduct close follow up</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>
<b>Group discussion</b>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow up</li> <li>❖ Introduce the trainees with other group</li> </ul>	<ul style="list-style-type: none"> <li>❖ Use sign language interpreters</li> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow up</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow</li> </ul>	<ul style="list-style-type: none"> <li>❖ Introduce the trainees with their peers</li> </ul>

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

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

## **ASSESSMENT CRITERIA:**

### **LO.1 Drawing tools and equipment are selected and made ready for use.**

- Workstation and seating are set up according to OHS practices and specifications for work.
- Patternmaking tools and equipment are set up ready for use
- OHS practices and workplace practices for dealing with hazards are identified and followed.

### **LO.2 Develop a tech pack/ specification**

- identified entire outfit
- Measurements, materials, colors, trim, grading, accessories, labels, tags are defined.
- a tech pack for the entire outfit is prepared

### **LO.3 Select blocks to be used**

- Design is analyzed to identify appropriate modifications.
- Fabric performance characteristics that may affect garment pattern are identified.
- Pattern development is planned according to design, material, measurements, quality standards and workplace practices.
- Ease allowances are determined
- Appropriate block is selected.

### **LO.4 Apply basic patternmaking principles to develop patterns**

- Pattern is developed in applying basic patternmaking and grading principles in accordance with specifications
- Methods and formulas used are documented.
- Pattern pieces are checked for accuracy, including seam allowances, ease allowances, seam match, hems, specific material requirements and functional openings.
- All pattern pieces are labeled, including grain lines, notches, pattern information and cutting instructions.

### **LO.5 Test patterns**

- A toile (chip piece of fabric) is made to test the fit and accuracy of pattern.
- Pattern is altered to reflect test fitting outcomes, quality standards and workplace practices.

- Alterations to patterns are documented.
- Facing, closure options are developed

#### **LO.6 Grading task**

- Stacking or outlay requirements, including direction are determined
- Pattern is graded manually using patternmaking technical skills or by computer
- If stacking, stack points or lines are identified
- Integrity of pattern attributes is preserved during grading
- All pattern pieces are accurately labeled with pattern marking symbols
- Pattern is checked for accuracy and rectified or addressed as required

#### **LO.7 Complete work**

- Pattern specification sheets are completed and attached to patterns for storage.
- Finished patterns are labeled and filed / stored in accordance with enterprise standard procedures and system
- OHS procedures are observed in the application of this unit



## Annex: Resource Requirements

IND GAP2 M03 0322 Developing Pattern and Conduct Grading				
Item No	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials			
1	<b>TTLM</b>	Information sheet, operation sheet and lab test	25	1:1
2	<b>Reference manuals and books To be developed by the trainer</b>			
	,fashion patternmaking techniques,: how to make skirts, trousers and shirts. Women/men	Donnanno, antonio ; drudi, elisabetta volume 1(2014)	5	1:5
	,garment drafting by simple rule method	Gingles, mae milbourne mrs [from old c,(2018)	5	1:5
	pattern fitting and alteration: 7 projects and little-known tricks to fit and design garments	Gallagher,mae ,(2030)	5	1:5
	,metric pattern cutting for children's wear and baby wear:	Aldrich, winifred ,2009 from birth to 14 years	5	1:5
	metric pattern cutting for menswear	Aldrich, winifred ,(2011)	5	1:5
	Patternmaking for Fashion Design	Helen Joseph, Armstrong,(2005).	5	1:5
B.	<b>Learning Facilities &amp; Infrastructure</b>			
	Work shop	Standard	1	1:25
	Lecture room	Standard	1	1:25
	Library / learning resource area	Equipped with multi media	1	1:25
C.	<b>Consumable Materials</b>			
	Pattern paper	Brown paper	250 sheets	10:1
	Adhesive tape	Masking or transparent tape	250 rolls	10:1
	Tailors chalk		25	1:1
	Pencil	HB	25	1:1
	Paper	A0	125	5:1
D.	<b>Tools and Equipments</b>			
	Drafting table	36''x60'' approximately, smooth surface	25 units	1:1
	Drafting tools	L-square, hip curve , French curve, straight ruler/graded ruler, triangle(45*90)	25 sets	1:1
	Measuring tools /devices	Meter stick, tape measure	25	1:1

LEARNING MODULE 04	
TVET-PROGRAMME TITLE: <b>Garment Production Level II</b>	
MODULE TITLE: <b>Producing cut panels with Delicate Fabrics</b>	
MODULE CODE: <b>IND GAP2 M04 0322</b>	
NOMINAL DURATION: 50 Hours	
<b>MODULE DESCRIPTION:</b> This module covers the knowledge, skills and attitudes required to mark, lay-up and cut delicate fabrics and lays as part of the garment production process. It can be applied to situations where multiple garments and layers of fabric are to be laid up and cut according to a marker, and may include two way markers and step layers.	
<b>LEARNING OUTCOMES</b> At the end of the module the trainee will be able to: <b>LO1. Prepare workstation</b> <b>LO2. Draft lay marker</b> <b>LO3. Lay-up fabric and Positioning marker</b> <b>LO4. Cut work</b> <b>LO5. Complete work</b>	
<b>MODULE CONTENTS:</b> <b>LO1. Prepare workstation</b> <ul style="list-style-type: none"> <li>1.1 Applying OHS practices</li> <li>1.2 Checking and setting up cutting equipment               <ul style="list-style-type: none"> <li>1.2.1. Cleaning, checking for faults and assessing servicing</li> <li>1.2.2. Preparing positioning of cutting table</li> <li>1.2.3. Changing cutting blades</li> </ul> </li> <li>1.3 Perform Routine maintenance of cutting <i>equipment</i></li> </ul> <b>LO2. Draft lay marker</b> <ul style="list-style-type: none"> <li>2.1 Identifying marker requirements</li> <li>2.2 Collecting and checking pattern pieces</li> <li>2.3 Manipulating and positioning Pattern pieces</li> <li>2.4 Checking Pattern grain</li> <li>2.5 Drawing up Lay marker</li> <li>2.6 Preparing and interpreting Lay-up instructions               <ul style="list-style-type: none"> <li>2.6.1 job cards</li> <li>2.6.2 cutting orders</li> </ul> </li> </ul>	

