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GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT  
& ENTREPRENEURSHIP



# Facilitator Guide



Sector  
Apparel

Sub-Sector  
Apparel, Made-Ups & Home Furnishing

Occupation  
Production

Reference ID: AMH/Q2001, Version 4.0  
NSQF level: 6

**Industrial  
Engineer-  
Apparel**

## Published by

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**Shri Narendra Modi**  
Prime Minister of India

“

Skill development of the new generation is a national need and is the foundation of Aatmnirbhar Bharat

”



## Acknowledgements

Apparel, Made-ups & Home Furnishing Sector Skill Council would like to express its gratitude to all the individuals and institutions who contributed in different ways towards the preparation of this “Facilitator Guide”. Without their contribution it could not have been completed. Special thanks are extended to those who collaborated in the preparation of its different modules. Sincere appreciation is also extended to all who provided peer review for these modules.

The preparation of this facilitator guide would not have been possible without the Apparel Industry’s support. Industry feedback has been extremely encouraging from inception to conclusion and it is with their input that we have tried to bridge the skill gaps existing today in the industry.

This facilitator guide is dedicated to the aspiring youth who desire to achieve special skills which will be a lifelong asset for their future endeavours.

## About this Guide

This Facilitator Guide is designed for providing skill training and /or upgrading the knowledge level of the Participants to take up the job of an “Industrial Engineer-Apparel” in the Management and Entrepreneurship Sector.

This Facilitator Guide is designed based on the Qualification Pack (QP) under the National Skill Qualification framework (NSQF) and it comprises of the following National Occupational Standards (NOS)/topics and additional topics.

1. AMH/N2001: Select fabrics, trims and accessories as per specific product category
2. AMH/N2002: Supervise, Analyse and Evaluate Performance on Sewing Floor
3. AMH/N2003: Research and Resolve production problems to implement better production system
4. AMH/N2004: Manage data, forms and instructions for recording, evaluating and reporting quality and reliability data
5. AMH/N0621: Adhere to industry, regulatory, and organizational standards and embrace environmentally sustainable practices
6. AMH/N1605: Maintaining a healthy, safe and secure working environment in the organization with Gender and PwD Sensitization
7. DGT/VSQ/N0103:Employability Skills (90 Hrs.)

## Symbols Used



Ask



Explain



Elaborate



Notes



Objectives



Do



Demonstrate



Activity



Team Activity



Facilitation Notes



Practical



Say



Resources



Example



Summary



Role Play



Learning Outcomes



Exercise



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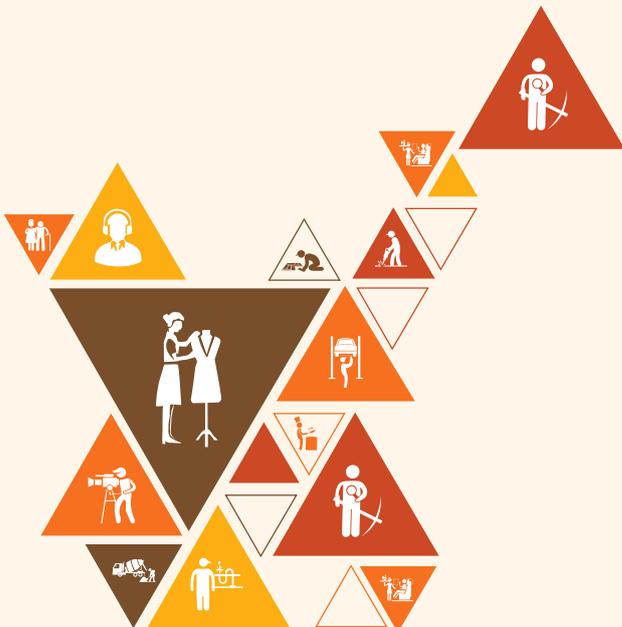


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# 1. Introduction and Orientation to Industrial Engineer (IE)

Unit 1.1 - Role and Scope of an Industrial Engineer (IE) in Apparel Manufacturing



AMH/N2001

## Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Describe various employment opportunities for an 'Industrial Engineer (IE)' in the apparel industry.
2. Describe the relationship between work role of an 'Industrial Engineer (IE)' and the overall manufacturing process.
3. Describe the production process and the specific work activities that relate to the whole process.
4. Explain the roles and responsibilities of an 'Industrial Engineer (IE)'.

## Unit 1.1: Role and Scope of an Industrial Engineer (IE) in Apparel Manufacturing

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe various employment opportunities for an Industrial Engineer (IE) in the apparel industry.
2. Explain the roles and responsibilities of an Industrial Engineer (IE).
3. Examine the relationship between the Industrial Engineer's work role and the overall manufacturing process.
4. Analyse the production process and describe specific work activities involved.

### Resources to be Used

Whiteboard, markers, projector, presentation slides, chart papers, pens, sample production flow charts, case examples from apparel manufacturing, stopwatch or timer

### Do

- Greet the participants and create an engaging environment
- Introduce the unit and link it with their future work in apparel industry
- Show the session outline on the board or slides
- Explain the importance of Industrial Engineering in apparel manufacturing
- Involve participants by asking simple questions
- Give real-world examples from factories to make the topic relatable
- Guide the demonstration and activity step by step
- Summarize key points at the end

### Say

- Hello everyone, I'm really excited to start this session with you today.
- Today we will learn about the role and scope of Industrial Engineers in apparel manufacturing and understand how they fit into the production system.
- This is important because as future professionals, knowing the scope and work of IE will help you see how efficiency, productivity, and quality are managed in the apparel industry.

## Ask

- Have you ever seen how clothes are stitched in bulk in a garment factory or tailoring unit?
- When you see so many workers making clothes, what do you think ensures everything runs smoothly?
- Why do you think some companies produce faster and better-quality clothes than others?

## Elaborate

- Industrial Engineers in apparel manufacturing can work in garment factories, export houses, buying agencies, and consulting firms. They can also take roles in production planning, quality management, and process improvement. The opportunities are diverse and span across both domestic and international markets.
- An Industrial Engineer is responsible for improving productivity, reducing wastage, setting production targets, line balancing, time study, and ensuring quality standards. They act as a bridge between management and the shop floor, ensuring efficiency and smooth workflow.
- IEs analyse, monitor, and improve each step of the manufacturing process. From cutting and sewing to finishing and packing, they ensure processes are optimized. Their role directly affects output, efficiency, and profitability.
- Key activities include motion study, work measurement, setting Standard Minute Value (SMV), capacity planning, and resource allocation. They also monitor operator performance, machine utilization, and help troubleshoot bottlenecks during production.

## Explain

- Industrial Engineers are essential in apparel manufacturing because they optimize time, cost, and resources.
- They ensure smooth production by balancing workflows and improving efficiency.
- They help reduce wastage and enhance product quality.
- They connect planning with execution on the shop floor.
- They also play a role in worker training and motivation.
- Their scope extends across the entire apparel supply chain.
- Understanding their role prepares learners to interact effectively with IEs in real industry settings.

## Demonstrate

Show a simple production line flow chart of a T-shirt manufacturing process and highlight where and how an Industrial Engineer contributes at each stage, such as cutting, sewing, finishing, and packing.

## Activity

1. **Activity Name:** Mapping IE Role in a Production Line (covers Roles and Responsibilities of an Industrial Engineer, Relationship with the Manufacturing Process)
2. **Objective:** To help participants identify where and how Industrial Engineers intervene in the production process
3. **Type of Activity:** Group
4. **Resources:** Chart paper, markers, sample production process flow chart handouts
5. **Time Duration:** 25 minutes
6. **Instructions:**
  - Divide participants into small groups.
  - Provide each group with a sample flow chart of a garment production process.
  - Ask them to identify stages where Industrial Engineers play a role.
  - Each group should mark the stages and write the IE activities next to them.
  - Groups will present their charts briefly to the class.
7. **Outcome:** Participants will be able to recognize and explain the contribution of Industrial Engineers at different stages of apparel manufacturing.

## Notes for Facilitation

- Keep the session interactive and encourage everyone to contribute
- Use real-life examples to make concepts easy to understand
- Emphasize how IE roles improve efficiency and profitability
- Stress that IEs work closely with workers, supervisors, and management
- Highlight that understanding IE functions is crucial for those aspiring to leadership roles in apparel manufacturing

## Answers to Exercises for PHB

**Answer the following questions by choosing the correct option:**

1. c. Optimising production efficiency
2. b. Time and motion study
3. b. Finance
4. b. Improve workflow efficiency
5. c. Efficiency percentage

**Answer the following questions briefly.**

1. Refer Unit 1.1: Role and Scope of an Industrial Engineer (IE) in Apparel Manufacturing  
Topic: 1.1.2 Roles and Responsibilities of an Industrial Engineer
2. Refer Unit 1.1: Role and Scope of an Industrial Engineer (IE) in Apparel Manufacturing  
Topic: 1.1.4 Work Activities in the Production Process
3. Refer Unit 1.1: Role and Scope of an Industrial Engineer (IE) in Apparel Manufacturing  
Topic: 1.1.3 Relationship with the Manufacturing Process
4. Refer Unit 1.1: Role and Scope of an Industrial Engineer (IE) in Apparel Manufacturing  
Topic: 1.1.2 Roles and Responsibilities of an Industrial Engineer
5. Refer Unit 1.1: Role and Scope of an Industrial Engineer (IE) in Apparel Manufacturing  
Topic: 1.1.1 Employment Opportunities for Industrial Engineer



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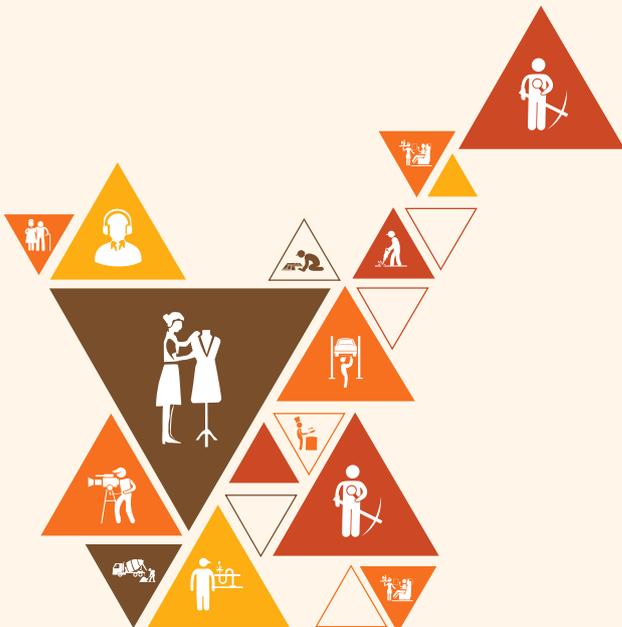
## 2. Select Fabrics, Trims and Accessories as per Specific Product Category

Unit 2.1 - Business Planning and Strategy

Unit 2.2 - Design, Tools and Equipment

Unit 2.3 - Procedures, Reporting and Regulations

Unit 2.4 - Analysis, Estimation and Decision-Making



AMH/N2001

## Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Analyse the business plan and strategy against implementation procedure and success factors.
2. Prepare operation bulletin to estimate SAM (Standard Allowed Minute) with productivity at the costing stage, cost analysis in consultation with relevant stakeholders.
3. Determine worker functions and responsibilities by studying operations sequence, material flow, functional.
4. Plan and establish the sequence of operations to fabricate and assemble parts or products and to promote efficient utilization.
5. Regulate workflow schedules according to established manufacturing sequences and lead times to expedite production operations.
6. Communicate to the concerned authority about production plan and standards.
7. Analyse detailed instructions, drawings, or specifications to explain how devices, parts, equipment, or structures are to be fabricated, constructed, assembled, modified, maintained, or used.
8. Classify defects as critical and non-critical.
9. Analyse risk assessment processes.

## Unit 2.1: Business Planning and Strategy

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Analyse the business plan and strategy in relation to implementation procedures and success factors.
2. Estimate Standard Allowed Minute (SAM) using operation bulletin to evaluate productivity during costing.
3. Conduct cost analysis in consultation with relevant stakeholders.
4. Assess worker roles and responsibilities by examining operation sequences and material flow.
5. Plan and structure the sequence of operations to promote efficient fabrication and assembly.
6. Regulate workflow schedules according to production lead times and manufacturing sequences.
7. Communicate the production plan and standards to the concerned authority.

### Resources to be Used

Whiteboard, markers, projector, PowerPoint slides, sample production plans, handouts on SAM and workflow scheduling, flowcharts of operation sequence, cost analysis worksheets, notepads, pens

### Do

- Greet participants and introduce the unit with energy
- Present the session title on the board or screen
- Begin with simple examples of planning in daily life and link it to business planning
- Explain each topic using diagrams, examples, and handouts
- Engage participants with questions and involve them in discussions
- Demonstrate a simple example of operation sequence planning
- Guide participants in the activity with clear instructions
- Summarize the key learning points before closing the session

### Say

- Hello everyone! I'm glad to see you all today as we dive into the world of business planning and strategy.
- By the end of this session, you'll understand how to plan operations, calculate SAM, analyse costs, and communicate production strategies effectively.
- This is important because strong planning and clear strategy are what keep apparel manufacturing efficient, cost-effective, and competitive.

## Ask

- Have you ever planned your day by deciding what to do first and what to do later?
- When you buy something, do you think about how much effort and cost went into making it?
- Why do you think it is important for a team to have a clear plan before starting any work?

## Elaborate

- Business planning involves setting clear objectives, identifying resources, and aligning operations to achieve goals. In apparel manufacturing, strategy ensures production efficiency, cost control, and timely delivery.
- SAM refers to the time required by a skilled worker to complete a task under standard conditions. It helps in capacity planning, labour costing, and evaluating worker performance.
- Cost analysis involves calculating the expenses related to labour, materials, and overheads. Industrial Engineers collaborate with stakeholders to ensure cost efficiency without compromising quality.
- Clear definition of worker roles, establishing the correct operation sequence, and ensuring smooth material flow are critical for avoiding bottlenecks and ensuring productivity.
- Sequencing defines the order of operations in the production line. Correct sequencing reduces delays, increases efficiency, and ensures consistent product quality.
- Scheduling aligns tasks, manpower, and machine availability with deadlines. It ensures smooth flow of production and timely order completion.
- A production plan must be communicated clearly to supervisors, workers, and stakeholders. Effective communication prevents errors and maintains coordination across departments.

## Explain

Business planning and strategy provide a structured approach to manufacturing. SAM helps measure task times and set realistic production targets. Cost analysis ensures expenses are managed and profits are protected. Worker roles and material flow must be clearly defined for smooth operations. Sequencing of operations prevents bottlenecks and delays. Workflow scheduling ensures that timelines are met efficiently. Communicating the production plan clearly builds coordination and ensures success in apparel manufacturing.

## Demonstrate

Show a sample production flow chart and demonstrate how sequencing operations affects the overall workflow and efficiency.

## Activity

1. **Activity Name:** Operation Sequencing and Workflow Mapping (topics: Worker Roles, Operation Sequence & Material Flow, Sequencing Operations, Workflow Scheduling)
2. **Objective:** To help participants understand how to arrange operations and map workflow for efficiency.
3. **Type of activity:** Group
4. **Resources:** Chart papers, markers, handouts of sample apparel production steps
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into groups
  - Provide each group with a list of production steps (cutting, stitching, finishing, packing) in a mixed order
  - Ask them to arrange the steps in correct sequence and map the material flow on chart paper
  - Groups should also suggest how they would schedule tasks to avoid delays
  - Each group presents their workflow mapping to the class
7. **Outcome:** Participants will gain practical experience in sequencing operations and workflow scheduling for apparel production.

## Notes for Facilitation

- Encourage active participation from all members of the group
- Use simple examples to make technical terms easier to understand
- Emphasize that planning and strategy are ongoing processes, not one-time tasks
- Highlight that SAM is the backbone for production planning and labor costing
- Stress that communication is equally important as planning in ensuring success
- Reinforce that proper sequencing and scheduling can prevent production delays and losses

## Unit 2.2: Design, Tools and Equipment

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Analyse detailed instructions, drawings, or specifications to explain fabrication and assembly processes.
2. Classify and differentiate critical and non-critical defects.
3. Identify machine specifications and relevant organisational regulations.
4. Identify product requirements in terms of construction specifications and quality standards.
5. Design layout of equipment, materials, and workspace to optimise efficiency using drafting tools and software.
6. Evaluate the accuracy and precision of production and testing equipment to formulate corrective actions.
7. Identify critical defect zones during inspection processes.

### Resources to be Used

Whiteboard, markers, projector, PowerPoint slides, sample assembly diagrams, defect classification charts, sewing machine manual, safety posters, product specification sheets, layout planning charts, calibration tools, defect zone inspection samples, notepads, pens

### Do

- Begin with a short introduction linking tools, machines, and quality in apparel manufacturing
- Show visual examples of defects and layouts for better understanding
- Discuss each topic step by step with real-life industry references
- Encourage participants to share their experience with tools and equipment
- Demonstrate one small equipment calibration example in front of class
- Guide participants through the activity with clear step-by-step support
- Summarize all the topics before closing the session

### Say

- Hello everyone! I'm excited to be with you today as we explore how design, tools, and equipment drive quality and efficiency in apparel manufacturing.
- Today's session will help you understand machine specifications, defects, layout planning, and quality requirements that directly impact production success.
- This is important because using the right tools and following standards ensures safety, efficiency, and defect-free products.

## Ask

- Have you ever noticed how a machine in poor condition produces weaker or uneven results?
- When you buy clothes, do you check if there are loose threads or stitching defects?
- Why do you think factories spend so much time arranging their equipment in a particular layout?

## Elaborate

- Understanding fabrication drawings and assembly instructions helps in visualizing how different garment parts come together. It ensures accuracy during production and minimizes errors.
- Defects are categorized as critical, major, or minor based on their impact on product quality. This classification helps prioritize corrections and maintain customer satisfaction.
- Each machine has specific features and operational limits. Following safety standards prevents accidents and ensures long-term machine efficiency.
- Every garment must meet set product requirements such as size, seam strength, and finishing. Quality standards guide the inspection process to ensure consistency.
- Proper machine and workstation layout reduce worker fatigue, saves time, and increases production efficiency. It also helps in smooth material flow.
- Calibration ensures that machines operate at precise settings, reducing errors and defects. Regular calibration maintains consistent quality.
- Defect zones in garments are areas prone to common issues such as seams, hems, or collars. Identifying these zones allows for focused inspection and quality control.

## Explain

- Design, tools, and equipment play a central role in manufacturing.
- Fabrication and assembly interpretation ensure correct product construction.
- Defect classification helps in prioritizing corrections.
- Machines must follow specifications and safety standards to ensure safe and efficient operation.
- Product requirements and quality standards guide consistent production.
- Efficient layouts improve workflow and reduce waste.
- Equipment calibration maintains accuracy and reduces defects.
- Defect zones in inspection highlight areas to check for maintaining high product quality.

## Demonstrate

Demonstrate how to check and adjust the calibration of a sewing machine's stitch length to ensure accuracy.