**2.6.3** customer order breakdown

**2.7** Checking Marker

**2.8** Coping Marker by manually

**LO3. Lay-up fabric and Positioning marker**

**3.1** Using efficient fabric

**3.1.1.** directional and checked patterned fabrics

**3.2** Checking fabric width and quality

**3.3** Spreading fabric and Adjusting fabric tension

**3.4** Checking fabric for faults

**3.5** Taking required action

**3.5.1** Splicing (overlap joining) or other appropriate techniques

**3.5.2** Avoiding the fault

**3.6** Checking Lay height and position of fabric

**LO4. Cut work**

**4.1.** Cutting fabric using cutting equipment

**4.2.** Inspecting Cut work and Identifying faults

**4.3.** Taking and recording Preventative action

**4.4.** Checking regularly Performance of cutting equipment's

**LO5. Complete work**

**5.1.** Bundling work

**5.1.1.** By fabric shade

**5.1.2.** Whole garments

**5.1.3.** Same pattern pieces

**5.1.4.** With notions (threads etc.)

**5.2 .** Storing Master copy of lay marker

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
<b>Lecture-discussion</b>	<ul style="list-style-type: none"> <li>❖ Provide large print text</li> <li>❖ Prepare the lecture in <b>Audio/video</b></li> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Write short notes on the black/white board using large text</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Use normal tone of voice</li> <li>❖ Encourage trainees to record the lecture in audio format</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assign sign language interpreter</li> <li>❖ Arrange the class room seating to be conducive for eye to eye contact</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Introduce new and relevant vocabularies</li> <li>❖ Use short and clear sentences</li> <li>❖ Give emphasis on visual lecture and ensure the attention of the trainees</li> <li>❖ Avoid movement during lecture time</li> <li>❖ Present the lecture in video format</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Speak loudly</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Present the lecture in video format</li> <li>❖ Ensure the attention of the trainees</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible for wheelchairs users.</li> <li>❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> </ul>
<b>Demonstration</b>	<ul style="list-style-type: none"> <li>❖ Conduct close follow up</li> <li>❖ Use verbal description</li> <li>❖ Provide special attention in the process of guidance</li> <li>❖ facilitate the support of peer trainees</li> <li>❖ Prepare &amp; use simulation</li> </ul>	<ul style="list-style-type: none"> <li>❖ use Sign language interpreter</li> <li>❖ Use video recorded material</li> <li>❖ Ensure attention of the trainees</li> <li>❖ Provide structured training</li> <li>❖ Show clear and short method</li> <li>❖ Use gesture</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Illustrate in clear &amp; short method</li> <li>❖ Use Video recorded material</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines</li> <li>❖ Assign peer trainees to assist</li> <li>❖ Conduct close follow up</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>

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

## ASSESSMENT METHODS:

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

## ASSESSMENT CRITERIA:

### LO1. Prepare workstation

- Work area is set up according to OHS practices and specifications for work
- Equipment is set up, checked and made ready for use.
- Routine maintenance of equipment is undertaken.
- Cutting table and seating are set up and prepared to suit lay length and following OHS requirements.

### LO2. Draft lay marker

- Marker requirements are identified.
- Required pattern pieces are collected and checked manually or by computer.
- Pattern pieces are manipulated and positioned for most efficient use of fabrics.
- Pattern 'grain' indication is checked against grain of material.
- Lay marker is drawn up according to pattern requirements.
- Laying-up instructions are prepared according to requirements.
- Marker is checked against order requirements.
- Marker is copied either manually or by computer.

### LO3. Lay-up fabric and Positioning marker

- Lay-up instructions are interpreted.
- Fabric is collected and checked off according to OHS practices.
- Fabric width and quality are checked against lay-up instructions.
- Fabric is laid up, spread and fabric tension is adjusted to suit fabric performance.
- Fabric is checked for faults and required action is taken.
- Lay height and position of fabric are checked according to cutting equipment and work specifications.
- Aids to assist lay-up are used according to job card and workplace practices.
- Marker is placed on lay.
- Marker and lay alignment are checked and appropriate action taken according to job specifications.

### LO4. Cut work

- Fabric is cut according to lay, using cutting equipment according to requirements for operation.
- Cut fabric is inspected, any faults identified and appropriate action taken to ensure cut pieces

meet required quality standards.

- Preventative action to avoid any recurrence of defective pieces is taken and recorded.
- Performance of cutting equipment is regularly checked for signs of faulty operation, including evidence from inspection of cut pieces and any required action is taken.
- OHS practices are followed to eliminate risks to personal safety.

#### **LO5. Complete work**

- Cut fabric is bundled according to job card.
- Cut work is directed to next operation and work area is cleaned and prepared for next job.
- Master copy of lay marker is stored in filing drawer or computer as appropriate.