## Activity

1. **Activity Name:** Defect Identification and Classification (topics: Defect Classification, Defect Zones in Inspection, Product Requirements and Quality Standards)
2. **Objective:** To enable participants to identify and classify garment defects effectively.
3. **Type of activity:** Group
4. **Resources:** Sample garments with defects, defect classification chart, inspection checklist
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into small groups
  - Provide each group with garments that have different types of defects
  - Ask them to inspect the garments and identify the defects
  - Groups should classify defects as critical, major, or minor using the classification chart
  - Each group presents their findings to the class
7. **Outcome:** Participants will learn to practically identify and classify garment defects, linking theory with real inspection tasks.

## Notes for Facilitation

- Encourage participants to interact and share real-life examples of defects and machine handling
- Use clear visuals and practical samples to make learning effective
- Stress the importance of accuracy in both machine calibration and defect inspection
- Highlight that efficient layout planning saves both time and costs in manufacturing
- Emphasize that defect classification is key to maintaining customer trust and product quality
- Remind participants that safety standards in machine use are non-negotiable for worker protection

## Unit 2.3: Procedures, Reporting and Regulations

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Identify authorised personnel to report issues beyond job responsibilities.
2. Identify inter-departmental material movement procedures.
3. Explain the concept of logistics and supply chains within a manufacturing context.
4. Identify compliance guidelines to be followed by vendors.
5. Identify organisational reporting procedures, formats, and their periodicity.
6. Identify the escalation matrix as follows within the organisation.
7. Interpret tools, templates, and processes used for recording and monitoring deviations.

### Resources to be Used

Whiteboard, markers, projector, sample reporting formats, flowcharts of reporting structure, handouts on vendor compliance guidelines, logistics charts, deviation monitoring tool samples, case reference sheets

### Do

- Start with a brief overview of the importance of procedures and reporting in industrial settings
- Present each topic with visual aids like flowcharts and reporting templates
- Encourage participants to share their understanding of reporting and compliance from past experiences
- Demonstrate a sample reporting flow and escalation matrix step-by-step
- Facilitate a discussion on how procedures link with supply chain and vendor compliance
- Conduct the planned activity and allow participants to practice reporting using provided templates

### Say

- Good morning everyone, I'm glad to see your energy today and I'm excited to take you through another important learning session.
- Today we are going to focus on procedures, reporting, and regulations which are vital for smooth and accountable operations.
- Understanding this will help you work confidently in any organization by knowing how to handle reporting, manage vendors, and follow structured procedures.

## Ask

- When you were in school or college, did you ever report an issue to your teacher? How did you decide whom to approach?
- Have you ever ordered something online and tracked its delivery? What steps did you notice in the supply process?
- If a shop near your home doesn't follow packaging rules, what could happen to the product quality?

## Elaborate

- Reporting Structure and Escalation Matrix defines how information flows in an organization and who should be informed in case of an issue. It ensures accountability and faster problem resolution.
- Material Movement Procedure includes the guidelines for receiving, storing, and transferring materials within the facility. Proper material movement minimizes losses and ensures timely production.
- Vendor Compliance Guidelines are the standards and expectations vendors must follow, covering quality, delivery schedules, and legal compliance. It builds trust and long-term relationships.
- Logistics and Supply Chain refers to the process of planning, implementing, and controlling the movement of goods and materials from suppliers to customers efficiently.
- Standardized formats ensure uniformity, accuracy, and completeness of information in organizational reports.
- Deviation Monitoring Tools are used to track and highlight differences between planned and actual outcomes. They help in identifying issues early and implementing corrective actions.

## Explain

- Reporting ensures accountability and structured communication in an organization.
- Escalation matrices help issues reach the right authority in time.
- Material movement must follow procedures to avoid delays, damages, and losses.
- Vendor compliance is essential for quality assurance and legal safety.
- Logistics and supply chain management ensures timely delivery and efficient use of resources.
- Deviation monitoring tools help track performance and support continuous improvement.

## Demonstrate

Demonstrate filling a simple incident report using a standard reporting format and show how it would be escalated through the reporting structure.

## Activity

1. **Activity Name:** Reporting and Escalation Flow (Topics: Reporting Structure and Escalation Matrix, Reporting Procedures and Formats)
2. **Objective:** To help participants practice preparing and routing a report through a structured escalation flow
3. **Type of activity:** Group
4. **Resources:** Sample incident scenario handouts, reporting templates, whiteboard, markers
5. **Time Duration:** 25 minutes
6. **Instructions:**
  - Divide participants into small groups
  - Provide each group with a simple incident scenario (e.g., late delivery, material defect)
  - Ask them to prepare a report using the provided template
  - Groups must decide the correct escalation path and present it briefly
7. **Outcome:** Participants will understand how to document an issue properly and escalate it through the right reporting structure

## Notes for Facilitation

- Keep the session interactive and encourage participation from everyone
- Use real-life examples and relatable scenarios to build connections with learners
- Stress the importance of following the reporting structure to avoid confusion and delay
- Emphasize that material movement procedures reduce operational risks
- Highlight how vendor compliance impacts overall supply chain quality
- Explain how deviation monitoring tools support continuous improvement and accountability

## Unit 2.4: Analysis, Estimation and Decision-Making

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Estimate sizes, distances, and quantities to determine time, cost, resources, or materials for tasks.
2. Analyse variables involved in mathematical calculations and decision-making processes.
3. Examine organisational charts, statements, and project-related information.
4. Plan delivery schedules based on production forecasts, substitutions, storage capacity, and maintenance needs.

### Resources to be Used

Whiteboard, markers, projector, calculator, measuring scale, sample production charts, organisational chart templates, forecasting charts, planning sheets, handouts on decision-making variables

### Do

- Begin the session by introducing the importance of analysis and estimation in production
- Use real objects to show basic estimation of sizes, distances, and quantities
- Present organisational charts and explain their role in project planning
- Walk through examples of mathematical variables used in decision-making
- Discuss delivery schedules and how forecasts and constraints affect planning
- Conduct the planned activity by engaging participants in group practice of estimation and scheduling

### Say

- Good morning everyone, I'm really glad to see you all here today and I'm excited to dive into this important session together.
- Today we are going to learn about analysis, estimation, and decision-making which are essential for efficient production planning and smooth workflow.
- This is something that will help you not only in the workplace but also in everyday decision-making where estimation and planning are key.

## Ask

- When you go to the market, do you estimate how many items will fit in your bag before buying them?
- Have you ever planned how much time it will take you to travel somewhere depending on distance?
- When you cook food at home, do you estimate the quantity of ingredients needed based on the number of people?

## Elaborate

- Estimation skills are vital in production planning to allocate resources effectively and reduce wastage. Workers need to approximate dimensions, space, and material requirements accurately.
- Variables like cost, time, efficiency, and output are applied to select the best production method. Understanding these variables ensures logical and data-driven decisions.
- Charts provide a clear picture of roles, responsibilities, and communication flow in a project. They help in organizing teams and coordinating work effectively.
- Delivery schedules depend on demand forecasts and production constraints such as manpower, material availability, and machinery capacity. These factors are used to plan timely deliveries.

## Explain

- Estimation helps in avoiding resource shortages or wastage in production.
- Mathematical variables provide measurable criteria for making informed decisions.
- Organisational charts ensure clarity of roles and responsibilities within projects.
- Delivery schedules align production with customer needs and deadlines.
- Forecasts support better planning, while constraints help set realistic targets.
- Decision-making relies on balancing available data with practical limitations.

## Demonstrate

Demonstrate how to use a simple measuring scale and calculator to estimate the quantity of raw material needed for producing a set number of items.

## Activity

1. **Activity Name:** Production Planning Estimation Exercise (Topics: Estimation of Sizes, Distances, and Quantities in Production Planning, Delivery Schedules Using Forecasts and Constraints)
2. **Objective:** To develop practical estimation and scheduling skills in production planning
3. **Type of activity:** Group
4. **Resources:** Measuring scales, calculators, sample production data sheets, organisational chart template, planning sheets
5. **Time Duration:** 30 minutes

**6. Instructions:**

- Divide participants into groups and provide each group with a sample production requirement (e.g., producing 100 units of a product).
- Ask them to estimate the raw material quantities and time required using given data.
- Provide constraints such as limited manpower or machine hours and ask them to adjust their plan.
- Each group prepares a small delivery schedule based on their estimations and presents it.

**7. Outcome:** Participants will gain hands-on experience in estimation, resource planning, and adjusting schedules based on constraints.

## Notes for Facilitation

- Encourage learners to actively participate and ask questions during demonstrations
- Keep explanations simple and connect concepts with real-life examples
- Emphasize that estimation in production must be as accurate as possible to avoid cost overruns
- Highlight how mathematical variables like time, cost, and efficiency impact decision-making in production
- Stress the role of organisational charts in ensuring accountability and clear communication
- Explain how delivery schedules need to balance forecasts with real-world constraints for effective planning

## Answers to Exercises for PHB

**Answer the following questions by choosing the correct option:**

1. b. SAM (Standard Allowed Minute)
2. c. To optimise efficiency and production flow
3. d. Critical defect
4. b. Fishbone Diagram
5. c. Optimising efficiency

**Answer the following questions briefly.**

1. Refer Unit 2.1: Business Planning and Strategy  
Topic: 2.1.1 Business Planning and Strategy: Core Concept
2. Refer Unit 2.2: Design, Tools and Equipment  
Topic: 2.2.5 Layout Planning for Efficiency
3. Refer Unit 2.1: Business Planning and Strategy  
Topic: 2.1.2 SAM (Standard Allowed Minute)
4. Refer Unit 2.3: Procedures, Reporting and Regulations  
Topic: 2.3.2 Material Movement Procedure
5. Refer Unit 2.4: Analysis, Estimation and Decision-Making  
Topic: 2.4.4 Delivery Schedules Using Forecasts and Constraints





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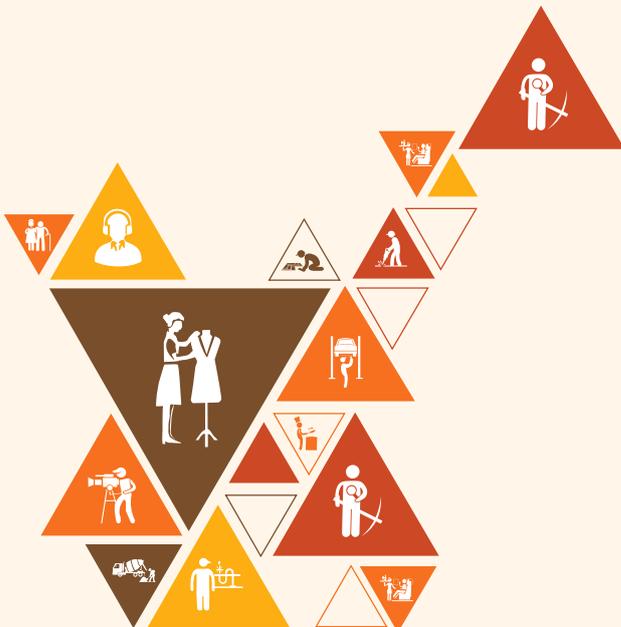
# 3. Supervise, Analyse and Evaluate Performance on Sewing Floor

Unit 3.1 - Production Planning and Flow

Unit 3.2 - Quality, Performance, and Evaluation

Unit 3.3 - Organisational Ethics and Documentation

Unit 3.4 - Communication and Software Tools



AMH/N2002

## Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Explain the operations sequence, material flow, functional statements to evaluate the production flow process.
2. Set goals and targets as per production directives for all operators in a production line.
3. Explain the elements of a professional code of ethics and standards of practice.
4. Interpret framework and guidelines prescribed by the organization for redressal of queries and problems.
5. Interpret documentation requirements for performance evaluation of operations and operators.

## Unit 3.1: Production Planning and Flow

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe the operations sequence, material flow, and functional statements to assess the production flow process.
2. Set goals and targets for all operators based on production directives.
3. Review production schedules, engineering specifications, and orders to examine manufacturing methods and activities.
4. Evaluate the precision and accuracy of production and testing equipment and layout to formulate corrective actions.
5. Monitor all operator activities to ensure optimisation and goal achievement.
6. Select a suitable measuring system for operators based on assigned goals and targets.
7. Ensure strict adherence of operator activities to production guidelines.

### Resources to be Used

Whiteboard, markers, projector, sample production schedules, measuring instruments, layout diagrams, operator task sheets, handouts on production guidelines, charts on operation sequence and material flow

### Do

- Start with a simple example of how material moves in a production line
- Introduce operator goals and explain their link to productivity
- Show a sample production schedule and highlight specifications
- Explain equipment layout and how accuracy impacts results
- Discuss typical operator activities and responsibilities
- Present measuring systems used to track operator goals and targets
- Relate all operator activities back to production guidelines
- Conduct the planned group activity on operation sequence and operator tasks

### Say

- Good morning everyone, it's great to have you here as we dive into today's session.
- Today we are going to explore production planning and flow, which is the backbone of efficient manufacturing.
- If you understand these concepts, you'll know exactly how your work fits into the bigger production process and why accuracy and guidelines are so important.

## Ask

- When you cook food at home, do you follow a sequence of steps to make sure everything comes out right?
- Have you ever planned your day by setting targets like finishing a task before a certain time?
- When you use a tool or appliance, do you notice how proper handling affects the result?

## Elaborate

- Every production process follows a sequence of operations where material moves step by step. Smooth material flow prevents delays and increases efficiency.
- Operators must meet daily or hourly targets that align with production goals. Clear targets ensure focus, accountability, and timely delivery.
- Production schedules set deadlines, while specifications ensure that the product meets quality standards. Both are essential for consistency.
- Accurate machines and well-planned layouts reduce errors and downtime. They help operators perform their tasks smoothly and efficiently.
- Operators perform defined tasks such as setting machines, monitoring processes, and checking quality. Their activities directly affect productivity.
- Measuring systems like output counts, time logs, or quality checks help assess operator performance.
- Following established guidelines ensures safety, quality, and uniformity across all operations.

## Explain

- Production planning involves organizing material flow and setting sequences for smooth operations.
- Operators must achieve goals that are measurable and tied to overall targets.
- Schedules and specifications guide both timing and quality of production.
- Equipment accuracy and layout planning directly influence production efficiency.
- Operator activities must align with organizational expectations and quality needs.
- Measuring systems track and ensure that targets are being met accurately.
- Adherence to production guidelines creates a safe, efficient, and consistent work environment.

## Demonstrate

Demonstrate a simple operation sequence by showing how raw material can be passed through three stages (cutting, assembling, checking) using sample objects, and explain how each operator's role connects to the overall flow.

## Activity

1. **Activity Name:** Mapping a Production Flow (Topics: Operation Sequence and Material Flow, Operator Activities, Adherence of Operator Activities to Production Guidelines)
2. **Objective:** To help participants understand how material flow and operator activities are planned and linked to guidelines
3. **Type of activity:** Group
4. **Resources:** Chart paper, markers, sample product flow chart, task cards for operators
5. **Time Duration:** 25 minutes
6. **Instructions:**
  - Divide participants into groups and provide each group with task cards that describe operator activities.
  - Ask them to arrange the tasks in a logical sequence to form a material flow.
  - Each group will draw a simple production flow diagram on chart paper.
  - After mapping the flow, participants will identify operator goals and note which guidelines apply at each stage.
7. **Outcome:** Participants will learn how to visualize production flow, understand operator tasks in sequence, and see how guidelines govern the process.

## Notes for Facilitation

- Keep the session interactive by involving participants in discussions
- Use simple real-life analogies to explain technical terms
- Stress that smooth material flow reduces waste and delays in production
- Highlight how operator targets must connect to overall organizational goals
- Explain that equipment layout is not just technical but also a productivity factor
- Reinforce that measuring systems and guidelines ensure both quality and accountability

## Unit 3.2: Quality, Performance, and Evaluation

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Analyse statistical data and product specifications to determine standards and establish quality and reliability objectives.
2. Evaluate the performance of operators using defined metrics in line with production guidelines.
3. Create quantified measures and metrics to analyse operator performance.
4. Interpret framework and guidelines for operator performance evaluations as prescribed by the organisation.
5. Analyse the process flow used for performance evaluation and documentation.
6. Interpret documentation requirements for evaluating operations and operators.

### Resources to be Used

Whiteboard, markers, organisational policy booklet, sample HR forms, grievance/redressal forms, sample code of ethics document, projector, chart papers, sticky notes.

### Do

- Introduce the session and briefly outline the flow of topics.
- Display sample documents such as code of ethics, HR forms, and redressal forms.
- Divide the board into sections to explain each documentation area clearly.
- Use simple workplace examples to connect ethics with daily responsibilities.
- Encourage participants to share any observations about documentation at their workplaces.
- Guide learners through the purpose of each document by showing samples.
- Prepare chart papers for the activity in advance.
- Ensure clear explanation without overloading participants with policy jargon.

### Say

- Hello everyone! I'm really excited to take you through today's session because it's something that shapes how we work and interact every single day.
- Today we will learn about organisational ethics and how proper documentation supports our roles, responsibilities, and workplace redressal systems.
- Understanding these concepts is important because they help you work professionally, protect yourself, and follow the organisation's expectations confidently.

## Ask

- Have you ever been told to follow a certain rule at work or school without fully knowing where it came from?
- Have you filled any form like leave application, ID request, or registration form before?
- If you had a concern or complaint in the past, whom did you inform and how did you document it?

## Elaborate

- These define what behaviour is expected from employees, including integrity, honesty, respect, confidentiality, and accountability. They guide decision-making and ensure professionalism in all interactions.
- This includes maintaining records of tasks, daily logs, reports, attendance, and compliance-related documents. It ensures clarity about what work was done, by whom, and when.
- HR requires documentation such as joining forms, leave records, performance reports, misconduct reports, and policy acknowledgements. These documents help manage employee data accurately.
- Organisations provide clear systems such as suggestion boxes, supervisors, grievance cells, and helplines through which employees can raise issues or ask queries professionally.
- These include forms and registers designed to record complaints, follow-up actions, and decisions. Documenting the process ensures fairness and transparency.
- This involves recording the complaint received, investigation details, actions taken, and final closure. Proper documentation helps maintain legal and organisational standards.

## Explain

- A professional code of ethics provides guidelines for appropriate behaviour, decision-making, and responsibility in the workplace.
- Documentation helps maintain clarity, accountability, and transparency in all assigned duties.
- HR documentation mainly records employment details, attendance, performance, and policy compliance.
- Organisations create structured frameworks to raise queries and concerns systematically.
- Redressal mechanisms rely on proper documentation to track issues and ensure fair resolution.
- Accurate, timely, and well-maintained documentation supports organisational standards and legal compliance.

## Demonstrate

Show participants how to fill a basic grievance or concern form step by step, including writing the issue clearly, mentioning the date, attaching evidence, and submitting it to the correct authority.