## Annex: Resource Requirements

IND GAP2 M04 0322		Producing cut panels with Delicate Fabrics		
Item No	Category Item	Description/ Specification	Quantity	Recommended Ratio(Item: trainee)
<b>A</b>	<b>Learning materials</b>			
1	TTLM	Information sheet, operation sheet and lab test	25	1:1
2	Reference books			
2.1	Pattern Cutting Made Easy	Gillian Holman Blackwell Scientific Publications ISBN: 0-7134 -8093-1997	5	1:5
2.2	Pattern Cutting for Lingerie, Beach Wear	Ann Haggard, Black Well (2001)		
2.3	Impact of Different Sort of Marker Efficiency in Fabric Consumption	Md. Nazmul Haque, International Journal of Textile Science, pg. 96 – 109, Vol. 5, Issue 5, (2016)	5	1:5
2.4	Impact of Marker on Cut Plan in Garment Production	Elmira Dumishllari and Genti Guxho International Journal of Innovative Research in Science, Engineering and Technology, Vol. 4, Issue 8, August (2015)	5	1:5
2.5	Fabric Utilization, Cut Order Planning	Mausmi A., Stitch World, June (2013)		
<b>B</b>	<b>Learning facilities and infrastructure</b>			
1	Work shop		1	1:25
2	Lecture room	Equipped with multi-media	1	1:25
3	Library / learning resource area	Equipped with multi-media	1	1:25
<b>C</b>	<b>Consumable Materials</b>			
1	Patterns	A0	125 pcs	5:1
2	Adhesive tape	Masking or transport tape	5	1:5
3	Tailors chalk	Different colors	25	1:1
4	Fabrics	Check, striped and printed fabric	25 meter	1:1
<b>D</b>	<b>Tools and equipment</b>			
1	Cutting table	3x10x120	25	1:25
2	Lay-up	Weights, Stainless steel	5	1:5

3	equipment	Clamps		25	1:1
		Spreading table,		1	1:25
	Cutting equipment	Round blade cutter		1	1:25
		Straight knife cutter		1	1:25
		Drills		1	1:25
		Fabric Scissor		25	1:1

## LEARNING MODULE 05

TVET-PROGRAMME TITLE: Garment Production **Level II**

MODULE TITLE: **Operating Specialized Industrial Garment Machines**

MODULE CODE: **IND GAP2 M05 0322**

NOMINAL DURATION: 50 Hours

**MODULE DESCRIPTION:** This module covers the knowledge, skills and attitudes required to use specialized industrial Garment machinery to assist in assembly production and completion of garments and other associated items.

### LEARNING OUTCOMES

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

**LO1. Prepare workstation**

**LO2. Prepare work pieces and equipment**

**LO3. Perform production assembly tasks**

**LO4. Check and verify machine performance**

**LO5. Dispatch completed work**

### MODULE CONTENTS:

#### LO1. Prepare workstation

- 1.1. Setting up Workbench
- 1.2. Organizing work area
- 1.3. Work instructions
- 1.4. Records are maintain

#### LO2. Prepare work pieces and equipment

- 2.1. Laying out Work pieces or materials
- 2.2. Laying out equipments
- 2.3. Perform Threading and adjusted tension
- 2.4. Reporting and documenting problems

#### LO3. Perform production assembly tasks

- 3.1 . Applying OHS Practices
- 3.2 . Performing production tasks
- 3.3 . Assessing work for compliance with quality standards
- 3.4 . Using specialized machines checked and adjusted to ensure optimum performance
  - 3.3.1. fusing machine

- 3.3.2. buttonholing machine
- 3.3.3. button attaching machine
- 3.3.4. bar tacking machine
- 3.3.5. blind stitch machine
- 3.3.6. cover stitch machine/Inter lock machine
- 3.3.7. FOA ( feed of the arm)
- 3.3.8. pocket setter
- 3.3.9. eye let

3.5. Recording are maintained

#### **LO4. Check and verify machine performance**

- 4.1 . Identified and corrected/adjusted tension faults
- 4.2 . Identified and correcting thread defect performance
- 4.3 . Checking and verifying stitch length to against specifications
- 4.4 . Checking Presser foot selection and performance
- 4.5 . Checking and adjusting Feed dog performance
- 4.6 . Checking and adjusting Pressure of presser foot
- 4.7 . Identifying sewing defects and taken corrective actions
- 4.8 . Identifying and selecting needle types based on the fabric characteristics
- 4.9 . Performing work aids and attachment
- 4.10 . Monitoring machine for correct operation

#### **LO5. Dispatch completed work**

- 5.1. Checking Garments process output with quality standards
- 5.2. Reporting and recording identified faults
- 5.3. Completed garments to directed next operation
- 5.4. Completed Work documentation

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
<b>Lecture-discussion</b>	<ul style="list-style-type: none"> <li>❖ Provide large print text</li> <li>❖ Prepare the lecture in <b>Audio/video</b></li> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Write short notes on the black/white board using large text</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Use normal tone of voice</li> <li>❖ Encourage trainees to record the lecture in audio format</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assign sign language interpreter</li> <li>❖ Arrange the class room seating to be conducive for eye to eye contact</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Introduce new and relevant vocabularies</li> <li>❖ Use short and clear sentences</li> <li>❖ Give emphasis on visual lecture and ensure the attention of the trainees</li> <li>❖ Avoid movement during lecture time</li> <li>❖ Present the lecture in video format</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Speak loudly</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Present the lecture in video format</li> <li>❖ Ensure the attention of the trainees</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible for wheelchairs users.</li> <li>❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> </ul>
<b>Demonstration</b>	<ul style="list-style-type: none"> <li>❖ Conduct close follow up</li> <li>❖ Use verbal description</li> <li>❖ Provide special attention in the process of guidance</li> <li>❖ facilitate the support of peer trainees</li> <li>❖ Prepare &amp; use simulation</li> </ul>	<ul style="list-style-type: none"> <li>❖ use Sign language interpreter</li> <li>❖ Use video recorded material</li> <li>❖ Ensure attention of the trainees</li> <li>❖ Provide structured training</li> <li>❖ Show clear and short method</li> <li>❖ Use gesture</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Illustrate in clear &amp; short method</li> <li>❖ Use Video recorded material</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines</li> <li>❖ Assign peer trainees to assist</li> <li>❖ Conduct close follow up</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>
<b>Group discussion</b>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow up</li> <li>❖ Introduce the trainees with other group</li> </ul>	<ul style="list-style-type: none"> <li>❖ Use sign language interpreters</li> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow up</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow</li> </ul>	<ul style="list-style-type: none"> <li>❖ Introduce the trainees with their peers</li> </ul>

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

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

## **ASSESSMENT CRITERIA:**

### **LO.1 Prepare workstation**

- Workbench and seating are set up to achieve operator comfort and to minimize fatigue
- Work area is well organized to maximize safety and productivity
- work instructions are available for operation
- Records are maintained