## Activity

1. **Activity Name:** Documentation Trail Mapping
2. **Objective:** To help participants understand the flow and importance of documentation from reporting a task or issue to its final closure.
3. **Type of Activity:** Group
4. **Resources:** Chart papers, markers, sample forms (HR, grievance, reporting), sticky notes
5. **Time Duration:** 25–30 minutes
6. **Instructions:**
  - Divide participants into small groups.
  - Provide each group with sample forms related to roles, HR, and redressal.
  - Ask each group to create a simple flow map on chart paper showing how documentation moves from an employee to the concerned authority.
  - Encourage groups to use sticky notes to represent steps like reporting, verification, submission, review, and closure.
  - Each group presents their documentation trail briefly.
7. **Outcome:** Participants will understand the movement, purpose, and importance of documentation in ensuring accountability, transparency, and efficient workplace processes.

## Notes for Facilitation

- Encourage participation by relating each topic to simple workplace experiences.
- Use clear and simple language while explaining policies and documentation.
- Explain that documentation is not just paperwork but a method to protect both the employee and the organisation.
- Highlight that ethical behaviour is demonstrated through actions and supported through documented processes.
- Remind trainees that HR documentation ensures their rights, safety, and growth in the organisation.
- Emphasise that redressal documentation ensures fairness and prevents bias or misunderstandings.

## Unit 3.3: Organisational Ethics and Documentation

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the elements of a professional code of ethics and standards of practice.
2. Identify the documentation requirements for procedures related to assigned roles and responsibilities.
3. Escalate all documentation and relevant support materials to the human resources department for official records.
4. Interpret organisational frameworks and guidelines for addressing queries and concerns.
5. Identify the documentation mechanisms available for redressal within the organisation.
6. Maintain documentation related to redressal procedures.

### Resources to be Used

Whiteboard, markers, projector, presentation slides, printed handouts of professional code of ethics, organisational policy documents, HR documentation forms, grievance redressal flowchart, pens, notepads

### Do

- Greet the participants warmly and create a welcoming atmosphere
- Introduce the session topic and explain its relevance to professional life
- Distribute handouts and reference materials to participants
- Present slides with structured explanations of ethics and documentation requirements
- Use real-life organisational examples for better understanding
- Encourage participants to share their thoughts and connect with the concepts
- Facilitate the activity and ensure every trainee participates
- Summarise the session before closing

### Say

- Good morning everyone, I'm excited to be here with you today to discuss organisational ethics and documentation.
- Today we'll learn about professional codes of ethics, documentation requirements, HR reporting, and redressal mechanisms.
- Understanding this will help you not only maintain professionalism but also protect yourself and your organisation when issues arise.

## Ask

- Have you ever seen or heard of workplace rules that employees must follow every day?
- What kind of documents do you usually submit when joining a new workplace or institution?
- If you face a problem at work, who would you normally approach first?

## Elaborate

- Elements of a professional code of ethics and standards of practice: These are the guiding principles that define expected workplace behaviour, integrity, and professional conduct to ensure trust and accountability.
- Documentation requirements for assigned roles and responsibilities: Employees are expected to maintain accurate records of their duties, responsibilities, and progress to ensure transparency and accountability in their roles.
- Documentation to the Human Resources department: HR documentation includes employee records, leave applications, performance reviews, and compliance forms that support workforce management.
- Organisational frameworks for queries and concerns: These frameworks define how employees can raise queries or report concerns within the organisation in a structured and respectful manner.
- Documentation mechanisms for redressal: Organisations have standard documentation practices for recording complaints and requests for redressal to maintain fairness and evidence-based handling.
- Documentation related to redressal procedures: This includes maintaining written records of the process, decisions, and actions taken during conflict resolution or grievance redressal.

## Explain

- Professional codes of ethics help employees maintain discipline and integrity in their work.
- Documentation ensures that roles and responsibilities are clearly defined and can be reviewed when needed.
- HR documents are essential for employee management and organisational record-keeping.
- Organisational frameworks provide structured ways for employees to raise concerns without fear.
- Proper documentation of redressal procedures ensures transparency and fairness in handling complaints.
- Following ethical standards and maintaining accurate documentation enhances professional trust and organisational efficiency.

## Demonstrate

Show participants how to fill a simple HR form for reporting an issue, highlighting the importance of accurate details, signatures, and dates.

## Activity

1. **Activity Name:** Ethics and Documentation Role Recording (Topics: Documentation requirements for assigned roles and responsibilities, Elements of a professional code of ethics)
2. **Objective:** To help participants practice writing role-specific documentation while adhering to ethical guidelines.
3. **Type of activity:** Individual
4. **Resources:** Printed role description handouts, pens, notepads
5. **Time Duration:** 25 minutes
6. **Instructions:**
  - Distribute role description handouts to each participant.
  - Ask participants to prepare a short documentation note summarising their role, responsibilities, and how they would maintain ethical practices in those duties.
  - Collect and review the notes, highlighting good examples of clarity and ethical alignment.
7. **Outcome:** Participants will be able to demonstrate practical understanding of documentation for roles and responsibilities while keeping ethical practices in mind.

## Notes for Facilitation

- Maintain an open, inclusive, and respectful tone throughout the session.
- Encourage participation by validating trainee inputs and connecting them to session topics.
- Highlight how ethical practices strengthen workplace culture and build trust.
- Emphasise the importance of accurate and timely documentation to avoid disputes.
- Explain the linkage between HR documentation and organisational accountability.
- Stress the need for clear documentation in grievance redressal to ensure fairness and compliance.

## Unit 3.4: Communication and Software Tools

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Analyse subordinate reporting executives' queries and document them using the prescribed organisational format.
2. Provide timely and necessary feedback to concerned line supervisors.
3. Explain the basic functions of software tools and formats such as MS Word, Excel, PowerPoint, MIS, GSD, and PMTS as per organisational standards.

### Resources to be Used

Whiteboard, markers, projector, presentation slides, sample feedback forms, organisational communication templates, computers or laptops, basic software applications (Excel, Word, PowerPoint), demonstration files of MIS, GSD, and PMTS tools, notepads, pens

### Do

- Greet participants and introduce the session topic
- Explain the importance of communication and software tools in apparel production
- Provide examples of real workplace scenarios involving feedback and reporting
- Demonstrate use of basic software for production documentation
- Explain industry-specific software with visuals or simple walkthroughs
- Distribute feedback forms and show how to prepare them for line supervisors
- Guide participants through the activity and ensure equal involvement
- Wrap up with a summary of the key takeaways

### Say

- Good morning everyone, I'm glad to see you here today as we dive into communication and software tools in apparel production.
- In this session, we'll learn how to provide effective feedback to supervisors, use basic software tools, and understand the role of industry-specific systems like MIS, GSD, and PMTS.
- Mastering these skills will help you communicate clearly, stay organised, and work efficiently in a production environment.

## Ask

- Have you ever given or received feedback from a supervisor or teacher in your daily life?
- What common software do you use at home or in your studies, like spreadsheets or word processors?
- Why do you think industries need specialised tools instead of just basic software?

## Elaborate

- Feedback to line supervisors: Effective feedback helps supervisors monitor progress, identify issues, and take corrective actions to maintain workflow efficiency.
- Basic software tools in apparel production: Tools like Excel, Word, and PowerPoint are used for data recording, reporting, scheduling, and preparing production-related documents.
- Industry-specific tools MIS: Management Information Systems (MIS) are used to collect, process, and manage data to improve decision-making and efficiency.
- Industry-specific tools GSD: General Sewing Data (GSD) provides standard time measurements for garment operations, helping to optimise labour costs and efficiency.
- Industry-specific tools PMTS: Predetermined Motion Time Systems (PMTS) are used to analyse work content and establish standard times for production tasks.

## Explain

- Providing structured feedback helps supervisors improve workflow and address problems quickly.
- Basic software applications form the foundation for production documentation and reporting.
- MIS is crucial for handling large-scale data in production planning and monitoring.
- GSD supports time management and helps ensure fair productivity benchmarks.
- PMTS improves efficiency by standardising task analysis and resource allocation.
- Combining communication skills with technical tools enhances overall organisational performance.

## Demonstrate

Show participants how to fill out a sample feedback form for line supervisors and prepare a basic production report using Excel.

## Activity

1. **Activity Name:** Preparing a Production Feedback Report (Topics: Feedback to line supervisors, Basic software tools in apparel production)
2. **Objective:** To help participants practice documenting production data and providing clear feedback using basic software.
3. **Type of activity:** Group

4. **Resources:** Computers or laptops, Excel software, sample production data sheet, feedback form templates
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into small groups.
  - Provide each group with a sample production data sheet.
  - Ask them to prepare a short Excel-based report and a feedback note for a line supervisor based on the data.
  - Groups present their reports to the class for review and discussion.
7. **Outcome:** Participants will gain practical skills in combining communication with basic software tools to produce structured feedback.

## Notes for Facilitation

- Encourage active participation and hands-on practice with software tools.
- Keep technical explanations simple and beginner-friendly.
- Stress the importance of giving feedback that is constructive, clear, and respectful.
- Emphasise the role of MIS in streamlining data-driven decision-making.
- Explain how GSD helps in labour efficiency and cost optimisation.
- Highlight how PMTS contributes to productivity improvement by standardising task times.

## Answers to Exercises for PHB

**Answer the following questions by choosing the correct option:**

1. c. To ensure timely output and identify performance gaps
2. b. Fishbone Diagram
3. b. Standard Allowed Minutes
4. c. Workflow continuity and delivery schedule
5. b. MS Excel

**Answer the following questions briefly.**

1. Refer Unit 3.2: Quality, Performance, and Evaluation  
Topic: 3.2.2 Performance of Operators
2. Refer Unit 3.2: Quality, Performance, and Evaluation  
Topic: 3.2.1 Statistical Data and Product Specifications
3. Refer Unit 3.2: Quality, Performance, and Evaluation  
Topic: 3.2.3 Quantified Measures and Metrics
4. Refer Unit 3.1: Production Planning and Flow  
Topic: 3.1.7 Adherence of Operator Activities to Production Guidelines
5. Refer Unit 3.1: Production Planning and Flow  
Topic: 3.1.6 Suitable Measuring System for Operators Based on Assigned Goals and Targets





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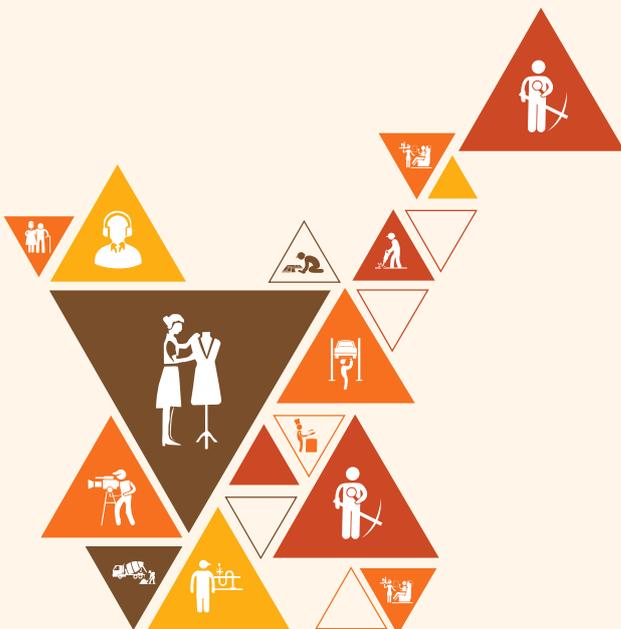


# 4. Research and Resolve Production Problems to Implement Better Production System

Unit 4.1 - Standards, Procedures, and Specifications

Unit 4.2 - Production Systems and Problem Management

Unit 4.3 - Productivity, Operations, and Efficiency



AMH/N2003

## Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Explain specifications for garment construction.
2. Explain quality systems and other processes practised in the organisation.
3. Explain the various types of problems associated with different kind of production system and how to report them to appropriate people.
4. Interpret safe working practices and organisational procedures.
5. Analyse labour utilisation standards, and cost analysis systems to develop efficiency and productivity.
6. Describe the importance of complying with written instructions.
7. Provide feedback regarding methods for improving utilisation of personnel, material, and utilities.
8. Interpret the organisation's tools, templates and processes for export marketing-related operations.
9. Interpret routing guidelines.
10. Explain the invoice in instructions and process.

## Unit 4.1: Standards, Procedures, and Specifications

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe specifications for garment construction.
2. Explain quality systems and related processes practiced in the organisation.
3. Interpret safe working practices and organisational procedures.
4. Describe the importance of complying with written instructions.
5. Identify the organisation's policies, procedures, guidelines, and standards.
6. Interpret the manufacturer's guidelines for machine operation.
7. Interpret required manufacturing standards and procedures.
8. Explain invoice instructions and associated processes.
9. Interpret routing guidelines for production flow.
10. Interpret the organisation's tools, templates, and export marketing processes.

### Resources to be Used

Whiteboard, markers, projector, sample garment specification sheets, quality control checklists, SOP handouts, production routing diagrams, invoice templates, documentation tools, export requirement guides

### Do

- Begin the session by introducing the importance of standards and procedures in garment manufacturing
- Explain garment specifications with examples from actual production sheets
- Discuss quality control systems and safe work practices in the production area
- Present organisational policies, SOPs, and production routing for clarity on workflow
- Show manufacturer guidelines and explain how invoice instructions are followed
- Demonstrate the use of templates and documentation tools for export compliance
- Engage participants with the activity to reinforce learning about documentation and standards

### Say

- Good morning everyone, today we will explore how standards and procedures ensure quality in garment production.
- Our goal is to understand how to follow specifications, SOPs, and proper documentation for efficient manufacturing.
- Understanding this will help you maintain quality, comply with regulations, and support smooth production operations.

## Ask

- Have you ever followed a recipe or instruction sheet at home to make something correctly?
- How do you check if a product you made matches the required quality standards?
- When you send an important document or package, how do you ensure it meets all requirements?

## Elaborate

- Detailed specifications guide operators to produce garments that meet size, colour, fabric, and design requirements consistently.
- Quality Control Systems and Safe Work Practices ensure products meet standards, while safety practices protect workers and reduce risks in production areas.
- SOPs and policies provide a structured workflow, defining roles, responsibilities, and step-by-step procedures for production.
- Manufacturers provide instructions for processing, handling, and delivering garments correctly, including invoice details for shipments.
- Standardized templates and documentation tools help in maintaining accurate records, ensuring compliance with legal and export regulations.

## Explain

- Adhering to garment specifications ensures consistent quality in production.
- Quality control and safety practices protect both the product and the workers.
- Organisational policies and SOPs provide clear guidance for production activities.
- Manufacturer guidelines and invoice instructions help avoid errors and maintain compliance.
- Proper documentation supports record-keeping and export compliance.
- Using templates and standardized tools increases efficiency and accuracy in operations.
- Following these standards and procedures reduces errors and improves overall production workflow.

## Demonstrate

Demonstrate filling out a sample garment specification sheet, showing how measurements, colour codes, and material types are recorded, and how QC checks are applied.

## Activity

1. **Activity Name:** Garment Documentation and QC Exercise (Topics: Garment Specifications, Quality Control Systems, Templates and Documentation Tools)
2. **Objective:** To practice recording specifications and performing basic quality checks using templates
3. **Type of activity:** Group
4. **Resources:** Sample garments, QC checklist, garment specification sheets, markers, sample templates

5. **Time Duration:** 30 minutes

6. **Instructions:**

- Divide participants into groups and provide each group with a sample garment.
- Ask them to record garment specifications such as size, fabric, and color on the provided sheet.
- Conduct a basic quality check using the QC checklist.
- Fill in the documentation templates for each garment, including production notes and QC results.
- Review and discuss the results with the class to ensure correct understanding.

7. **Outcome:** Participants will learn how to document garment specifications, perform basic quality checks, and complete standardized templates accurately.

## Notes for Facilitation

- Encourage active participation by asking trainees to share experiences from their own work or daily life.
- Use real samples and templates to make the session practical and hands-on.
- Stress the importance of accuracy in following specifications and documenting processes.
- Emphasize that quality control and safety practices protect both the product and the workforce.
- Highlight the role of SOPs and manufacturer guidelines in maintaining consistent production standards.
- Ensure participants understand the use of templates and documentation for compliance and record-keeping.

## Unit 4.2: Production Systems and Problem Management

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Analyse different types of production systems and examine their feasibility for specific product requirements.
2. Discuss various types of problems associated with different production systems and explain how to report them to the appropriate personnel.
3. Identify reporting procedures in case of faults in own or other processes.
4. Identify the appropriate authority to refer problems that exceed own responsibility.
5. Carry out process re-engineering and set production benchmarks.
6. Apply statistical methods and perform mathematical calculations to identify manufacturing process problems.

### Resources to be Used

Whiteboard, markers, projector, sample production flowcharts, problem log sheets, escalation matrices, benchmarking case examples, statistical charts, calculators, worksheets

### Do

- Begin the session by introducing different types of garment production systems
- Explain how production problems arise and methods to manage them efficiently
- Discuss fault reporting procedures and escalation protocols in the workplace
- Illustrate process re-engineering techniques and the importance of benchmarking for improvement
- Introduce the use of statistics to identify recurring production issues
- Engage participants in a practical activity to record and analyse production faults

### Say

- Good morning everyone, today we will learn how garment production systems function and how to manage problems effectively.
- Our goal is to understand production workflows, reporting mechanisms, and methods for process improvement.
- Knowing this will help you identify issues quickly, maintain smooth operations, and improve overall efficiency.

## Ask

- Have you ever faced a situation where a task did not go as planned? How did you handle it?
- How do you inform someone if you notice a problem at work or home?
- Have you ever compared your performance with others to see how to improve?

## Elaborate

- Production systems define how garments are manufactured, whether in batch, line, or modular setups. Each system is designed to optimize the workflow, balance workload, and enhance overall production efficiency. Understanding the type of production system helps in allocating resources effectively and meeting delivery timelines consistently.
- Effective problem management involves systematically identifying, analysing, and resolving issues in the production process. It ensures that delays, defects, and operational bottlenecks are minimized. By addressing problems promptly, production continuity is maintained, quality standards are upheld, and costs are controlled.
- Structured fault reporting ensures that all issues are accurately documented, classified, and escalated to the relevant authority. This systematic approach allows for timely intervention, accountability, and better tracking of recurring issues. Clear reporting also facilitates communication between operators, supervisors, and management.
- Re-engineering workflows and benchmarking against industry best practices help identify inefficiencies, streamline processes, and implement improvements. This approach reduces waste, optimizes resource usage, and enhances product quality. Continuous evaluation and adaptation ensure that production remains competitive and cost-effective.
- Statistical tools and data analysis provide objective insights into production performance. By monitoring patterns, trends, and deviations, recurring issues can be identified, root causes determined, and corrective actions implemented. This data-driven approach supports informed decision-making and continuous process improvement.

## Explain

- Garment production systems provide structured workflows for efficient manufacturing.
- Problems in production must be identified and managed systematically to prevent delays.
- Fault reporting and escalation procedures ensure accountability and timely resolution.
- Process re-engineering and benchmarking improve operations and reduce errors.
- Using statistics helps in recognizing patterns and root causes of recurring issues.
- Accurate documentation and analysis are essential for informed decision-making.
- Applying these methods enhances productivity, quality, and overall operational efficiency.