### **LO.2. Prepare work pieces and equipment**

- Work pieces or materials are laid out in sequence according to specifications
- Equipment is set up and adjusted in accordance to specifications for work
- Threading is performed and tension is adjusted.
- Any machine adjustment is taken as job requirement.
- Any problems are reported and recorded

### **LO.3 Perform production assembly tasks**

- Power cable is Plugged-in on the correct out let
- Switches are checked for correct installation and properly pressed.
- Production tasks are performed in accordance to requirements and OHS practices
- Work is assessed for compliance with quality standards and production specifications
- Where specialized machine is used, machine is checked and adjusted to ensure optimum performance
- Records are maintained

### **LO.4 Check and verify machine performance**

- Tension faults are identified and corrected/adjusted according to specifications
- Defect thread performance is identified and corrected
- Stitch length is checked and verified against specifications
- Presser foot selection and performance is checked and changed as necessary
- Feed dog performance is checked and adjusted as necessary
- Pressure of presser foot is checked and adjusted as required



#### **LO5. Dispatch completed work**

- Garments/each process output or articles are checked against quality standards
- Any faults identified are reported and recorded
- Completed garments or articles are directed to next operation
- Work documentation is completed as required.

## Annex: Resource Requirements

IND GAP2 M05 0322 Operating Specialized industrial Garment Machines				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
<b>A.</b>	<b><i>Learning Materials</i></b>			
1.	TTLTM	TTTLM prepared by the trainer	5	1:5
2.	Reference Books			
2.1	The Technology of Clothing Manufacture	Harold Carr and Barbara Latham Wiley Publications	5	1:5
2.2				1:5
4.	Journals/Publication/Magazines			1:5
<b>B.</b>	<b><i>Learning Facilities &amp; Infrastructure</i></b>			
1.	Garment assembly shop	Standard	1	1:25
2.	LCD	Normal	1	1:25
3.	White board	Standard	1	1:25
<b>C.</b>	<b><i>Consumable Materials</i></b>			
1.	Sewing thread	Standard	60	3:1
2	SNLS machine needle	Standard	25	1:1
5	OL machine needle	Standard	8	8:25
6	Any specialized machine needle	Standard	5	5: 25
<b>D.</b>	<b><i>Tools and Equipments</i></b>			
1.	Screw		5	1:5
2.	fusing machine		2	1:13
3.	gluing / binding machine		2	1:13
4.	buttonholing machine		2	1:13
5.	button attaching machine		2	1:13
6.	bar tacking machine		2	1:13

7.	blind stitch machine		2	1:13
8.	cover stitch machine/Inter lock machine		2	1:13
9.	FOA ( feed of the arm		2	1:13

<b>LEARNING MODULE 06</b>	
TVET-PROGRAMME TITLE: Garment Production <b>Level II</b>	
MODULE TITLE: <b>Preparing and Performing Embroidery Design and Machine operation</b>	
MODULE CODE: <b>IND GAP2 M06 0322</b>	
NOMINAL DURATION: 60 Hours	
<b>MODULE DESCRIPTION:</b> This module covers the knowledge, skills and attitudes required to create, edit embroidery design and perform machine embroidery	
<b>LEARNING OUTCOMES</b> At the end of the module the trainee will be able to: <b>LO1. Identify client design requirements</b> <b>LO2. Edit design</b> <b>LO3. Identify influences on fashion design</b> <b>LO4. Present design for feedback</b> <b>LO5. Set up embroidery machine for production operation</b> <b>LO 6. Test embroidery machine setting</b> <b>LO7. Prepare work pieces and workstation</b> <b>LO8. Produce Machine embroidery on articles/ garments</b> <b>LO 9. Completion of work</b>	
<b>MODULE CONTENTS:</b> <b>LO1. Identify client design requirements</b> <ul style="list-style-type: none"> <li>1.1. Detering Specifications for embroidery design</li> <li>1.2. Identifying Available templates/ frames.               <ul style="list-style-type: none"> <li>1.2.1 Manual handling techniques</li> <li>1.2.2 Standard operating procedures</li> </ul> </li> <li>1.3. Identifying Garment considerations               <ul style="list-style-type: none"> <li>1.3.1 Type of fabric</li> <li>1.3.2 fabric Color</li> <li>1.3.3 Suitability of dimension and proportion, design, color and other characteristics of fabric</li> <li>1.3.4 Position of the embroidery design/alignment</li> <li>1.3.5 Filling options</li> </ul> </li> <li>1.4. Identifying embroidery tools and equipment</li> </ul>	

## **LO2. Edit design**

- 2.1. Elaborating Existing design concept by embroidered elements and prepared for presentation
- 2.2. Reviewing and modifies designs
- 2.3. Creating design concepts.
- 2.4. Developing design specifications.
- 2.5. Labelling, organizing , storing and protecting embroidery designs

## **LO3. Identify influences on fashion design**

- 3.1 . Selecting Suitable designs or images for editing
- 3.2 . Importing designs and laid for editing.
- 3.3 . Editing designs to achieve the design objectives
- 3.4 . Determining Production specifications and material selection
- 3.5 . Designing are marked, saved and recorded.