## Demonstrate

Demonstrate recording a sample production fault on a fault log sheet, then show how to escalate it using an escalation matrix and analyse trends using simple statistical charts.

## Activity

1. **Activity Name:** Production Fault Logging and Analysis (Topics: Fault Reporting, Statistics for Problem Identification)
2. **Objective:** To practice identifying, reporting, and analysing production problems using logs and basic statistics
3. **Type of activity:** Group
4. **Resources:** Sample garments with intentional defects, fault log sheets, markers, calculators, statistical charts
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into small groups and provide each group with a sample garment or production scenario.
  - Ask them to identify faults and record them on the log sheet.
  - Escalate the issues according to the provided escalation matrix.
  - Analyse the recorded faults using basic statistical tools such as tally marks or frequency charts.
  - Discuss the findings with the class and suggest improvements.
7. **Outcome:** Participants will learn how to document faults, escalate issues, and use statistics to identify problem trends for process improvement.

## Notes for Facilitation

- Encourage participants to actively share examples of production issues they have seen.
- Use real-life examples to make the session relatable and practical.
- Emphasize the importance of timely reporting and escalation in maintaining workflow.
- Highlight how statistical analysis can reveal recurring problems and guide improvements.
- Reinforce the role of benchmarking and process re-engineering in achieving operational excellence.
- Ensure participants understand how to use log sheets and statistical charts accurately for problem identification.

## Unit 4.3: Productivity, Operations, and Efficiency

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Analyse labour utilisation standards and cost analysis systems to enhance productivity.
2. Provide feedback on methods to improve utilisation of personnel, materials, and utilities.
3. Develop garment manufacturing methods in alignment with organisational goals.
4. Identify the sequence of operations in the garment manufacturing process.
5. Evaluate the method to adopt for machine operations.
6. Review the production process based on method and machine requirements.

### Resources to be Used

Whiteboard, markers, projector, sample production schedules, cost analysis sheets, workflow charts, utility usage data, sample garments, machines or machine images, checklists for reviewing production processes, calculators, worksheets

### Do

- Begin the session with an overview of labour utilisation and cost efficiency in garment manufacturing
- Explain how personnel, materials, and utilities are optimally used for production efficiency
- Discuss manufacturing methods aligned with organisational goals
- Illustrate the sequence of operations in garment manufacturing for smooth workflow
- Demonstrate machine operation methods and best practices
- Show how to review the production process systematically for efficiency improvements
- Engage participants in a practical activity to analyse labour and material utilisation

### Say

- Good morning everyone, today we will explore how productivity and efficiency are achieved in garment manufacturing.
- Our goal is to understand how labour, materials, and machines are utilised to meet organisational goals efficiently.
- Knowing this will help you optimise operations, reduce costs, and improve overall production quality.

## Ask

- Have you ever planned your daily tasks to finish on time and save effort?
- How do you make sure resources like electricity or materials are not wasted at home or work?
- Can you think of a process you follow that could be done more efficiently if planned differently?

## Elaborate

- Effective labour utilisation ensures that manpower is optimally assigned, reducing idle time and cost per unit.
- Proper planning of personnel, raw materials, and utilities ensures smooth production, minimises waste, and lowers operational costs.
- Selecting the right production methods supports organisational objectives like quality, productivity, and timely delivery.
- Correct sequencing ensures each operation flows logically to reduce delays, errors, and bottlenecks.
- Understanding machine operations and their optimal usage improves output, safety, and reduces maintenance issues.
- Regular review helps identify inefficiencies, streamline operations, and implement continuous improvements.

## Explain

- Labour utilisation affects production cost and efficiency directly.
- Effective use of personnel, materials, and utilities reduces wastage and improves workflow.
- Manufacturing methods must align with organisational goals for optimum output.
- Proper sequence of operations ensures smooth and timely production.
- Machine operation techniques influence productivity, safety, and quality.
- Reviewing the production process regularly helps identify and eliminate inefficiencies.
- Applying these principles collectively enhances operational efficiency and cost-effectiveness.

## Demonstrate

Demonstrate analysing a sample production schedule to identify underutilised labour, excessive material use, and opportunities to optimise machine operations.

## Activity

1. **Activity Name:** Production Efficiency Analysis (Topics: Labour Utilisation, Use of Personnel, Materials, Utilities)
2. **Objective:** To practice evaluating labour and material efficiency and identify improvement opportunities
3. **Type of activity:** Group
4. **Resources:** Sample production schedules, worksheets, calculators, flowcharts of operations, mock data for utilities and labour hours
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into groups and provide each group with sample production data.
  - Ask them to calculate labour utilisation, material consumption, and utility usage efficiency.
  - Identify bottlenecks or areas of underperformance.
  - Suggest recommendations to improve efficiency based on their calculations.
  - Present the findings to the class for discussion.
7. **Outcome:** Participants will understand how to measure productivity, analyse resource utilisation, and suggest improvements in a production setup.

## Notes for Facilitation

- Encourage active participation by having trainees share real-life examples of efficiency improvements.
- Use visual aids like charts and flow diagrams to explain complex operations.
- Emphasise the importance of aligning production methods with organisational goals.
- Highlight how proper sequence of operations reduces errors and improves workflow.
- Reinforce reviewing and analysing production processes regularly for continuous improvement.
- Guide participants in interpreting production data accurately to identify inefficiencies.

## Answers to Exercises for PHB

**Answer the following questions by choosing the correct option:**

1. c. Progressive bundle system
2. c. The designated supervisor or quality control officer
3. c. Removing non-value-adding activities
4. c. Evaluating workforce efficiency
5. c. Work-study analysis

**Answer the following questions briefly.**

1. Refer Unit 4.2: Production Systems and Problem Management  
Topic: 4.2.1 Garment Production Systems
2. Refer Unit 4.2: Production Systems and Problem Management  
Topic: 4.2.3 Fault Reporting and Escalation Procedures
3. Refer Unit 4.2: Production Systems and Problem Management  
Topic: 4.2.4 Process Re-engineering and Benchmarking
4. Refer Unit 4.3: Productivity, Operations, and Efficiency  
Topic: 4.3.1 Labour Utilisation and Cost Analysis
5. Refer Unit 4.3: Productivity, Operations, and Efficiency  
Topic: 4.3.5 Machine Operation Methods



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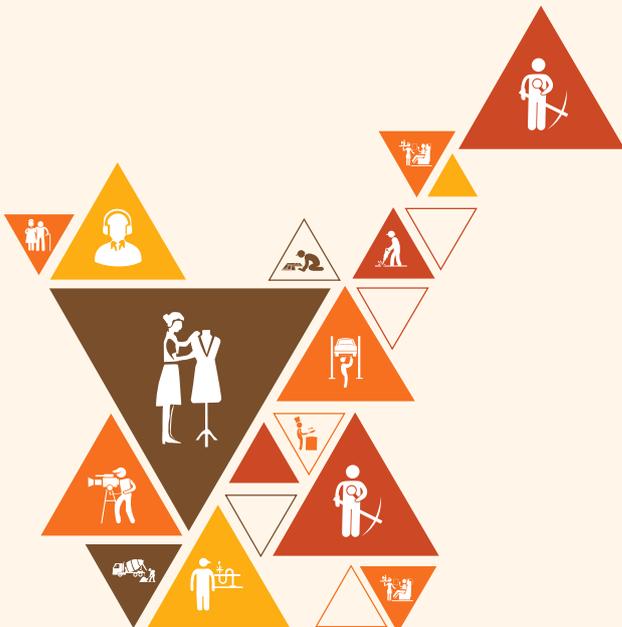


# 5. Manage Data, Forms and Instructions for Recording, Evaluating and Reporting Quality and Reliability Data

Unit 5.1 - Organisational Framework and Communication

Unit 5.2 - Documentation Methods and Reporting Systems

Unit 5.3 - Storage, Retrieval, and Maintenance Practices



AMH/N2004

## Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Describe the organisation's policies and procedures.
2. Explain the protocol to obtain more information on work-related tasks.
3. Identify the documentation and reporting formats of the organisation.
4. Interpret the documentation framework related to industrial engineering.
5. Interpret the protocol and format for reporting work-related risks/ problems.
6. Analyse the method of obtaining/ giving feedback related to performance.
7. Interpret the process for offering/ obtaining work related assistance.
8. Explain the record keeping method followed in the organisation.
9. Explain how to evaluate information collected during the inspection.
10. Supervise the process of documentation of various processes.
11. Document the Operation Bulletin created to estimate SAM with productivity at the costing stage.
12. Record special and new operations via video and build a database for operations with Sewing Data Analysis software.
13. Explain the importance of teamwork and harmonious working relationships.

## Unit 5.1: Organisational Framework and Communication

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe the organisation's policies and procedures.
2. Explain the protocol to obtain more information on work-related tasks.
3. List the documentation and reporting formats used by the organisation.
4. Interpret the documentation framework related to industrial engineering.
5. Interpret the protocol and format for reporting work-related risks or problems.
6. Analyse the method of obtaining and providing feedback related to performance.
7. Interpret the process for offering or obtaining work-related assistance.
8. Explain the importance of teamwork and harmonious working relationships.

### Resources to be Used

Whiteboard, markers, projector, sample organisational policies, procedure manuals, reporting templates, communication tools, feedback forms, team-building activity materials, sample industrial engineering documents, handouts, worksheets

### Do

- Begin the session with an overview of organisational frameworks and their importance.
- Explain communication protocols and how they support smooth operations.
- Discuss documentation and reporting requirements for different work areas.
- Illustrate effective work-related communication and feedback mechanisms.
- Engage participants in activities that demonstrate teamwork and collaboration.
- Show examples of industrial engineering documentation and its relevance.
- Conduct an activity to practice documentation and communication skills in a workplace context.

### Say

- Good morning everyone, today we will explore how organisational frameworks and communication shape effective workplaces.
- Our goal is to understand documentation, reporting, and communication methods that help in smooth and efficient operations.
- Knowing this will make it easier for you to work as a team, communicate effectively, and maintain proper records.

## Ask

- Have you ever experienced miscommunication at work or in daily life that caused confusion?
- How do you keep track of important information in your daily tasks?
- Can you think of an example where teamwork improved a task's outcome?

## Elaborate

- Organisational Policies, Procedures, and Communication Protocols provide rules and structured methods for workplace behaviour, decision-making, and communication to maintain order and consistency.
- Standardised documentation ensures accurate record-keeping, traceability, and accountability for tasks and processes.
- Effective communication and timely feedback enhance coordination, reduce errors, and promote transparency.
- Collaboration and mutual respect among employees improve productivity, morale, and workplace harmony.
- Proper documentation of time studies, process layouts, and reports ensures efficiency, compliance, and informed decision-making.

## Explain

- Organisational policies guide employee behaviour and establish consistency in operations.
- Procedures and protocols provide step-by-step instructions for tasks and communication.
- Accurate documentation and reporting frameworks ensure accountability and traceability.
- Effective work-related communication and feedback improve clarity, coordination, and problem-solving.
- Teamwork promotes efficiency, reduces conflict, and creates a harmonious workplace.
- Industrial engineering documentation supports process analysis, decision-making, and continuous improvement.
- Understanding and applying these practices helps maintain professional standards and operational efficiency.

## Demonstrate

Demonstrate filling out a sample reporting template for a production task, showing correct documentation and feedback entry.

## Activity

1. **Activity Name:** Workplace Communication and Documentation Drill (Topics: Documentation and Reporting Framework, Work-Related Communication)
2. **Objective:** To practice proper documentation and communication in a workplace context
3. **Type of activity:** Group
4. **Resources:** Sample reporting templates, worksheets, feedback forms, pens, markers
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into small groups.
  - Provide each group with a scenario requiring task reporting and feedback communication.
  - Ask participants to complete the reporting templates accurately and provide constructive feedback.
  - Review the completed templates and discuss improvements.
7. **Outcome:** Participants will learn how to document tasks effectively and communicate feedback clearly within a team.

## Notes for Facilitation

- Encourage participants to share personal experiences of communication challenges.
- Reinforce the importance of following organisational procedures for consistency.
- Highlight the role of proper documentation in accountability and decision-making.
- Emphasise teamwork as a key factor in achieving workplace efficiency.
- Guide participants in using communication tools effectively for clear information sharing.

## Unit 5.2: Documentation Methods and Reporting Systems

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the record-keeping methods followed in the organisation.
2. Monitor the documentation process for various organisational functions.
3. Document the operation bulletin to estimate SAM with productivity at the costing stage.
4. Demonstrate the process of recording special or new operations using video and sewing data analysis software.
5. Explain how to evaluate information collected during inspections.
6. Demonstrate report writing methods and techniques.
7. Ensure all reports and documents are prepared as per the specified format.
8. Maintain and store all reports in a safe and secure condition as per organisational norms.
9. Maintain confidentiality of reports, data, and analysis where applicable.
10. Document the operation bulletin as per the organisation's procedure and protocol.
11. Record relevant information using appropriate data management software effectively.
12. Check and validate the operation bulletin and SAMs on the production floor to regulate unnecessary operations.

### Resources to be Used

Laptop, projector, whiteboard, markers, printed templates of Operation Bulletins, sample SAM sheets, documentation manuals, pen, notepad, data management software, internet access, USB drives, charts, graphs, report formatting guides, case files, stationery, digital tools tutorials.

### Say

- Good morning everyone! Today we are going to explore how proper documentation and reporting systems play a critical role in managing operations efficiently.
- By the end of this session, you will be able to understand organisational record-keeping, monitoring documentation processes, and using digital tools for accurate reporting.
- Understanding this topic is important because accurate documentation ensures traceability, improves decision-making, and maintains compliance in production operations.

**Do**

- Introduce the topic using a real-life example of production documentation.
- Show examples of completed Operation Bulletins (OB) and SAM sheets.
- Demonstrate how to record new operations using software tools.
- Discuss report formatting, storage methods, and confidentiality requirements.
- Guide participants through hands-on exercises for evaluating data and preparing reports.

**Ask**

- Have you ever maintained records or logs in your personal or academic life? How did it help you?
- How do you keep track of your tasks or assignments at home or school?
- Can you think of a situation where missing a record or document caused confusion or delay?

**Elaborate**

- **Organisational Record-Keeping and Documentation Practices:** Explains the importance of maintaining accurate and systematic records for all operations. Proper record-keeping ensures traceability and accountability in production.
- **Monitoring and Managing the Documentation Process:** Focuses on tracking documentation workflows to ensure timely updates, completeness, and compliance with organisational policies.
- **Operation Bulletin (OB) and SAM at Costing Stage:** Demonstrates how OBs and SAM calculations are recorded during costing to plan production efficiency and labour allocation.
- **Recording of Special or New Operations Using Technology:** Highlights the use of software and digital tools to document unique operations, ensuring standardisation and easy reference.
- **Data Evaluation and Report Writing:** Guides participants in analysing production data, drawing meaningful conclusions, and preparing structured reports.
- **Report Formatting, Storage, and Confidentiality:** Explains the standards for formatting reports, securely storing records, and maintaining confidentiality of sensitive information.
- **Operation Bulletins and SAM:** Details the practical use of OBs and SAM for tracking and evaluating production processes.
- **Data Management Software and Digital Tools:** Introduces digital solutions for efficient storage, retrieval, and analysis of production data.

**Explain**

- Accurate documentation ensures all operations are traceable and auditable.
- Monitoring documentation processes helps maintain compliance and operational efficiency.
- Operation Bulletins and SAM sheets are essential for planning production and controlling costs.
- Using technology improves the accuracy, accessibility, and security of records.
- Evaluating data and writing reports supports informed decision-making.
- Proper report formatting and storage maintain organisational standards and confidentiality.
- Digital tools streamline documentation, reduce errors, and save time.

## Demonstrate

Show how to fill an Operation Bulletin for a new garment operation using a template, including SAM calculations and recording operator activities, using either printed sheets or software.

## Activity

1. **Activity Name:** Documentation Exercise – OB and SAM Recording
2. **Objective:** To practice accurate recording of operations and calculating SAM values.
3. **Type of Activity:** Group
4. **Resources:** OB templates, sample SAM data, pens, notebooks, laptops with spreadsheet software.
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into groups of 4–5.
  - Each group receives a sample production scenario.
  - Record the sequence of operations on the OB template.
  - Calculate SAM for each operation.
  - Compile a brief report summarising the operations and SAM values.
  - Share results with the class for discussion.
7. **Outcome:** Participants will gain hands-on experience in creating OBs, calculating SAM, and preparing structured reports.

## Notes for Facilitation

- Encourage participants to actively participate and ask questions during exercises.
- Ensure clarity in demonstrating both manual and digital documentation methods.
- Emphasise the importance of confidentiality when handling production data.
- Provide examples of common documentation errors and how to avoid them.
- Highlight practical applications of OB and SAM in everyday production planning.
- Reinforce the benefits of using digital tools for efficient data management.

## Unit 5.3: Storage, Retrieval, and Maintenance Practices

### Unit Objectives

By the end of this unit, the participants will be able to:

1. List the guidelines for the storage of records.
2. Maintain documents such as standard operating procedures according to organisation norms.
3. Store the records, SOPs, and analysis documents for easy retrieval when required.
4. Store the information following organisational norms.

### Resources to be Used

Filing cabinets, folders, binders, label makers, pens, notebooks, sample SOP documents, storage guidelines manuals, computer, data management software, USB drives, projector, whiteboard, markers, charts, document templates, stationery.

### Say

- Good morning everyone! Today we will learn how to store, retrieve, and maintain records and SOPs efficiently to support smooth operations.
- By the end of this session, you will be able to manage documentation storage, ensure easy retrieval, and maintain SOPs according to organisational norms.
- Understanding this topic is crucial because proper storage and maintenance prevent loss of information and ensure quick access to records for decision-making.

### Do

- Introduce the topic by explaining the importance of organised storage for production records and SOPs.
- Show examples of filing methods and digital storage practices.
- Demonstrate labelling, categorising, and storing documents for easy retrieval.
- Discuss maintenance of SOPs and updates in records to reflect current standards.
- Guide participants through an exercise on storing and retrieving sample records.

### Ask

- Have you ever mislaid important documents at home or school? How did it affect you?
- How do you organise your personal notes or files to find them easily when needed?
- Why do you think keeping SOPs up-to-date is important in a workplace?

## Elaborate

- **Guidelines for Storage of Records:** Covers organisational practices for safe, systematic storage of production and operational records to ensure accessibility.
- **Maintenance of Standard Operating Procedures (SOPs):** Explains how SOPs should be regularly reviewed, updated, and maintained to reflect current processes.
- **Storing Records, SOPs, and Analysis Documents for Retrieval:** Focuses on methods for categorising and indexing documents to allow quick retrieval when required.
- **Organisational Norms for Information Storage:** Highlights policies and standards governing storage practices, including security, confidentiality, and compliance.

## Explain

- Proper storage of records ensures quick access and protects against loss or damage.
- SOPs must be maintained and updated regularly to ensure accuracy and compliance.
- Organised filing systems, both physical and digital, enhance operational efficiency.
- Categorisation and indexing simplify document retrieval and reduce time wastage.
- Adhering to organisational norms ensures consistency and standardisation in record management.
- Regular audits and reviews help in maintaining the reliability of stored information.
- Efficient storage and retrieval practices support better decision-making and operational control.

## Demonstrate

Show how to label, file, and index a set of sample SOPs and records in both physical folders and digital storage, then retrieve a specific document using the indexing system.

## Activity

1. **Activity Name:** Document Storage and Retrieval Exercise
2. **Objective:** To practice organised storage and quick retrieval of records and SOPs.
3. **Type of Activity:** Group
4. **Resources:** Sample SOPs, folders, binders, label makers, USB drives, indexing templates, pens, notebooks, laptops.
5. **Time Duration:** 25 minutes
6. **Instructions:**
  - Divide participants into small groups of 3–4.
  - Each group receives a set of sample documents and SOPs.
  - Label, categorise, and file the documents in folders or binders.
  - Create an index for the stored documents.

- Ask groups to retrieve a specific document using their index.
  - Review the process and discuss challenges and improvements.
7. **Outcome:** Participants will learn practical methods for storing, indexing, and retrieving records efficiently.

## Notes for Facilitation

- Encourage participants to maintain neat and organised filing practices.
- Ensure clarity in demonstrating both physical and digital storage methods.
- Highlight the importance of updating SOPs to reflect current processes.
- Emphasise adherence to organisational norms and confidentiality rules.
- Provide examples of common mistakes in document storage and retrieval and ways to avoid them.
- Reinforce the benefits of indexing and categorising for easy access and time-saving.

## Answers to Exercises for PHB

**Answer the following questions by choosing the correct option:**

1. b. To estimate time required for an operation
2. c. Sewing Machine Calibration
3. c. Use of outdated documents
4. c. Assigning unique identifiers for easy retrieval
5. c. Update OB to reflect efficiency

**Answer the following questions briefly.**

1. Refer Unit 5.2: Documentation Methods and Reporting Systems  
Topic: 5.2.3 Operation Bulletin (OB) and SAM at Costing Stage / 5.2.7 Operation Bulletins and SAM
2. Refer Unit 5.2: Documentation Methods and Reporting Systems  
Topic: 5.2.2 Monitoring and Managing the Documentation Process
3. Refer Unit 5.3: Storage, Retrieval, and Maintenance Practices  
Topic: 5.3.2 Maintenance of Standard Operating Procedures (SOPs) / 5.3.3 Storing Records, SOPs, and Analysis Documents for Retrieval
4. Refer Unit 5.2: Documentation Methods and Reporting Systems  
Topic: 5.2.2 Monitoring and Managing the Documentation Process
5. Refer Unit 5.3: Storage, Retrieval, and Maintenance Practices  
Topic: 5.3.4 Organisational Norms for Information Storage



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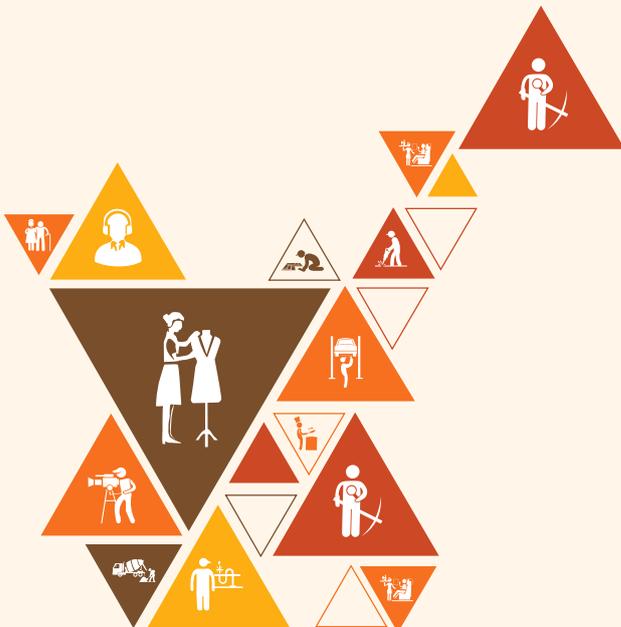


# 6. Adhere to Industry, Regulatory, and Organizational Standards and Embrace Environmentally Sustainable Practices

Unit 6.1 - Ethics, Values and Workplace Conduct

Unit 6.2 - Regulations, Responsibilities and Reporting

Unit 6.3 - Sustainability, Resource Efficiency and Waste Management



AMH/N0621

## Key Learning Outcomes



By the end of this module, the participants will be able to:

1. State the importance of having an ethical and value based approach to governance.
2. State benefits to self and the organisation due to practice of values and ethics.
3. State the importance of punctuality and attendance.
4. State customer specific requirements mandated as a part of the work process.
5. State country/customer specific regulations for the apparel sector and their importance.
6. State reporting procedure of the organisation in case of deviations.
7. State limits of personal responsibility.
8. Report any possible deviation to regulatory requirements.
9. Clarify doubts on policies and procedures, from the supervisor or other authorized personnel.
10. Explain importance of greening solutions, procedures, policies, legislation and regulations.
11. Discuss the significance of specified usage of resources at work area.
12. Evaluate the different ways to conserve energy in Apparel sector.

## Unit 6.1: Ethics, Values and Workplace Conduct

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the importance of an ethical and value-based approach to governance.
2. Describe the personal and organisational benefits of practising values and ethics.
3. Explain the significance of punctuality and attendance at the workplace.
4. Discuss the limits of personal responsibility in a professional environment.
5. Clarify doubts regarding workplace policies and procedures from supervisors or authorised personnel.
6. Follow organisational policies and procedures within the limits of one's authority.
7. Carry out work functions in line with organisational standards, including greening solutions, procedures, policies, and regulations.
8. Provide support to supervisors and team members in maintaining organisational considerations.

### Resources to be Used

Whiteboard, markers, projector, presentation slides on workplace ethics, printed organisational policies, workplace code of conduct booklets, case examples (non-sensitive), handouts on greening practices, pens, notebooks, flip charts, sticky notes.

### Say

- Good morning everyone! Today we will explore ethics, values, and proper workplace conduct, which are essential for a professional and respectful work environment.
- By the end of this session, you will be able to identify ethical practices, follow organisational standards, and take personal responsibility in the workplace.
- Understanding ethics and values is crucial because it helps maintain trust, teamwork, and sustainability in your organisation.

### Do

- Begin with a discussion on what ethics and values mean in everyday life and the workplace.
- Explain the importance of personal responsibility in maintaining workplace discipline and standards.
- Share examples of good and bad workplace conduct.
- Present organisational policies, communication structures, and authority hierarchy.
- Highlight greening practices and sustainability standards relevant to the workplace.

## Ask

- Can you think of a situation at work or school where someone did the right thing even when it was difficult?
- How do you ensure that you respect rules and responsibilities in daily life?
- Why is it important to follow environmental or greening practices at your workplace?

## Elaborate

- **Ethics and Values in the Workplace:** Covers principles of honesty, integrity, fairness, and respect that guide workplace behaviour.
- **Workplace Conduct and Personal Responsibility:** Explains expected behaviour, punctuality, accountability, and professionalism in daily tasks.
- **Organisational Policies, Communication, and Authority:** Discusses company rules, reporting structures, proper communication channels, and respecting hierarchy.
- **Organisational Standards and Greening Practices:** Highlights workplace standards, environmental responsibilities, and initiatives to reduce waste and promote sustainability.

## Explain

- Workplace ethics and values form the foundation for professional behaviour and decision-making.
- Personal responsibility ensures tasks are completed reliably and ethically.
- Following organisational policies and respecting authority promotes a harmonious work environment.
- Clear communication and adherence to rules reduce conflicts and misunderstandings.
- Greening practices and environmental standards support sustainable operations.
- Ethical and responsible conduct strengthens team collaboration and organisational reputation.
- Maintaining high standards ensures compliance and continuous improvement in workplace culture.

## Demonstrate

Demonstrate proper workplace conduct by role-playing scenarios such as reporting issues, following hierarchical communication, and showing environmentally responsible behaviour.

## Activity

1. **Activity**
2. **Activity Name:** Workplace Ethics Role-Play
3. **Objective:** To practice ethical decision-making, proper conduct, and adherence to organisational standards.
4. **Type of Activity:** Group
5. **Resources:** Handouts on workplace ethics, scenario cards, flip charts, markers, notebooks.

6. **Time Duration:** 30 minutes

7. **Instructions:**

- Divide participants into small groups of 3–4.
- Each group receives a scenario related to workplace ethics or conduct.
- Groups discuss and act out how to handle the situation following ethical guidelines and organisational policies.
- Other participants observe and provide feedback on decisions and behaviour.
- Discuss learning points as a class.

8. **Outcome:** Participants will be able to recognise ethical dilemmas, make responsible decisions, and demonstrate appropriate workplace conduct.

## Notes for Facilitation

- Encourage active participation and discussion during role-plays.
- Emphasise that ethics and values are applied in both small and large decisions.
- Highlight the importance of accountability and personal responsibility in the workplace.
- Provide examples of organisational policies and greening practices to relate theory to practice.
- Ensure participants understand communication hierarchies and proper reporting procedures.
- Reinforce the link between ethical behaviour, team harmony, and organisational reputation.

## Unit 6.2: Regulations, Responsibilities and Reporting

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe customer-specific requirements that are part of the work process.
2. Explain country or customer-specific regulations applicable to the apparel sector and their significance.
3. Interpret legal, regulatory and ethical requirements specific to the apparel industry.
4. Identify the procedures to follow when legal, regulatory or ethical requirements are not met.
5. Report possible deviations from regulatory requirements to the concerned authority.
6. State the internal reporting procedure for handling deviations in the organisation.

### Resources to be Used

Whiteboard, markers, projector, presentation slides on industry regulations, printed customer requirement documents, handouts on ethical standards, company SOPs, reporting templates, pens, notebooks, flip charts, sticky notes.

### Say

- Good morning everyone! Today we will explore regulations, responsibilities, and reporting procedures that are crucial in the apparel industry.
- By the end of this session, you will be able to understand customer and industry requirements, handle deviations, and follow proper reporting procedures.
- Knowing regulations and reporting responsibilities is important because it ensures compliance, maintains quality standards, and protects the organisation's reputation.

### Do

- Begin by explaining customer-specific requirements and why adhering to them is critical.
- Discuss country-specific and industry regulations relevant to apparel manufacturing.
- Explain ethical standards in the industry and their role in decision-making.
- Demonstrate procedures for handling deviations from regulations.
- Show internal and external reporting frameworks and formats.

### Ask

- Have you ever followed specific rules at work or school to meet someone's expectations?
- Why do you think companies need to follow laws and industry standards strictly?
- Can you think of a situation where reporting a problem promptly can prevent bigger issues?

## Elaborate

- **Customer-Specific Requirements:** Outlines expectations from clients, including quality, safety, and compliance standards.
- **Country-Specific and Industry Regulations:** Covers legal and regulatory frameworks applicable to apparel manufacturing in different regions.
- **Ethical Standards in the Apparel Industry:** Focuses on ethical practices, responsible sourcing, and fair treatment of workers.
- **Handling Deviations from Regulations:** Explains how to identify, manage, and correct deviations while minimizing risk.
- **Reporting of Deviations to Authorities:** Details steps for informing regulatory bodies or stakeholders about non-compliance.
- **Internal Reporting Procedures:** Provides internal communication protocols for documenting and escalating deviations within the organisation.

## Explain

- Compliance with customer-specific requirements ensures client satisfaction and repeat business.
- Adhering to country-specific and industry regulations prevents legal issues and penalties.
- Ethical standards guide responsible business practices and enhance brand reputation.
- Proper handling of deviations helps maintain quality and operational continuity.
- Reporting deviations to authorities ensures transparency and accountability.
- Internal reporting procedures promote timely resolution of issues and prevent escalation.
- Understanding responsibilities and reporting frameworks strengthens organisational governance.

## Demonstrate

Demonstrate filling out a deviation report using a sample scenario, showing how to record details, escalate internally, and notify relevant authorities according to company procedures.

## Activity

1. **Activity Name:** Deviation Reporting Exercise
2. **Objective:** To practice identifying deviations and completing internal and external reporting accurately.
3. **Type of Activity:** Group
4. **Resources:** Sample deviation scenarios, reporting templates, pens, notebooks, flip charts.
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into small groups.
  - Provide each group with a scenario involving a deviation from regulations or customer requirements.
  - Groups identify the deviation, document it, and prepare an internal report using provided templates.

- Groups then discuss how the deviation would be escalated to authorities if required.
  - Share and review each group's approach and discuss improvements.
7. **Outcome:** Participants will be able to recognise deviations, follow internal reporting protocols, and understand when and how to notify authorities.

## Notes for Facilitation

- Encourage participants to relate scenarios to real-life workplace situations.
- Stress the importance of accurate and timely reporting for compliance and accountability.
- Highlight differences between internal and external reporting procedures.
- Emphasise ethical standards and their role in decision-making.
- Provide examples of common deviations in the apparel industry to make learning practical.
- Reinforce the connection between regulations, responsibilities, and organisational reputation.

## Unit 6.3: Sustainability, Resource Efficiency and Waste Management

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Discuss the importance of greening solutions, relevant policies, and environmental regulations.
2. Evaluate the importance of resource usage and methods for energy conservation in the apparel sector.
3. Make conscious and sustainable decisions to promote an effective and green workplace.
4. Discuss the need to switch off machines when not in use for energy efficiency.
5. Demonstrate the correct method of handling and storing waste materials such as paper, sketches, colouring tools, and electronic waste.
6. Demonstrate the process of segregation of waste according to type and disposal guidelines.

### Resources to be Used

Whiteboard, markers, projector, presentation slides on sustainability and environmental regulations, printed company environmental policies, sample charts for resource usage and energy conservation, waste segregation bins or visuals, notebooks, pens, flip charts, sticky notes.

### Say

- Good morning everyone! Today we will discuss sustainability, resource efficiency, and waste management in the apparel industry.
- By the end of this session, you will be able to understand greening solutions, make sustainable workplace decisions, and manage resources and waste effectively.
- Understanding sustainability and resource efficiency is essential to reduce environmental impact, save costs, and meet regulatory and client expectations.

### Do

- Begin by explaining the importance of greening solutions and environmental regulations.
- Discuss methods for conserving energy and optimising resource usage in production.
- Explain sustainable decision-making in the workplace to minimise environmental impact.
- Demonstrate proper waste segregation and disposal techniques.
- Show examples of resource-efficient practices in apparel manufacturing.

## Ask

- Have you ever seen someone separate waste at home or school? Why was it done?
- Can you think of ways to save electricity or water in daily activities?
- Why is it important for companies to follow environmental rules and policies?

## Elaborate

- Importance of Greening Solutions, Policies, and Environmental Regulations focuses on reducing environmental impact through regulations, company policies, and eco-friendly practices in production.
- Resource Usage and Energy Conservation Methods covers efficient use of water, electricity, raw materials, and methods to optimise energy consumption.
- Sustainable Workplace Decisions involves making choices that reduce waste, encourage recycling, and promote long-term environmental benefits.
- Waste Segregation and Disposal explains how to separate different types of waste, proper disposal methods, and compliance with local regulations.

## Explain

- Greening solutions and environmental policies help organisations reduce their ecological footprint.
- Resource-efficient practices save costs and support sustainable production.
- Energy conservation methods ensure optimal utilisation of utilities in the workplace.
- Sustainable workplace decisions promote responsible behaviour and long-term benefits.
- Waste segregation and proper disposal prevent pollution and ensure regulatory compliance.
- Employees play a crucial role in implementing sustainability practices.
- Understanding environmental regulations and policies safeguards the company's reputation and operations.

## Demonstrate

Demonstrate proper waste segregation using sample waste items or visuals, showing how to separate biodegradable, recyclable, and hazardous waste for correct disposal.

## Activity

1. **Activity Name:** Resource Efficiency and Waste Segregation Exercise
2. **Objective:** To practice identifying resource-saving opportunities and correctly segregating waste.
3. **Type of Activity:** Group
4. **Resources:** Sample waste items, coloured bins or charts, checklist for resource usage, pens, notebooks.
5. **Time Duration:** 30 minutes

**6. Instructions:**

- Divide participants into small groups.
- Provide each group with sample waste items and a checklist for resource usage in a hypothetical production area.
- Groups identify ways to reduce energy and resource consumption and segregate waste correctly into designated categories.
- Groups present their decisions and reasoning to the class.
- Facilitator provides feedback and highlights best practices.

7. **Outcome:** Participants will understand sustainable resource management, energy conservation, and correct waste segregation practices.

## Notes for Facilitation

- Encourage participants to connect sustainability practices with their daily life experiences.
- Highlight cost benefits along with environmental advantages of resource efficiency.
- Demonstrate real examples from the apparel industry for better understanding.
- Stress the importance of complying with environmental regulations and company policies.
- Reinforce the role of individual actions in achieving organisational sustainability goals.
- Ensure participants understand the differences between various types of waste and disposal methods.