## **LO4. Present design for feedback**

- 4.1 . Presenting design concept extension by embroidered details
- 4.2 . Received Feedback
- 4.3 . Modifying and improved design concept
- 4.4 . Identifying material and quantities

## **LO5 Set up embroidery machine for production operation**

- 5.1 . Interpreting Product specifications/ embroidery specification
- 5.2 . Interpreting machine setting documents
- 5.3 . Selecting appropriate tools
- 5.4 Arranging materials per embroidery required
- 5.5 . Setting up machine
- 5.6 . Checking Fabric feed system
- 5.7 . Follow OHS practices

## **LO 6 Test embroidery machine setting**

- 6.1. Selecting of required frame
- 6.2. Performing framing preparation
- 6.3. Correcting alignment
- 6.4. Check-up Machine functionality
- 6.5. Operating embroidery machine
- 6.6. Achieving embroidered product
- 6.7. Conducting or organize Quality tests

**LO7. Prepare work pieces and workstation**

- 7.1. Lading out Work pieces and backing pieces are selected to suit fabric
- 7.2. Seating workbench according to OHS Practices
- 7.3. Setting up and adjusting Equipment and materials
- 7.4. performing Routine minor maintenance
- 7.5. Reported and recorded problems

**LO8. Produce Machine embroidery on articles/ garments**

- 8.1 . Producing Embroidery showing appropriate techniques
- 8.2 . Follow OHS practices
- 8.3 . Producing embroidery showing appropriate techniques and embroidery methods
- 8.4 . Assessing Work compliance
- 8.5 . Checking and adjusted Machine to ensure optimum performance
- 8.6 . Managing Production problems
- 8.7 . Under controlling Manufacturing detail
- 8.8 Managing Troubleshooting steps of machine

**LO9. Completion of work**

- 9.1. Checking completed work against quality standards
- 9.2. Reporting and recorded Any faults
- 9.3. Taking corrective actions to solve identify flutes
- 9.4. Completing work is directed to next operation
- 9.5. Completing Work documentation

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
<b>Lecture-discussion</b>	<ul style="list-style-type: none"> <li>❖ Provide large print text</li> <li>❖ Prepare the lecture in <b>Audio/video</b></li> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Write short notes on the black/white board using large text</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Use normal tone of voice</li> <li>❖ Encourage trainees to record the lecture in audio format</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assign sign language interpreter</li> <li>❖ Arrange the class room seating to be conducive for eye to eye contact</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Introduce new and relevant vocabularies</li> <li>❖ Use short and clear sentences</li> <li>❖ Give emphasis on visual lecture and ensure the attention of the trainees</li> <li>❖ Avoid movement during lecture time</li> <li>❖ Present the lecture in video format</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Speak loudly</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Present the lecture in video format</li> <li>❖ Ensure the attention of the trainees</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible for wheelchairs users.</li> <li>❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> </ul>
<b>Demonstration</b>	<ul style="list-style-type: none"> <li>❖ Conduct close follow up</li> <li>❖ Use verbal description</li> <li>❖ Provide special attention in the process of guidance</li> <li>❖ facilitate the support of peer trainees</li> <li>❖ Prepare &amp; use simulation</li> </ul>	<ul style="list-style-type: none"> <li>❖ use Sign language interpreter</li> <li>❖ Use video recorded material</li> <li>❖ Ensure attention of the trainees</li> <li>❖ Provide structured training</li> <li>❖ Show clear and short method</li> <li>❖ Use gesture</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Illustrate in clear &amp; short method</li> <li>❖ Use Video recorded material</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines</li> <li>❖ Assign peer trainees to assist</li> <li>❖ Conduct close follow up</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>

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



## ASSESSMENT METHODS:

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

## **ASSESSMENT CRITERIA:-**

### **Lo1. Identify client design requirements**

- Specifications for embroidery design are determined.
- Available templates/ frames are identified.
- Garment considerations are identified.
- Tools and equipment requirements for design are identified.

### **LO2. Create design**

- Existing design concept is elaborated by embroidered elements and prepared for presentation.
- Designs are reviewed against requirement and modified as required for approval.
- Design concept is created using appropriate tools and equipment according to OHS practices.
- Design specifications are developed to guide production.
- Designs are labelled, organised, stored and protected.

### **LO3. Edit design**

- Suitable designs or images are selected for editing.
- Designs are imported and laid for editing.
- Designs are edited to achieve design objectives accordingly to embroidery machine specifications.
- Production specifications and material selection are determined by considering embroidery machine specifications, options and limits.
- Designs are marked, saved and recorded.

### **LO4. Present design for feedback**

- Design concept extension by embroidered details is presented for feedback.
- Feedback is received and considered in line with design objectives.
- Design concept is modified and improved if necessary.
- Material and quantities are identified.

#### **LO5. Set up embroidery machine for production operation**

- Production specifications/ embroidery specification and work orders are interpreted to determine optimum machine settings for product and operator
- Documentation relating to machine settings, operation and maintenance is interpreted, referenced and applied according to the needs of the task and operator
- Tools appropriate for the machine and task are selected, prepared and used in a safe and effective manner to setup machine for operation
- Materials are arranged as per embroidery required.
- Machine is set up according to required specifications for operation including fixing of required attachments and to run at optimum quality and efficiency levels
- Needle/needles are threaded, bobbin wound, checked and tension set for planned embroidery operations
- Fabric feed system is checked prior to operation
- OHS practices are followed

#### **LO6. Test embroidery machine setting**

- Selection of required frame is performed in accordance with manufacturer's and workplace instructions.
- Framing preparation including hooping process is performed
- Correct alignment is performed in accordance with manufacturer's and workplace instructions.
- Machine functionality is Checked-up and managed as per specifications.
- Embroidery machine is operated in accordance with manufacturer's and workplace instructions to test settings against specifications and operational standards
- Embroidered product or sample is examined to confirm desired sewing motion and stitch is achieved and to identify required adjustments to machine settings or production specifications
- Quality tests are conducted or organized as required to ensure optimal production outcomes are achieved
- Required adjustments are identified machine settings adjusted accordingly

### **LO7. Produce Machine embroidery on articles/ garments**

- Embroidery is produced showing appropriate techniques and procedures in accordance to job requirements
- OHS practices are followed
- Embroidery is produced showing appropriate techniques and embroidery methods
- Work is assessed for compliance with quality standards and production specifications
- Machine is checked and adjusted to ensure optimum performance
- Production problems such as thread breaks are managed
- Manufacturing details like speed, stitch quality and quantity are under control
- Troubleshooting steps of machine are managed.