## Answers to Exercises for PHB

**Answer the following questions by choosing the correct option:**

1. c. Misrepresenting completed work
2. b. Segregate and dispose of waste as per guidelines
3. c. To minimise environmental impact
4. b. Discriminating based on gender
5. c. Ask a supervisor or authorised person for clarification

**Answer the following questions briefly.**

1. Refer Unit 6.1: Ethics, Values and Workplace Conduct  
Topic: 6.1.1 Ethics and Values in the Workplace
2. Refer Unit 6.3: Sustainability, Resource Efficiency and Waste Management  
Topic: 6.3.1 Importance of Greening Solutions, Policies, and Environmental Regulations
3. Refer Unit 6.2: Regulations, Responsibilities and Reporting  
Topic: 6.2.1 Customer-Specific Requirements and 6.2.2 Country-Specific and Industry Regulations
4. Refer Unit 6.2: Regulations, Responsibilities and Reporting  
Topic: 6.2.4 Handling Deviations from Regulations and 6.2.5 Reporting of Deviations to Authorities
5. Refer Unit 6.3: Sustainability, Resource Efficiency and Waste Management  
Topic: 6.3.4 Waste Segregation and Disposal



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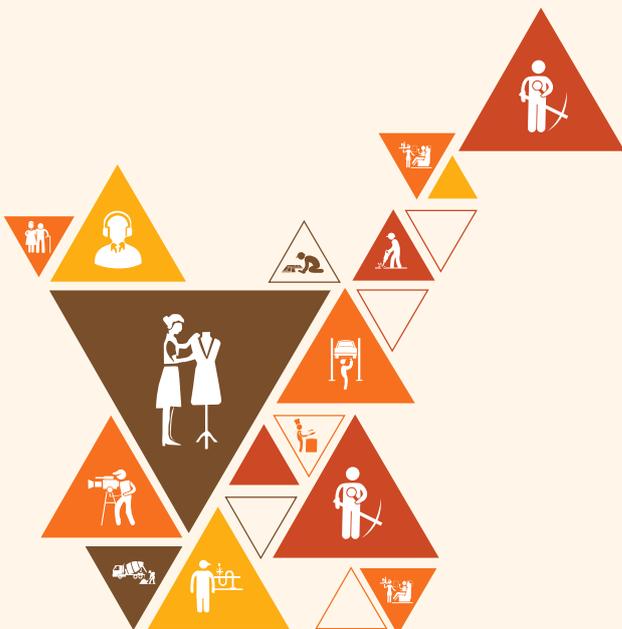


# 7. Maintaining a Healthy, Safe and Secure Working Environment in the Organisation PWD & Gender Sensitivity Requirements

Unit 7.1 - Workplace Safety Protocols and Compliance

Unit 7.2 - Risk Identification and Response

Unit 7.3 - Inclusivity and Environment-Friendly Practices



AMH/N1605

## Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Explain health and safety related practices applicable at the workplace.
2. Explain importance of complying with health, safety, gender and PWD related instructions applicable to workplace
3. Explain gender equality in apparel industry.
4. Describe the layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points.
5. Follow environment management system related procedures.
6. Comply with health and safety related instructions applicable in the workplace.
7. List potential hazards, risks and threats based on the nature of operations.
8. List potential risks due to own actions and methods to minimise these.
9. Report hazards and potential risks/ threats to supervisors or other authorised personnel.
10. Seek clarifications, from supervisors or other authorised personnel in case of perceived risks.
11. State reporting protocol and documentation required.
12. Describe occupational health and safety risks and methods.
13. State organisational procedures for safe handling of equipment and machine operations.
14. Explain various personal protective equipment and their method of use.
15. Report unsafe equipment and other dangerous occurrences.
16. List details of personnel trained in first aid, fire-fighting and emergency response.
17. Describe actions to take in the event of a mock drill/ evacuation procedures or actual accident, emergency or fire.
18. Participate in mock drills/ evacuation procedures organised at the workplace.
19. Undertake first aid, fire-fighting and emergency response training.
20. Report any service malfunctions that cannot be rectified.

## Unit 7.1: Workplace Safety Protocols and Compliance

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe workplace health and safety practices and their significance in maintaining a secure environment.
2. Explain the importance of complying with health, safety, gender equality, and disability-related workplace protocols.
3. Examine occupational risks and describe methods to manage health and safety hazards effectively.
4. Explain safe handling and operation procedures for equipment and machinery as per organisational guidelines.
5. Identify personal protective equipment and explain its correct use according to safety standards.
6. Describe the workplace layout, including emergency exits, escape routes, assembly points, and emergency equipment.
7. Report hazards, unsafe equipment, dangerous occurrences, and service malfunctions to authorised personnel.
8. Follow emergency instructions during fire, accidents, or drills and participate in evacuation procedures.
9. Describe appropriate responses during mock drills, evacuation exercises, and actual emergency situations.
10. State reporting protocols, required documentation, and the importance of seeking clarification when needed.

### Resources to be Used

Whiteboard, markers, projector, presentation slides on workplace safety, sample PPE (helmets, gloves, masks, goggles), safety posters, floor layout diagrams, emergency evacuation maps, hazard signage examples, notebooks, pens, first aid kit, flip charts, sticky notes.

### Say

- Good morning everyone! Today we are going to learn about workplace safety protocols and compliance, which are crucial in every manufacturing environment.
- By the end of this session, you will understand health and safety procedures, safe equipment handling, emergency preparedness, and compliance with gender and disability regulations.
- Knowing and following safety protocols ensures a secure working environment, prevents accidents, and promotes employee well-being.

**Do**

- Explain the importance of health and safety protocols in the workplace.
- Discuss gender and disability compliance and how to ensure inclusivity.
- Identify common occupational hazards and methods for risk assessment and management.
- Demonstrate proper handling of equipment and the use of PPE.
- Explain workplace layout considerations, emergency preparedness, and evacuation procedures.

**Ask**

- Have you ever seen someone get injured at work or school? How could it have been prevented?
- Can you think of any equipment that requires special handling to stay safe?
- How do you think emergency plans or evacuation routes help save lives?

**Elaborate**

- **Health and Safety Protocols in the Workplace:** Focuses on implementing standards and guidelines to prevent injuries and ensure a safe working environment.
- **Gender and Disability Compliance at the Workplace:** Emphasises creating an inclusive workspace and following regulations that support equality and accessibility.
- **Occupational Hazards and Risk Management:** Covers identifying potential hazards, assessing risks, and taking preventive actions to protect employees.
- **Safe Equipment Handling and Use of PPE:** Demonstrates correct use of machinery and personal protective equipment to reduce workplace accidents.
- **Workplace Layout, Emergency Preparedness, and Evacuation:** Explains designing safe workspaces, preparing for emergencies, and conducting effective evacuation drills.

**Explain**

- Health and safety protocols protect employees and reduce workplace incidents.
- Compliance with gender and disability regulations ensures an inclusive and fair working environment.
- Identifying occupational hazards and managing risks prevent injuries and maintain productivity.
- Proper handling of equipment and consistent use of PPE are critical for safety.
- Effective workplace layout and emergency preparedness reduce accident impact and improve response time.
- Employees must be aware of evacuation routes and emergency procedures.
- Safety awareness is a shared responsibility that strengthens organisational culture.

## Demonstrate

Demonstrate the correct use of PPE and safe handling of common workplace equipment, including gloves, helmets, goggles, and masks.

## Activity

1. **Activity Name:** Workplace Safety Drill and PPE Practice
2. **Objective:** To practice correct use of PPE and demonstrate awareness of emergency procedures.
3. **Type of Activity:** Group
4. **Resources:** Sample PPE items, floor layout diagrams, emergency exit maps, hazard signage examples, notebooks, pens.
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into small groups.
  - Each group practices wearing PPE correctly and identifies its usage for different hazards.
  - Conduct a mock evacuation using floor layout diagrams and exit maps.
  - Groups present their learnings and discuss any potential safety improvements.
  - Facilitator provides feedback and highlights best practices.
7. **Outcome:** Participants will understand proper PPE usage, safe equipment handling, and emergency preparedness in the workplace.

## Notes for Facilitation

- Encourage participants to relate safety protocols to their daily experiences in manufacturing environments.
- Emphasise real-life examples of accidents and preventive measures.
- Demonstrate hands-on practice with PPE for better understanding.
- Highlight the importance of inclusivity for gender and disability compliance.
- Reinforce understanding of workplace hazards and risk management.
- Ensure all participants understand emergency evacuation procedures and workplace layout considerations.

## Unit 7.2: Risk Identification and Response

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Identify potential hazards, risks, and threats based on operations and personal actions, and explain methods to minimise them.
2. Detect and rectify basic equipment malfunctions and monitor work processes for signs of risk or danger.
3. Describe possible workplace accidents and emergencies, and outline appropriate response actions.
4. Discuss the maintenance of a hazard-free workspace through regular inspections, walk-throughs, and proactive safety behaviour.

### Resources to be Used

Whiteboard, markers, projector, presentation slides on workplace hazards, sample equipment with demonstration capability, PPE (helmets, gloves, goggles, masks), safety posters, incident report templates, floor layout diagrams, emergency exit maps, notebooks, pens, hazard signage examples, flip charts, sticky notes.

### Say

- Good morning everyone! Today we will focus on identifying hazards, managing risks, and ensuring a safe and secure workplace.
- By the end of this session, you will understand how to detect hazards, monitor equipment risks, respond to emergencies, and maintain a hazard-free workspace.
- Understanding workplace hazards and risks helps prevent accidents, protect colleagues, and maintain a productive work environment.

### Do

- Explain different types of workplace hazards, risks, and potential threats.
- Discuss equipment malfunctions and how to monitor and mitigate associated risks.
- Demonstrate procedures for responding to workplace accidents and emergencies.
- Show methods to maintain a hazard-free workspace.
- Conduct walkthroughs to identify potential risks and unsafe conditions.

## Ask

- Have you ever seen a workplace accident or hazard around your home or school? What could have been done to prevent it?
- Can you think of any equipment that may pose a risk if not properly maintained?
- Why is it important to walk through your workspace and check for potential hazards?

## Elaborate

- **Hazards, Risks, and Threats at the Workplace:** Covers identification of physical, chemical, ergonomic, and environmental hazards that can impact safety.
- **Equipment Malfunctions and Monitoring Risks:** Focuses on preventive maintenance, routine checks, and risk assessment to reduce equipment-related incidents.
- **Workplace Accidents and Emergency Response:** Discusses steps to respond promptly and efficiently to accidents, including first aid and reporting procedures.
- **Hazard-Free Workspace:** Highlights housekeeping, proper storage, and clear work areas to eliminate potential risks.
- **Effective Walkthroughs:** Demonstrates how regular inspections and walkthroughs help identify unsafe conditions and improve overall workplace safety.

## Explain

- Identifying hazards and assessing risks are critical to preventing workplace incidents.
- Monitoring equipment regularly reduces the likelihood of malfunctions and associated hazards.
- Prompt emergency response ensures the safety of employees and reduces damage.
- Maintaining a hazard-free workspace improves efficiency and reduces accident potential.
- Regular walkthroughs help detect unsafe conditions and reinforce a safety-first culture.
- Employees must actively participate in hazard identification and mitigation practices.
- Continuous improvement in safety practices strengthens compliance and workplace reliability.

## Demonstrate

Demonstrate a walkthrough of a workspace, pointing out potential hazards, unsafe equipment handling, and proper corrective actions. Show proper use of PPE during the walkthrough.

## Activity

1. **Activity Name:** Workplace Hazard Identification Drill
2. **Objective:** To practice identifying hazards, assessing risks, and suggesting corrective actions.
3. **Type of Activity:** Group
4. **Resources:** Floor layout diagrams, sample equipment, PPE items, hazard signage examples, notebooks, pens.
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into small groups.
  - Assign each group a section of the workplace layout or mock setup.
  - Groups identify hazards, note possible risks, and suggest preventive measures.
  - Each group presents findings and corrective actions to the class.
  - Facilitator discusses best practices and reinforces safety measures.
7. **Outcome:** Participants will be able to identify hazards, assess risks, and recommend corrective actions to maintain a safe work environment.

## Notes for Facilitation

- Encourage participants to share real-life examples of workplace hazards they have seen.
- Emphasize the importance of proactive risk assessment and monitoring.
- Demonstrate proper equipment usage and routine checks for safety.
- Reinforce the need for hazard-free workspaces through proper housekeeping and storage.
- Highlight the benefits of regular walkthroughs for ongoing safety improvements.
- Ensure participants understand emergency response procedures and reporting protocols.

## Unit 7.3: Inclusivity and Environment-Friendly Practices

### Unit Objectives

By the end of this unit, the participants will be able to:

1. Discuss the importance of gender equality and sensitisation programs on gender and disability inclusion in the apparel industry.
2. Explain how to accommodate persons with disabilities in the workplace.
3. Discuss the importance of adopting environment-friendly practices and environmental management system (EMS) procedures applicable at the workplace.
4. Identify and interpret health and safety signage correctly.
5. Discuss undertaking training in first aid, firefighting and emergency response.

### Resources to be Used

Whiteboard, markers, projector, presentation slides on inclusivity and sustainability, PPE (helmets, gloves, masks), fire extinguisher, first aid kit, health and safety signage samples, floor layout diagrams, workplace accommodation examples, flip charts, sticky notes, notebooks, pens, emergency evacuation maps, Environment Management System (EMS) procedure documents.

### Say

- Good morning everyone! Today we will learn about promoting inclusivity, accessibility, and environment-friendly practices in the workplace.
- By the end of this session, you will understand gender equality, disability accommodations, EMS procedures, safety signage, and emergency response protocols.
- Knowing these practices ensures a safe, inclusive, and environmentally responsible workplace, which benefits everyone and enhances productivity.

### Do

- Explain gender equality and disability sensitisation in the apparel industry.
- Discuss workplace accommodations for persons with disabilities (PwDs).
- Demonstrate environment-friendly practices and EMS procedures.
- Show interpretation of health and safety signage.
- Conduct practical training in first aid, firefighting, and emergency response.

## Ask

- Have you seen workplaces making special arrangements for persons with disabilities? What were they?
- Can you think of simple ways to save energy or reduce waste at your workplace or home?
- Why is it important to understand safety signs and be trained in first aid and fire safety?

## Elaborate

- Gender Equality and Disability Sensitisation covers fair treatment of all employees, eliminating bias, and promoting inclusivity in daily operations.
- Workplace Accommodation for PwDs discusses ramps, adjustable workstations, assistive devices, and other measures that facilitate accessibility.
- Environment-Friendly Practices and EMS Procedures focuses on reducing energy consumption, waste segregation, recycling, and compliance with environmental management systems.
- Health and Safety Signage Interpretation teaches recognition of warning, mandatory, and emergency signs to prevent accidents and maintain safety.
- Training in First Aid, Firefighting, and Emergency Response explains basic first aid, correct use of firefighting equipment, and emergency evacuation procedures to handle incidents effectively.

## Explain

- Inclusivity in the workplace ensures fair opportunities and support for all employees, including PwDs.
- Proper workplace accommodations increase productivity and promote a positive work environment.
- Environment-friendly practices reduce the company's ecological footprint and improve sustainability.
- Understanding health and safety signage helps prevent accidents and ensures compliance.
- First aid, firefighting, and emergency response training equips employees to handle incidents efficiently.
- Combining inclusivity and safety practices contributes to a responsible and ethical workplace culture.
- Regular training and awareness programs reinforce these principles across all levels of staff.

## Demonstrate

Demonstrate the correct use of first aid kit items, operation of a fire extinguisher, and interpretation of common health and safety signage. Show how a workstation can be adapted for accessibility.

## Activity

1. **Activity Name:** Workplace Inclusivity and Safety Drill
2. **Objective:** To identify inclusivity measures, interpret safety signage, and practice emergency response.
3. **Type of Activity:** Group
4. **Resources:** Floor layout diagrams, PPE items, fire extinguisher, first aid kit, health and safety signage samples, notebooks, pens.
5. **Time Duration:** 30 minutes
6. **Instructions:**
  - Divide participants into small groups.
  - Assign each group a task to identify accessibility features, safety signage, and environment-friendly practices in a mock setup or layout diagram.
  - Groups practice first aid and fire safety procedures under supervision.
  - Each group presents observations and recommendations for improvements.
  - Facilitator provides feedback and reinforces best practices.
7. **Outcome:** Participants will be able to promote inclusivity, follow EMS procedures, interpret safety signage, and respond effectively in emergencies.

## Notes for Facilitation

- Encourage sharing of personal experiences related to inclusivity and safety.
- Reinforce the importance of environment-friendly practices and EMS compliance.
- Demonstrate accessibility adjustments and inclusive workplace examples.
- Emphasize correct interpretation of safety signage and emergency procedures.
- Practice first aid and firefighting exercises to enhance confidence.
- Highlight the connection between inclusivity, safety, and sustainable workplace practices.

## Answers to Exercises for PHB

**Answer the following questions by choosing the correct option:**

1. b. Aim
2. b. Carbon dioxide
3. d. Blue for mandatory action
4. b. Plan-Do-Check-Act
5. c. Proceed calmly to the nearest assembly point

**Answer the following questions briefly.**

1. Refer Unit 7.3: Inclusivity and Environment-Friendly Practices  
Topic: 7.3.1 Gender Equality and Disability Sensitisation in the Apparel Industry
2. Refer Unit 7.3: Inclusivity and Environment-Friendly Practices  
Topic: 7.3.5 Training in First Aid, Firefighting, and Emergency Response
3. Refer Unit 7.3: Inclusivity and Environment-Friendly Practices  
Topic: 7.3.3 Environment-Friendly Practices and EMS Procedures
4. Refer Unit 7.2: Hazards, Risks, and Threats at the Workplace  
Topic: 7.2.4 Hazard-Free Workspace and 7.2.5 Effective Walkthroughs
5. Refer Unit 7.2: Hazards, Risks, and Threats at the Workplace  
Topic: 7.2.1 Hazards, Risks, and Threats at the Workplace and 7.2.3 Workplace Accidents and Emergency Response



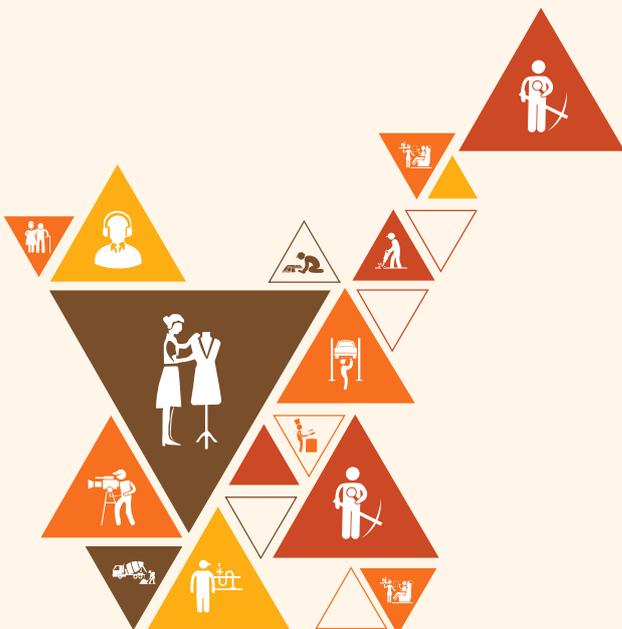
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## 8. Employability Skills



DGT/VSQ/N0103

Employability Skills is available at the following location



<https://www.skillindiadigital.gov.in/content/list>

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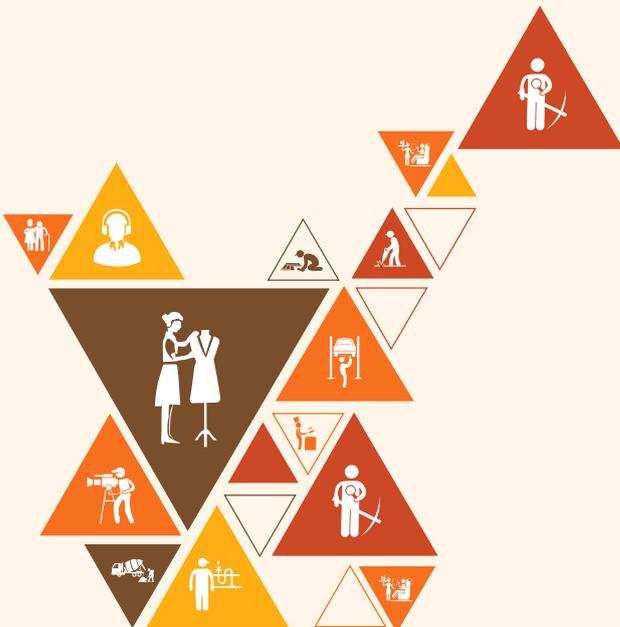


## 9. Annexures

Annexure I: Training Delivery Plan

Annexure II: Assessment Criteria

Annexure III: List of QR Codes Used in PHB



## Annexure I

### Training Delivery Plan

Training Delivery Plan			
<b>Program Name:</b>	Industrial Engineer-Apparel		
<b>Qualification Pack Name &amp; Ref. ID</b>	Industrial Engineer-Apparel, AMH/Q2001		
<b>Version No.</b>	4.0	<b>Version Update Date</b>	18/02/2028
<b>Pre-requisites to Training (if any)</b>	Not Applicable		
<b>Training Outcomes</b>	<p><b>After completing this programme, participants will be able to:</b></p> <ol style="list-style-type: none"> <li>1. Plan the sewing line operations based on production target.</li> <li>2. Supervise, analyse and evaluate performance on sewing floor.</li> <li>3. Resolve production problems to implement better production system.</li> <li>4. Manage data, forms and instructions for recording.</li> <li>5. Evaluate and ensure required quality of data prior to reporting.</li> <li>6. Perform industrial and organisational requirements.</li> <li>7. Adhere to regulatory compliances.</li> <li>8. Maintain a healthy, safe and secure working environment at the workplace</li> </ol>		

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
1.	<b>Introduction and Orientation- Bridge Module</b>	<b>Introduction to Apparel Industry and Industrial Engineering</b>	<ul style="list-style-type: none"> <li>• Describe the outline of the Apparel industry in India</li> <li>• Recognize various employment opportunities for a 'Industrial Engineer' in the apparel industry.</li> <li>• Identify apparel production process and the role that the 'Industrial Engineer' plays in the process.</li> <li>• Understand the production process</li> </ul>	Bridge Module	Classroom lecture / Power-Point Presentation / Question & Answer / Group Discussion	Charts, Models, Flip Chart, White-Board/ Smart Board, Marker, Duster, training kit (trainer guide, presentations)	3 Theory (3 :00) Practical (0:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
2.	Select fabrics, trims and accessories as per specific product category	<b>Fabric Construction and Aesthetic Evaluation</b>	<ul style="list-style-type: none"> <li>Analyse fabric construction to determine suitability for different product categories.</li> <li>Evaluate aesthetic appeal, colour, and design of fabrics to ensure alignment with product requirements.</li> </ul>	AMH/N2001 PC1, KU5	Classroom lecture / Power-Point Presentation / Question & Answer / Group Discussion	Charts, Models, Flip Chart, White-Board/ Smart Board, Marker, Duster, Computer with peripherals and stools and computer software (eg Microsoft office), garments, made ups and home furnishing samples, calculators, sewing kit (measurement tape, scissors, trimmers etc.), industrial single needle lockstitch machine with needle guard with stools, pouches / baskets for storing items and cleaning cloth, machine tool-kit, basic stationery ,white/black board+ marker+ duster/	8 Theory (4:00) Practical (4:00)
		<b>Functional Properties Assessment</b>	<ul style="list-style-type: none"> <li>Assess fabrics, trims, and accessories for functionality including heat transmission, moisture transfer, crease resistance, pilling, static electricity, and launderability.</li> <li>Evaluate the impact of these functional properties on product performance and user comfort.</li> </ul>	AMH/N2001 PC2, KU5			8 Theory (4:00) Practical (4:00)
		<b>Buyer Requirement Alignment</b>	<ul style="list-style-type: none"> <li>Interpret buyer requirements and select fabrics accordingly.</li> <li>Compare available fabrics in the market to ensure compliance with buyer expectations and product specifications.</li> </ul>	AMH/N2001 PC3, KU4			8 Theory (4:00) Practical (4:00)
		<b>Lead Time and Organizational Expertise</b>	<ul style="list-style-type: none"> <li>Analyse processing lead times and organizational expertise to select suitable fabrics.</li> <li>Evaluate past organizational experience with various types of fabrics to inform selection decisions.</li> </ul>	AMH/N2001 PC3, KU1, KU2			8 Theory (4:00) Practical (4:00)
		<b>Cost and Consumption Consideration</b>	<ul style="list-style-type: none"> <li>Calculate fabric, trim, and accessory costs considering consumption and potential wastage.</li> <li>Apply cost analysis to ensure selection aligns with budget constraints.</li> </ul>	AMH/N2001 PC4			8 Theory (4:00) Practical (4:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Fabric Types Knowledge</b>	<ul style="list-style-type: none"> <li>Identify types of fabrics used in selected product categories along with their trade names.</li> <li>Evaluate market availability of specific fabrics for product development purposes.</li> </ul>	AMH/N2001 KU4		chalk, students notes, stopwatches ,photocopier, films – work study, rating, sewing operations	8 Theory (2:00) Practical (6:00)
		<b>Fabric Sew-ability Assessment</b>	<ul style="list-style-type: none"> <li>Examine fabric sew-ability using standardized measures such as SIRO FAST.</li> <li>Analyse how sew-ability influences the manufacturing and quality of the final product.</li> </ul>	AMH/N2001 KU6		– methods and time study quantity may vary as per requirement, playing cards (quantity may vary as per requirement),a4 graph book (quantity may vary as per requirement),1 big table and stools for labs, fire extinguisher and first aid and dustbin, student’s chair with table arm, teacher’s table and chair, sewing needle, bobbin, bobbin case, tailor’s chalk, types of pins like safety pin etc., sewing thread(surplus), trims	8 Theory (2:00) Practical (6:00)
		<b>Embroidery, Dyeing, and Printing Techniques</b>	<ul style="list-style-type: none"> <li>Explain embroidery, dyeing, or printing processes suitable for the selected fabrics.</li> <li>Apply appropriate finishing techniques to enhance fabric aesthetics and functionality.</li> </ul>	AMH/N2001 KU7			8 Theory (2:00) Practical (6:00)
		<b>Organizational Machine Capability</b>	<ul style="list-style-type: none"> <li>Evaluate organizational machinery capabilities with respect to the type of fabric being processed.</li> <li>Determine machine suitability for handling specific fabrics to ensure efficient production.</li> </ul>	AMH/N2001 KU3			8 Theory (2:00) Practical (6:00)
		<b>Dimensional Properties Analysis</b>	<ul style="list-style-type: none"> <li>Assess dimensional properties of fabrics such as shrinkage, stretch, and stability.</li> <li>Predict the impact of dimensional behaviour on product quality and longevity.</li> </ul>	AMH/N2001 KU5			8 Theory (2:00) Practical (6:00)
		<b>Fabric Selection for Product Class</b>	<ul style="list-style-type: none"> <li>Compare fabrics based on construction, aesthetic, and functional attributes for a specific product class.</li> <li>Justify fabric selection decisions for targeted product categories.</li> </ul>	AMH/N2001 PC1, PC2			8 Theory (3:00) Practical (5:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Fabric and Accessory Integration</b>	<ul style="list-style-type: none"> <li>Integrate trims and accessories considering end usage, functionality, and cost efficiency.</li> <li>Analyse the combined effect of fabrics, trims, and accessories on final product quality.</li> </ul>	AMH/N2001 PC2, PC4		and accessories (variety, the quantity may vary), fabric (surplus, qnt and variety may vary), Projector / LCD, Computer with peripherals and stools and computer software (e.g. Microsoft office), garments, made ups and home furnishing samples, calculators, sewing kit (measurement tape, scissors, trimmers etc.), industrial single needle lockstitch machine with needle guard with stools, pouches / baskets for storing items and cleaning cloth, machine tool-kit, basic stationary ,white/black board+	8 Theory (3:00) Practical (5:00)
		<b>Availability and Sourcing Analysis</b>	<ul style="list-style-type: none"> <li>Investigate fabric availability in the market and compare sourcing options.</li> <li>Make informed decisions on fabric procurement based on market analysis and organizational needs.</li> </ul>	AMH/N2001 PC3, KU4			7 Theory (2:00) Practical (5:00)
		<b>Quality and Performance Evaluation</b>	<ul style="list-style-type: none"> <li>Evaluate fabrics for quality, sew-ability, and overall performance for production.</li> <li>Identify potential issues in fabric selection that could affect manufacturing or product utility.</li> </ul>	AMH/N2001 PC1, PC2, KU6			7 Theory (2:00) Practical (5:00)
		<b>Strategic Fabric Selection</b>	<ul style="list-style-type: none"> <li>Formulate strategies for fabric selection considering buyer requirements, lead time, cost, organizational expertise, and machine capabilities.</li> <li>Develop a decision-making framework for selecting fabrics, trims, and accessories for efficient product development.</li> </ul>	AMH/N2001 PC3, PC4, KU1, KU2, KU3			7 Theory (2:00) Practical (5:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
						marker+ duster/ chalk, students notes, stopwatches, photocopier, films – work study, rating, sewing operations – methods and time study quantity may vary as per requirement, playing cards (quantity may vary as per requirement), a4 graph book (quantity may vary as per requirement), 1 big table and stools for labs, fire extinguisher and first aid and dustbin, student’s chair with table arm, teacher’s table and chair, sewing needle, bobbin, bobbin case, tailor’s chalk, types of pins like safety pin etc., sewing thread	

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
						(surplus), trims and accessories (variety, the quantity may vary), fabric (surplus, qnt and variety may vary), Projector/ LCD	
3.	Supervise, Analyse and Evaluate Performance on Sewing Floor	Goal Setting and Target Alignment	<ul style="list-style-type: none"> <li>Define production goals and targets for operators in accordance with organizational directives.</li> <li>Apply knowledge of standard operating procedures and organizational guidelines to ensure targets are realistic and measurable.</li> </ul>	AMH/N2002 PC1, KU1, KU3	Classroom lecture / Power-Point Presentation / Question & Answer / Group Discussion	Charts, Models, Flip Chart, White-Board/ Smart Board, Marker, Duster, Computer with peripherals and stools and computer software (eg Microsoft office), garments, made ups and home furnishing samples, calculators, sewing kit (measurement tape, scissors, trimmers etc.), industrial single needle lockstitch machine with needle guard with stools, pouches / baskets for storing items and cleaning cloth,	8 Theory (3:00) Practical (5:00)
		Performance Measurement Design	<ul style="list-style-type: none"> <li>Develop quantified measures and metrics to evaluate operator performance effectively.</li> <li>Design documentation formats for performance metrics in compliance with organizational standards.</li> </ul>	AMH/N2002 PC2, KU3, KU7			8 Theory (3:00) Practical (5:00)
		Supervision and Activity Monitoring	<ul style="list-style-type: none"> <li>Monitor and supervise operators' activities on the production floor to ensure compliance with procedures.</li> <li>Implement safety and health regulations during supervision to maintain a safe working environment.</li> </ul>	AMH/N2002 PC3, KU1, KU6			8 Theory (3:00) Practical (5:00)
		Production Knowledge and Scheduling	<ul style="list-style-type: none"> <li>Interpret production schedules, engineering specifications, and orders to understand manufacturing methods and procedures.</li> <li>Maintain documentation for all procedures to ensure accurate record-keeping</li> </ul>	AMH/N2002 PC4, KU1, KU4			8 Theory (3:00) Practical (5:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Performance Evaluation and Reporting</b>	<ul style="list-style-type: none"> <li>Evaluate operator performance against established metrics and generate reports.</li> <li>Apply process flow knowledge for structured performance evaluation and documentation.</li> </ul>	AMH/N2002 PC5, KU7, KU8		machine toolkit, basic stationery ,white/black board+ marker+ duster/ chalk, students notes, stopwatches ,photocopier, films – work study, rating, sewing operations – methods and time study quantity may vary as per requirement, playing cards (quantity may vary as per requirement),a4 graph book (quantity may vary as per requirement),1 big table and stools for labs, fire extinguisher and first aid and dustbin, student’s chair with table arm, teacher’s table and chair, sewing needle, bobbin, bobbin case,	8 Theory (2:00) Practical (6:00)
		<b>Support and Coordination</b>	<ul style="list-style-type: none"> <li>Assist line supervisors and address operator or subordinate queries effectively.</li> <li>Document problem redressal actions in the organization’s prescribed format and follow up timely.</li> </ul>	AMH/N2002 PC6, KU9, KU10			8 Theory (2:00) Practical (6:00)
		<b>Production Flow Analysis</b>	<ul style="list-style-type: none"> <li>Analyse operations sequence, material flow, and functional statements to evaluate production efficiency.</li> <li>Identify potential bottlenecks and areas for process improvement.</li> </ul>	AMH/N2002 PC7, KU1, KU8			8 Theory (4:00) Practical (4:00)
		<b>Equipment and Layout Evaluation</b>	<ul style="list-style-type: none"> <li>Assess precision and accuracy of production and testing equipment to ensure efficiency.</li> <li>Formulate corrective action plans while considering workplace safety and health standards.</li> </ul>	AMH/N2002 PC8, KU1, KU6			8 Theory (4:00) Practical (4:00)
		<b>Statistical Analysis and Quality Standards</b>	<ul style="list-style-type: none"> <li>Analyse statistical data and product specifications to determine quality and reliability objectives.</li> <li>Apply professional ethics and standards of practice in evaluating product quality.</li> </ul>	AMH/N2002 PC9, KU1, KU5			7 Theory (3:00) Practical (4:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Productivity Monitoring</b>	<ul style="list-style-type: none"> <li>Conduct hourly production follow-ups and monitor non-productive time.</li> <li>Implement strategies to reduce machine breakdowns and enhance overall productivity.</li> </ul>	AMH/N2002 PC10, KU1, KU6		tailor's chalk, types of pins like safety pin etc., sewing thread(-surplus), trims and accessories (variety, the quantity may vary), fabric (surplus, qnt and variety may vary), Projector / LCD, Computer with peripherals and stools and computer software (e.g. Microsoft office), garments, made ups and home furnishing samples, calculators, sewing kit (measurement tape, scissors, trimmers etc.), industrial single needle lockstitch machine with needle guard with stools, pouches / baskets for storing items	8 Theory (1:00) Practical (6:00)
		<b>Documentation and Record Management</b>	<ul style="list-style-type: none"> <li>Handover operational documents and support measures to the human resources department for official records.</li> <li>Utilize organizational software tools like MS Word, Excel, PowerPoint, MIS, GSD, or PMTS to maintain and present records accurately.</li> </ul>	AMH/N2002 PC11, KU4, KU11			6 Theory (1:00) Practical (5:00)
		<b>Organizational Query and Problem Management</b>	<ul style="list-style-type: none"> <li>Apply organizational procedures to report, track, and resolve queries or problems on the production floor.</li> <li>Document all problem-solving actions and redressals in a timely and accurate manner.</li> </ul>	AMH/N2002 KU2, KU9, KU10			6 Theory (4:00) Practical (2:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
						and cleaning cloth, machine toolkit, basic stationary ,white/black board+ marker+ duster/ chalk, students notes, stopwatches, photocopier, films – work study, rating, sewing operations – methods and time study quantity may vary as per requirement, playing cards (quantity may vary as per requirement), a4 graph book (quantity may vary as per requirement), 1 big table and stools for labs, fire extinguisher and first aid and dustbin, student’s chair with table arm, teacher’s table and chair, sewing needle, bobbin,	