### **LO8. Completion of work**

- Completed work is checked against quality standards
- Any faults identified are reported and recorded
- Corrective actions are taken to solve the identified faults
- Completed work is directed to next operation
- Work documentation is completed as required

## Annex: Resource Requirements

IND GAP2 M06 0322 Preparing and Performing Embroidery Design and Machine operation				
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
<b>A.</b>	<b><i>Learning Materials</i></b>			
1.	TTLM	Information sheet, operation sheet and lab test	25	1:1
2.	Reference Books			
2.1	Design catalog book		5	1:5
2.2	Traditional Embroideries of India	Shailaja D. Naik API Publishing Corporation, New Delhi,(1996)	5	1:5
3	Journals/Publication/Magazine	Standard as Scopes	5	1:5
<b>B.</b>	<b><i>Learning Facilities &amp; Infrastructure</i></b>			
1.	Lecture Room	Standard	1	1:25
2.	Work shop	Standard	1	1:25
3.	Library	Standard	1	1:25
4.	Visual training media (LCD, laptops, whiteboard)	Standard	1	1:25
<b>C.</b>	<b><i>Consumable Materials</i></b>			
1.	Design transferring paper	Standard	25	1:1
2.	Fabric	Suitable fabric	50met	2:1
3.	Thread	Embroidery	25pc	1:1
4.	Needle			
5.	Pensile	HP	25	1:1
6.	Eraser		25	1:1
<b>D.</b>	<b><i>Tools and Equipments</i></b>			
1	Embroidery sewing machine	Any brands	<b>25</b>	<b>1:1</b>
3	Standard size table		2	1:13
4	Computer		25	1:1
5	Scanners/Printers		5	1:5
6.	Hoop (different made )	Standard	25	1:1

<b>LEARNING MODULE 07</b>	
TVET-PROGRAMME TITLE: Garment Production <b>Level II</b>	
MODULE TITLE: <b>Assembling Garment Parts</b>	
MODULE CODE: <b>IND GAP2 M07 0322</b>	
NOMINAL DURATION: 160 Hours	
<b>MODULE DESCRIPTION:</b> This module covers the knowledge, skills and attitudes required to preparing and assembling cut parts, preparing sewing machine for operation, sewing apparel/garments and components using sewing techniques.	
<b>LEARNING OUTCOMES</b> At the end of the module the trainee will be able to: <b>LO1. Prepare sewing machine for operation</b> <b>LO2. Prepare cut parts</b> <b>LO3. Sew and assemble garment parts</b> <b>LO4. Incorporate modifications</b>	
<b>MODULE CONTENTS:</b> <b>LO1. Prepare sewing machine for operation</b> <ul style="list-style-type: none"> <li>1.1. Cleaning and lubricating machines</li> <li>1.2. Setting up machine and threaded</li> <li>1.3. Controlling machine speed and work handling</li> <li>1.4. Identifying and repairing minor machine problem or fault</li> <li>1.5. Monitoring machine operation as per procedures</li> </ul> <b>LO2. Prepare cut parts</b> <ul style="list-style-type: none"> <li>1.1. Preparing cut part based on garment design/style</li> <li>1.2. Pressing cut part</li> <li>1.3. Pinning cut part together according to garment design.</li> <li>1.4. Preparing accessories and accent as per the required garment design.</li> </ul> <b>LO3. Sew and assemble garment parts</b> <ul style="list-style-type: none"> <li>3.1. Sew garment components in accordance to standard operation procedures (SOP)</li> <li>3.2. Assembling garment based on sewing standard</li> <li>3.3. Finishing Seam edges with job requirement.</li> </ul> <b>LO4. Incorporate modifications</b> <ul style="list-style-type: none"> <li>4.1. Performing alterations/modifications after initial fitting</li> <li>4.2. Conducting final fitting to ensure clients satisfaction.</li> <li>4.3. Completing garment alteration.</li> </ul>	

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
<b>Lecture-discussion</b>	<ul style="list-style-type: none"> <li>❖ Provide large print text</li> <li>❖ Prepare the lecture in <b>Audio/video</b></li> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Write short notes on the black/white board using large text</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Use normal tone of voice</li> <li>❖ Encourage trainees to record the lecture in audio format</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assign sign language interpreter</li> <li>❖ Arrange the class room seating to be conducive for eye to eye contact</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Introduce new and relevant vocabularies</li> <li>❖ Use short and clear sentences</li> <li>❖ Give emphasis on visual lecture and ensure the attention of the trainees</li> <li>❖ Avoid movement during lecture time</li> <li>❖ Present the lecture in video format</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Speak loudly</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Present the lecture in video format</li> <li>❖ Ensure the attention of the trainees</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible for wheelchairs users.</li> <li>❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> </ul>
<b>Demonstration</b>	<ul style="list-style-type: none"> <li>❖ Conduct close follow up</li> <li>❖ Use verbal description</li> <li>❖ Provide special attention in the process of guidance</li> <li>❖ facilitate the support of peer trainees</li> <li>❖ Prepare &amp; use simulation</li> </ul>	<ul style="list-style-type: none"> <li>❖ use Sign language interpreter</li> <li>❖ Use video recorded material</li> <li>❖ Ensure attention of the trainees</li> <li>❖ Provide structured training</li> <li>❖ Show clear and short method</li> <li>❖ Use gesture</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Illustrate in clear &amp; short method</li> <li>❖ Use Video recorded material</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines</li> <li>❖ Assign peer trainees to assist</li> <li>❖ Conduct close follow up</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>

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



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

## **ASSESSMENT CRITERIA:**

### **LO.1 Prepare sewing machine for operation**

- Machine parts are cleaned and lubricated in accordance with manufacturer's instructions
- Machine is set-up, adjusted and threaded in accordance with work specifications and company standards
- Speed of machines and work handling are controlled in accordance with company's procedures
- Minor machine problem or fault is identified and repaired in accordance with manufacturer's manual
- Machine operation is monitored as per procedures

### **LO.2 Prepare cut parts**

- Cut parts are prepared in accordance with the specified garment design/style
- Cut parts are pressed in accordance with fabric specifications
- Cut parts are pinned together in accordance with garment design or style
- Accessories and accents are prepared in accordance with garment design or style

### **LO.3 Sew and assemble garment parts**

- Garment parts are assembled in accordance with garment assembly instructions ,pattern specifications and standard operating procedure (SOPs)
- Garments are sewn in conformance with sewing standard procedures, company's timeframes and OHS practices
- Sleeves, collars and pockets are identified and sewn according to customer's specification
- Pocket flaps are sewn with clean corners and no raw edges
- Zipper is sewn without puckered
- Seams edges are finished in accordance with job requirements
- Waistband widths are evenly sewn from end to end according to standard operating procedure (SOPs).

### **LO.4 .Incorporate modifications**

- Alterations/modifications are done in accordance with the client's specifications and after initial fitting
- Final fitting is conducted to ensure client's satisfaction
- Garment alteration is completed as per client's satisfaction

## Annex: Resource Requirements

IND GAP2 M07 0322			Assembling Garment Part		
Item No.	Category/Item		Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A.	Learning Materials				
1.	TTLM		Based on the learning outcomes	25 pcs	1:1
2.	Hand-outs		related to topic	25 pcs	1:1
3	Reference book			5	1:5
	,guide to basic garment assembly for the fashion industry		Smith, Jayne (2013)	5	1:5
	the beginners guide to creating stylish garments		Willie, annette(2015) sew "n" style:	5	1:5
	sewing garments made simple		Walker, villia (2014)	5	1:5
B.	Learning Facilities & Infrastructure				
1.	Workshop			1	1:25
3.	industrial		➤		
	Sewing machine	over lock	➤ 5 thread	5	1:5
		Cover stitch	➤ phase(220v)	5	1:5
		Zigzag stitch	➤ phase(220v)	5	1:5
		Button hole and attach	➤ Under bed trimmer	5	1:5
3.	Library/ Learning Resource Area		Equipped with multi-media	1	1:25
C.	Consumable Materials				
1.	Garment parts/work pieces	Fabric			:
2.	Accessories and accents	Threads	Polyester	25	1:1
		Buttons	Plastic(4 hole)	125	5:1

		Zippers	Blind,metal,18cm and 50cm	75	3:1
3.	Sewing supplies	Pins		25 sets	1:1
		Needles			
		pin cushion			
4	Machine Needles	Lockstitch	Different sizes & types according to  machine specifications(No6)	5 packs	1:1
		over lock			
		Cover stitch			
		Zigzag stitch			
		Button hole and attach			
D.	Tools and Equipment's				
.	Single needle lockstitch sewing machine		Industrial, High-speed w/ attachments	25 units	1:1
2.	Overlock sewing machine		Three or 4/5 threads	5 units	1:5
3.	Button sew/attach sewing machine			5 units	1:5
4.	Buttonholer sewing machine			5 units	1:5
5.	Heming(cover stitch) or Other specialized machine		Zigzag sewing machine/ Blindstitches/Feed-of-Arm/ Bartacking Machine	5 units	1:5
7.	Thread clipper			25 pcs	1:1
8.	Scissors		For fabric	25 pcs	1:1
9.	Cleaning Tools		Brooms, rags, waste bins,	5 sets	1:5

LEARNING MODULE 08	
TVET-PROGRAMME TITLE: <b>Garment Production Level II</b>	
MODULE TITLE: <b>Applying Apparel Finishing</b>	
MODULE CODE: <b>IND GAP2 M08 0322</b>	
NOMINAL DURATION: 28 Hours	
<b>MODULE DESCRIPTION:</b> This module covers the knowledge, skills and attitudes required to applying finishing touches, attaching the needed accessories and accent, trimming of excess threads, pressing finished garment and packaging of finished garment.	
<b>LEARNING OUTCOMES</b>  At the end of the module the trainee will be able to: <ul style="list-style-type: none"> <li><b>LO1. Apply finishes</b></li> <li><b>LO2. Trim excess threads</b></li> <li><b>LO3. Press finished garments</b></li> <li><b>LO4. Package finished garment</b></li> </ul>	
<b>MODULE CONTENTS:</b>  <b>LO1. Apply finishes</b> <ul style="list-style-type: none"> <li>1.1 Identifying and checking finishing touches</li> <li>1.2 Marking and attaching accessories and accents</li> <li>1.3 Sew accessories by Hand/machine accordance with design.</li> <li>1.4 Performing finishing operations</li> <li>1.5 Checking missing buttons and attachments on garment.</li> <li>1.6 Folding and pinning bodice hem and sleeve allowance</li> <li>1.7 Sew hemline allowance in accordance with stitch/seam specification.</li> </ul> <b>LO2. Trim excess threads</b> <ul style="list-style-type: none"> <li>2.1 Checking garment for loose threads</li> <li>2.2 Trimming excess threads</li> <li>2.3 Reversing and hanging garments accordance to standard procedures.</li> </ul> <b>LO3. Press finished garments</b> <ul style="list-style-type: none"> <li>3.1 preparing fabric and pressing tools</li> <li>3.2 setting up, cleaning and checking Pressing machines</li> <li>3.3 Identifying faults, spots and marks and take appropriate action.</li> <li>3.4 Applying time , heat and pressure in accordance with product requirement</li> <li>3.5 Pressing in Sequence</li> </ul>	

#### **LO4. Package finished garment**

**4.1** Packing finished garments with packaging standard procedure

**4.2** Labeling Garment packages

**4.3** Cleaning work station

Learning Methods:				
For none impaired trainees	Reasonable Adjustment for Trainees with Disability (TWD)			
	Low Vision	Deaf	Hard of hearing	Physical impairment
<b>Lecture-discussion</b>	<ul style="list-style-type: none"> <li>❖ Provide large print text</li> <li>❖ Prepare the lecture in <b>Audio/video</b></li> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Write short notes on the black/white board using large text</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Use normal tone of voice</li> <li>❖ Encourage trainees to record the lecture in audio format</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assign sign language interpreter</li> <li>❖ Arrange the class room seating to be conducive for eye to eye contact</li> <li>❖ Make sure the luminosity of the light of class room is kept</li> <li>❖ Introduce new and relevant vocabularies</li> <li>❖ Use short and clear sentences</li> <li>❖ Give emphasis on visual lecture and ensure the attention of the trainees</li> <li>❖ Avoid movement during lecture time</li> <li>❖ Present the lecture in video format</li> <li>❖ Summarize main points</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible to trainees</li> <li>❖ Speak loudly</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Present the lecture in video format</li> <li>❖ Ensure the attention of the trainees</li> </ul>	<ul style="list-style-type: none"> <li>❖ Organize the class room seating arrangement to be accessible for wheelchairs users.</li> <li>❖ Facilitate and support the trainees who have severe impairments on their upper limbs to take note</li> <li>❖ Provide Orientation on the physical feature of the work shop</li> </ul>
<b>Demonstration</b>	<ul style="list-style-type: none"> <li>❖ Conduct close follow up</li> <li>❖ Use verbal description</li> <li>❖ Provide special attention in the process of guidance</li> <li>❖ facilitate the support of peer trainees</li> <li>❖ Prepare &amp; use simulation</li> </ul>	<ul style="list-style-type: none"> <li>❖ use Sign language interpreter</li> <li>❖ Use video recorded material</li> <li>❖ Ensure attention of the trainees</li> <li>❖ Provide structured training</li> <li>❖ Show clear and short method</li> <li>❖ Use gesture</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Illustrate in clear &amp; short method</li> <li>❖ Use Video recorded material</li> <li>❖ Ensure the attention of the trainees</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate and support the trainees having severe upper limbs impairment to operate equipments/ machines</li> <li>❖ Assign peer trainees to assist</li> <li>❖ Conduct close follow up</li> <li>❖ Provide tutorial support (if necessary)</li> </ul>
<b>Group discussion</b>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow up</li> <li>❖ Introduce the trainees with other group member</li> </ul>	<ul style="list-style-type: none"> <li>❖ Use sign language interpreters</li> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow up</li> <li>❖ Introduce the trainees with other</li> </ul>	<ul style="list-style-type: none"> <li>❖ Facilitate the integration of trainees with group members</li> <li>❖ Conduct close follow up</li> </ul>	<ul style="list-style-type: none"> <li>❖ Introduce the trainees with their peers</li> </ul>

	❖ Brief the thematic issues of the work	group member	❖ Introduce the trainees with other group member ❖ Inform the group members to speak loudly	
<b>Exercise</b>	❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process	❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/practical training ❖ Introduce new and relevant vocabularies	❖ Conduct close follow up and guidance ❖ Provide tutorial support if necessary ❖ provide special attention in the process/ practical training	❖ Assign peer trainees ❖ Use additional nominal hours if necessary
<b>Individual assignment</b>	❖ prepare the assignment questions in large text ❖ Encourage the trainees to prepare and submit the assignment in large texts ❖ Make available recorded assignment questions ❖ Facilitate the trainees to prepare and submit the assignment in soft or hard copy	❖ Use sign language interpreter ❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material	❖ Provide briefing /orientation on the assignment ❖ Provide visual recorded material	



## ASSESSMENT METHODS:

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



## ASSESSMENT CRITERIA :-

### LO1. Apply finishes

- Needed finishing touches are identified and checked in accordance with garment design/style specifications
- Accessories' and accents' positions are marked and attached in accordance with garment design/style specification
- Accessories and accents are sewn by hand or by machine in accordance with garment design/style specifications
- Finishing operations are performed in accordance with customer's specifications and standard procedures
- Garment is checked for missing buttons and attachments
- Bodice hem allowances and sleeves are folded and pinned in accordance with customer's specifications.
- Hemline allowances are sewn in accordance with the given stitch/seam specifications

### LO2. Trim excess threads

- Garment is checked for loose threads
- Excess threads are trimmed in accordance with sewing procedures
- Garments are reversed and hanged in accordance with standard procedures
- Apply thread suction procedures

### LO3. Press finished garments

- Fabric and pressing tools are prepared according to standard operating procedures
- Pressing machines are setup, cleaned and checked in accordance with company's procedures
- Faults, spots and marks are identified and appropriate actions are taken in accordance with standard procedures
- Heat/Pressure is applied in accordance with product requirements, fabric specifications and standard procedures
- Pressing is sequenced in accordance with work specifications and standard procedures

#### **LO4.Package finished garment**

- Finished garments are packed in accordance with packaging standards/procedures
- Garment packages are labeled following standard procedure
- Work station is cleaned after work completion

## Annex: Resource Requirements

IND GAP2 M08 0322		Applying Apparel Finishing		
Item No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Learner)
A.	<b>Learning Materials</b>			
	TTLM	Operation sheet Information sheet, Lap test	5	1-5
	Textbooks			
	Reference Books			
B.	<b>Learning Facilities &amp; Infrastructure</b>			
1.	Lecture Room	Standard	1	1:25
2	Visual training media (LCD, laptops, blackboard, whiteboard, flip chart)		1	1:25
C.	<b>Consumable Materials</b>			
1.	Fabric			
2.	Poly bag		1pack	1:1
D.	<b>Tools and Equipment's</b>			
1.	Flat iron	Stem iron	5	1:5
2.	Vacuum press	<ul style="list-style-type: none"> <li>Load Capacity:&lt;500kg</li> <li>Automatic Grade: Semi-Automatic</li> </ul>	2	2:25
4.	Press mitt		25	1:1
5.	Tailor's ham			

## Acknowledgements

The **Ministry of Labor and Skills** wishes to thank and appreciation for the trainers who donated their effort and time to develop this outcome based curriculum for the TVET Program **garment production Level II**.

We also thank all regional Labor and Skill/TVET Bureaus, Ministry of labor and skills coordinators, all instructors who developed this curriculum for active facilitation of this curriculum development.

### The trainers who developed the curriculum

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