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
						bobbin case, tailor's chalk, types of pins like safety pin etc., sewing thread(-surplus), trims and accessories(variety, the quantity may vary), fabric(surplus, qnt and variety may vary), Projector/ LCD	
4.	Research and Resolve production problems to implement better production system	Statistical and Mathematical Problem Analysis	<ul style="list-style-type: none"> <li>Apply statistical methods to analyse manufacturing process problems.</li> <li>Perform mathematical calculations to identify process inefficiencies and bottlenecks.</li> </ul>	AMH/N2003 PC1, KU1, KU3	Classroom lecture / Power-Point Presentation / Question & Answer / Group Discussion	Charts, Models, Flip Chart, White-Board/ Smart Board, Marker, Duster, Data management and recording software, Sewing Data Analysis software, Computer with peripherals and stools and computer-software (e.g. Microsoft office), garments, made ups and home furnishing samples, calculators, sewing kit (measurement tape, scissors, trimmers etc.), i	8 Theory (1:00) Practical (7:00)
		Production Process Review	<ul style="list-style-type: none"> <li>Examine production processes in terms of method, machine, and manpower requirements.</li> <li>Evaluate compliance with safe working practices and organizational procedures during process review.</li> </ul>	AMH/N2003 PC2, KU1, KU2, KU3			8 Theory (1:00) Practical (7:00)
		Production System Feasibility Analysis	<ul style="list-style-type: none"> <li>Identify and analyze different types of production systems for suitability with product requirements.</li> <li>Assess garment construction specifications to determine feasibility of production systems.</li> </ul>	AMH/N2003 PC3, KU4, KU10			8 Theory (1:00) Practical (7:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Manu- facturing Methods and Efficiency Development</b>	<ul style="list-style-type: none"> <li>Develop manufacturing methods to enhance labour utilization and cost efficiency.</li> <li>Formulate operational sequences and procedures to improve overall productivity.</li> </ul>	AMH/N2003  PC4, KU11, KU12		Industrial single needle lockstitch machine with needle guard with stools, pouches / baskets for storing items and cleaning cloth, machine tool-kit, basic stationary ,white/black board+ marker+ duster/ chalk, students notes, stopwatches, photocopier, films – work study, rating, sewing operations – methods and time study quantity may vary as per requirement, playing cards (quantity may vary as per requirement), a4 graph book (quantity may vary as per requirement), 1 big table	8 Theory (1:00) Practical (7:00)
		<b>Garment Manu- facturing Method Selection</b>	<ul style="list-style-type: none"> <li>Determine the most appropriate garment manufacturing methods for specific products.</li> <li>Evaluate machine and method operational guidelines to select optimal production techniques.</li> </ul>	AMH/N2003  PC5, KU9, KU10			8 Theory (4:00) Practical (4:00)
		<b>Process Re-engi- neering and Bench- marking</b>	<ul style="list-style-type: none"> <li>Carry out process re-engineering to streamline production operations.</li> <li>Establish production benchmarks to monitor and maintain efficiency and quality.</li> </ul>	AMH/N2003  PC6, KU11, KU12			8 Theory (4:00) Practical (4:00)
		<b>Resource Utilization Recom- mendations</b>	<ul style="list-style-type: none"> <li>Recommend methods to improve utilization of personnel, materials, and utilities.</li> <li>Apply organizational tools, templates, and processes to optimize resource efficiency.</li> </ul>	AMH/N2003  PC7, KU1, KU8			8 Theory (4:00) Practical (4:00)
		<b>Organi- zational Policies and Procedures</b>	<ul style="list-style-type: none"> <li>Interpret organizational policies, procedures, guidelines, and standards for production operations.</li> <li>Apply compliance with written instructions to ensure accurate and consistent manufacturing outcomes.</li> </ul>	AMH/N2003  KU1, KU5			7 Theory (1:00) Practical (6:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Quality and Problem Reporting</b>	<ul style="list-style-type: none"> <li>Evaluate quality systems and processes to identify potential production problems.</li> <li>Apply reporting procedures to communicate faults within and outside areas of authority effectively.</li> </ul>	AMH/N2003 KU3, KU4, KU6, KU7		and stools for labs, fire extinguisher and first aid and dustbin, student's chair with table arm, teacher's table and chair, sewing needle, bobbin, bobbin case, tailor's chalk, types of pins like safety pin etc., sewing thread(surplus), trims and accessories (variety, the quantity may vary), fabric (surplus, qnt and variety may vary), Projector/ LCD	7 Theory (1:00) Practical (6:00)
		<b>Garment Construction and Standards</b>	<ul style="list-style-type: none"> <li>Analyse garment construction specifications and manufacturing standards to ensure proper process implementation.</li> <li>Apply procedural knowledge to maintain consistency and quality in production.</li> </ul>	AMH/N2003 KU10, KU11			7 Theory (1:00) Practical (6:00)
		<b>Manufacturing Sequence and Invoicing</b>	<ul style="list-style-type: none"> <li>Sequence manufacturing operations logically to optimize workflow and productivity.</li> <li>Apply invoicing instructions and processes accurately in production-related documentation.</li> </ul>	AMH/N2003 KU12, KU13			7 Theory (1:00) Practical (6:00)
		<b>Comprehensive Problem-Solving in Production</b>	<ul style="list-style-type: none"> <li>Formulate strategies to identify, analyse, and resolve production system problems efficiently.</li> <li>Integrate knowledge of organizational policies, quality systems, and safe practices to recommend process improvements.</li> </ul>	AMH/N2003 PC1, PC3, PC4, PC6, KU1, KU2, KU3, KU4, KU5			6 Theory (1:00) Practical (5:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
5.	<b>Manage data, forms and instructions for recording, evaluating and reporting quality and reliability data</b>	<b>Recording and Currency of Documentation</b>	<ul style="list-style-type: none"> <li>Oversee the recording of information to ensure engineering drawings and production problem documentation are current.</li> <li>Apply organizational documentation procedures to maintain accurate and updated records.</li> </ul>	AMH/N2004  PC1, KU1, KU4, KU5	Classroom lecture / Power-Point Presentation / Question & Answer / Group Discussion	Charts, Models, Flip Chart, White-Board/ Smart Board, Marker, Duster, Training kit (trainer guide, presentations), Fabric checking(in-spection) machine / equipment setup (manual or automatic), measurement tape, tailor's chalk, check sheet and job card, basic stationary items (pens, pencils, erasers), stool, stain removal solvent (the quantity may vary as per requirement), sticker tickets (qnt. may vary), fabric cutting shears, lab dip/pit loom/strike off samples, spray gun,	8 Theory (1:00) Practical (7:00)
		<b>Supervision of Process Documentation</b>	<ul style="list-style-type: none"> <li>Supervise the maintenance of process, function, and report documentation according to specified formats.</li> <li>Organize documentation systematically to facilitate easy retrieval and compliance with protocols.</li> </ul>	AMH/N2004  PC2, KU1, KU5, KU11			8 Theory (1:00) Practical (7:00)
		<b>Data Management Software Utilization</b>	<ul style="list-style-type: none"> <li>Use data management software effectively to store, update, and manage production information.</li> <li>Apply knowledge of documentation frameworks to maintain data integrity and accessibility.</li> </ul>	AMH/N2004  PC3, KU11			8 Theory (1:00) Practical (7:00)
		<b>Operation Bulletin Documentation</b>	<ul style="list-style-type: none"> <li>Document operation bulletins created to estimate SAM and productivity during the costing stage.</li> <li>Apply report writing methods to ensure clarity and accuracy in documented bulletins.</li> </ul>	AMH/N2004  PC4, KU10, KU12			8 Theory (1:00) Practical (7:00)
		<b>Video Recording for Database Development</b>	<ul style="list-style-type: none"> <li>Video record special and new operations to build a database for operations using sewing data analysis software.</li> <li>Evaluate recorded information to enhance the accuracy and utility of the operations database.</li> </ul>	AMH/N2004  PC5, KU10, KU14			8 Theory (1:00) Practical (7:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Validation and Documentation of SAM Adjustments</b>	<ul style="list-style-type: none"> <li>Check and validate operation bulletins and SAM on the production floor.</li> <li>Document unnecessary operations regulation and adjustments as per organizational procedures and protocols.</li> </ul>	AMH/N2004  PC6, KU10, KU12, KU14		metallic comb, tweezer, fabric inspection bulletin (eg.4-point system), fabric defect list, record maintenance sheet,	8 Theory (1:00) Practical (7:00)
		<b>Record Storage and Retrieval</b>	<ul style="list-style-type: none"> <li>Store records, SOPs, and analysis documents methodically for easy retrieval.</li> <li>Apply guidelines for record storage and systematic filing to maintain accessibility and organization.</li> </ul>	AMH/N2004  PC7, KU2, KU13, KU15		white/black board+ marker+ duster/ chalk, board pen, trainees chairs ,with table	8 Theory (1:00) Practical (7:00)
		<b>Data Safety and Confidentiality</b>	<ul style="list-style-type: none"> <li>Ensure the safety and security of data, maintaining confidentiality of reports and analysis.</li> <li>Apply organizational protocols to handle sensitive information responsibly.</li> </ul>	AMH/N2004  PC8, KU1, KU6, KU8		defect samples, colour matching cabinet(light box),continuity chart, pantone shade card, crock meters,	8 Theory (2:00) Practical (6:00)
		<b>Work Role and Documentation Understanding</b>	<ul style="list-style-type: none"> <li>Interpret documentation and reporting formats relevant to specific job roles and responsibilities.</li> <li>Apply knowledge of organizational documentation frameworks to complete reports accurately.</li> </ul>	AMH/N2004  KU4, KU5, KU11		fire safety equipment, teacher's chair and table, dexterity test kit, students notes/ manuals, trainer's table and chair, first aid & dustbin, basic stationary items(pens, pencils, erasers),	7 Theory (2:00) Practical (5:00)
		<b>Work Role and Documentation Understanding</b>	<ul style="list-style-type: none"> <li>Interpret documentation and reporting formats relevant to specific job roles and responsibilities.</li> <li>Apply knowledge of organizational documentation frameworks to complete reports accurately.</li> </ul>	AMH/N2004  KU4, KU5, KU11			7 Theory (2:00) Practical (5:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Feedback and Risk Reporting</b>	<ul style="list-style-type: none"> <li>Follow protocols for reporting work-related risks or problems.</li> <li>Obtain and provide feedback on performance and operational processes effectively.</li> </ul>	AMH/N2004 KU6, KU7, KU9		fabric, samples(garments, made ups and home furnishing)	7 Theory (1:00) Practical (6:00)
		<b>Teamwork and Collaborative Documentation</b>	<ul style="list-style-type: none"> <li>Apply the importance of teamwork and harmonious working relationships to ensure smooth documentation processes.</li> <li>Seek and offer work-related assistance to enhance collective performance in data management.</li> </ul>	AMH/N2004 KU8, KU9			5 Theory (1:00) Practical (4:00)
6	<b>Adhere to industry, regulatory, and organizational standards and embrace environmentally sustainable practices</b>	<b>Organizational Standards and Sustainable Practices</b>	<ul style="list-style-type: none"> <li>Describe the importance of following organizational standards, policies, and legal regulations.</li> <li>Demonstrate execution of tasks in compliance with eco-friendly solutions and workplace guidelines.</li> <li>Apply sustainable consumption practices in routine operations.</li> <li>Analyse how adherence to regulations contributes to quality and environmental sustainability.</li> <li>Evaluate the effectiveness of policies in promoting eco-friendly workplace culture.</li> </ul>	AMH/N0621 PC1, PC2	Classroom lecture / Power-Point Presentation / Question & Answer / Group Discussion	Charts, Models, Flip Chart, White-Board/ Smart Board, Marker, Duster  Basic Stationery	8 Theory (4:00) Practical (4:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Driving Eco-Friendly Performance</b>	<ul style="list-style-type: none"> <li>Explain the role of environmentally friendly processes in enhancing organizational performance.</li> <li>Demonstrate active participation in initiatives that drive eco-friendly practices.</li> <li>Analyse barriers to adopting sustainable methods within production environments.</li> <li>Recommend improvements that support transition to green practices.</li> <li>Evaluate the impact of eco-friendly initiatives on organizational reputation and efficiency.</li> </ul>	AMH/N0621 PC3			7 Theory (4:00) Practical (3:00)
		<b>Safe Handling and Hazard Management</b>	<ul style="list-style-type: none"> <li>Demonstrate safe handling of materials, equipment, and digital tools in line with workplace norms.</li> <li>Perform cleaning and maintenance tasks effectively within agreed schedules.</li> <li>Identify unsafe equipment or hazardous situations and report promptly.</li> <li>Analyse causes of workplace hazards related to unsafe handling.</li> <li>Evaluate the importance of proactive maintenance and reporting in ensuring a hazard-free workplace.</li> </ul>	AMH/N0621 PC4, PC5, PC6			6 Theory (3:00) Practical (3:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Sustainable Cleaning and Maintenance</b>	<ul style="list-style-type: none"> <li>Identify appropriate cleaning equipment and techniques for specific tasks.</li> <li>Demonstrate the use of cleaning methods that promote efficiency and sustainability.</li> <li>Apply eco-friendly maintenance practices to minimize waste and energy use.</li> <li>Analyse how sustainable cleaning practices contribute to workplace safety.</li> <li>Evaluate the benefits of integrating sustainability in maintenance operations.</li> </ul>	AMH/N0621 PC7			5 Theory (2:00) Practical (3:00)
		<b>Digital Asset Management and System Efficiency</b>	<ul style="list-style-type: none"> <li>Demonstrate the process of requesting system or software upgrades to optimise performance.</li> <li>Apply backup and security measures to ensure data integrity when using design software.</li> <li>Maintain digital records of design work in an organized manner for future accessibility.</li> <li>Analyse the significance of data management in supporting workplace efficiency.</li> <li>Evaluate strategies for improving digital sustainability through efficient storage and secure handling.</li> </ul>	AMH/N0621 PC8, PC9			4 Theory (2:00) Practical (2:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
7.	Main- taining a healthy, safe and secure working environ- ment in the organisa- tion PWD & Gender Sensitivity Require- ments	<b>Workplace Health, Safety and Equipment Compliance</b>	<ul style="list-style-type: none"> <li>Apply health and safety practices at the workplace to ensure compliance with organizational protocols.</li> <li>Use and maintain materials, equipment, and personal protective equipment correctly.</li> <li>Identify, handle, store, and dispose of hazardous substances safely.</li> <li>Interpret safety signage and follow established procedures for waste and by-product disposal.</li> </ul>	AMH/N1605  PC1, PC2, KU1, KU9, KU10, KU11, KU12	Classroom lecture / Power-Point Presentation / Question & Answer / Group Discussion	Charts, Models, Flip Chart, White-Board/ Smart Board, Marker, Duster, Training kit (Trainer guide, Presentations), appropriate personal protective equipment (PPE), First aid box with all contents, Fabric checking(in- spection) machine / equipment setup (manual or automatic), measurement tape, tailor's chalk, check sheet and job card, basic stationary items(pens, pencils, eras-ers),stool, stain removal solvent (the quantity may vary as per require-ment),stick-er tickets	8 Theory (4:00) Practical (4:00)
		<b>Risk Monitoring and Emergency Response</b>	<ul style="list-style-type: none"> <li>Monitor the workplace and processes to identify potential hazards, risks, and threats.</li> <li>Report hazards and potential risks promptly to supervisors or authorized personnel.</li> <li>Perform first-aid, firefighting, and emergency response procedures effectively.</li> <li>Follow organization procedures during shutdowns, evacuation, and emergency situations.</li> </ul>	AMH/N1605  PC3, PC5, PC6, KU2, KU4, KU5, KU7, KU8			7 Theory (4:00) Practical (3:00)
		<b>Gender Sensitization and Awareness</b>	<ul style="list-style-type: none"> <li>Participate in gender awareness programs, mock drills, and discussions organized at the workplace.</li> <li>Apply organizational codes of conduct and social accountability standards in daily work.</li> <li>Recognize and report harassment or inappropriate behaviour, promoting a respectful workplace.</li> </ul>	AMH/N1605  PC4, KU3, KU14			6 Theory (3:00) Practical (3:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		<b>Disability Sensitization and Accommodation</b>	<ul style="list-style-type: none"> <li>Communicate and offer help appropriately to employees with disabilities or special needs.</li> <li>Apply proper etiquette, language, and terminology while interacting with PwD employees.</li> <li>Promote a safe, accessible, and inclusive workplace for employees with disabilities.</li> </ul>	AMH/N1605 PC4, KU15, KU16, KU17		(qnt may vary), fabric cutting shears, lab dip/pit loom/strike off samples, spray gun, metallic comb, tweezers, fabric inspection bulletin (eg. 4-point system), fabric defect list, record maintenance sheet, white/black board+ marker+ duster/ chalk, board pen, trainees chairs, with table arms, defect samples, colour matching cabinet(light box), continuity chart, pantone shade card, crock meter, fire safety equipment, teacher's chair and table, dexterity test kit, students notes/manuals, trainer's table	5 Theory (2:00) Practical (3:00)
		<b>Personal Hygiene and Workplace Conduct</b>	<ul style="list-style-type: none"> <li>Maintain personal health and hygiene to prevent workplace hazards.</li> <li>Understand the ill effects of intoxicants such as alcohol, tobacco, and drugs on personal and workplace safety.</li> </ul>	AMH/N1605 PC1, KU13			4 Theory (2:00) Practical (2:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
						and chair, first aid & dust-bin, basic stationary items(pens, pencils, erasers), fabric, samples (garments, made ups and home furnishing)	
<b>Total Duration</b>							<b>Theory:</b> 144:00  <b>Practical:</b> 306:00
<b>Employability Skills (DGT/VSQ/N0103)</b> <a href="https://www.skillindiadigital.gov.in/content/list">https://www.skillindiadigital.gov.in/content/list</a>							90:00
<b>OJT Duration (Mandatory)</b>							60:00
<b>Total</b>							<b>Theory</b> + <b>Practical</b> + ES <b>600:00</b>

## Annexure II

### Assessment Criteria

#### CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria for Industrial Engineer-Apparel	
Job Role	Industrial Engineer-Apparel
Qualification Pack	AMH/Q2001, V4.0
Sector Skill Council	Apparel

S. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below.)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
5	To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS.
6	In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
7	In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Assessment Outcomes	Assessment Criteria for Outcomes	Marks Allocation		
		Theory	Practical	Viva
<b>AMH/N2001: Select fabrics, trims and accessories as per specific product category</b>	Selections of fabrics, trims and accessories based on attributes making them suitable for the product class that is to be developed	20	60	10
	PC1.. Identify and select fabric suitability with respect to construction, aesthetic appeal color and design	5	15	3
	PC2. PC2. Identify and select fabric, trims and accessories with respect to end usage, functionality and applicability like heat transmission, moisture transfer, crease resistance, pilling, static electricity, and launder-ability.	5	15	3
	PC3. Identify and select fabric based on buyer requirements, availability, processing lead time and organization's expertise	5	15	2
	PC4. Identify and select fabrics, trims and accessories keeping in mind the cost parameters, consumption and wastage	5	15	2
	<b>NOS Total</b>	<b>20</b>	<b>60</b>	<b>10</b>

<b>AMH/N2002: Supervise, Analyze and Evaluate Performance on Sewing Floor</b>	Supervise all activities performed by operators and evaluate their performance	5.5	21	2.5
	PC1. Set goals and targets as per production directives for all operators in a production line	0.5	2	0.5
	PC2. Create quantified measures and metrics to analyze the performance delivered by operators as per the goals and targets assigned	2	5	0.5
	PC3. Monitor and supervise all the activities performed by operators and ensure strict implementation and optimization to achieve the set goals	1	3	0.5
	PC4. Review production schedules, engineering specifications, orders, and related information to obtain knowledge of manufacturing methods, procedures, and activities	1	7	0.5
	PC5. Evaluate performance of operators and reporting on the designed measures and metrics as per the production guidelines	1	4	0.5
	Analyse and evaluate performance on production floor	6.5	21	3.5
	PC6. Assist and support concerned line supervisors whenever necessary or applicable	1	1	0.5
	PC7. Study operations sequence, material flow, functional statements to evaluate the production flow process	2	5	0.5
	PC8. Evaluate precision and accuracy of production and testing equipment and layout to formulate corrective action plan to ensure daily targets, productivity and efficiency are maintained	1	5	0.5
	PC9. Analyze statistical data and product specifications to determine standards and establish quality and reliability objectives of finished product.	1	6	0.5
	PC10. Hourly production follow- up; and check Daily Non-productive time (NPT) and reduce machine breakdown time	1	3	1
	PC11. Handover all the documents and appropriate support measures to human resources department for official records	0.5	1	0.5
<b>NOS Total</b>	<b>12</b>	<b>42</b>	<b>6</b>	
<b>AMH/N2003: Research and Resolve production problems to implement better production system</b>	Identify & troubleshoot the production problem for better production system	12	42	6
	PC1.. Apply statistical methods and perform mathematical calculations to determine manufacturing process problems.	1	10	1
	PC2. Review production process in terms of method machine and manpower requirement	2	3	0.5
	PC3. Identify & analyze different type of production system & their feasibility with product requirement	2	7	1
	PC4. Develop manufacturing methods, labor utilization standards, and cost analysis systems to promote efficiency & productivity	1	7	1
	PC5. . Identify the appropriate method of garment manufacturing	2	7	1
	PC6.. Carry out process re-engineering & set the production bench marks	1	5	0.5
	PC7. . Recommend methods for improving utilization of personnel, material, and utilities	3	3	1
<b>NOS Total</b>	<b>12</b>	<b>42</b>	<b>6</b>	

<b>AMH/N2004: Manage data, forms and instructions for recording, evaluating and reporting quality and reliability data</b>	Documentation and management of data	10	39	5
	PC1. Oversee recording of information to ensure currency of engineering drawings and documentation of production problems.	1	3	0.5
	PC2. Supervise and maintain documentation of various processes, functions and reports as per specified formats in an organized manner	3	8	1
	PC3. Use data management software effectively to store information	1	12	1
	PC4. Document the operation bulletin created to estimate SAM with productivity at costing stage	2	7	1
	PC5. Video record special and new operations to build database for operations with sewing data analysis software.	2	6	1
	PC6. After checking and validating the operation bulletin and the SAM in production floor and thereby regulating the unnecessary operations, document the same as per organizations procedure and protocol.	1	3	0.5
	Record Keeping	4	10	2
	PC7. Store the records, SOPs and other analysis documents in such a way that it can be retrieved easily whenever required.	2	4	1
	PC8. Ensure safety and security of data; and maintain confidentiality of the reports/data/analysis, wherever applicable.	2	6	1
<b>NOS Total</b>	<b>14</b>	<b>49</b>	<b>7</b>	
<b>AMH/N0621: Adhere to industry, regulatory, and organizational standards and embrace environmentally sustainable practices</b>	Adhere to industry, regulatory, and organizational standards and embrace environmentally sustainable practices	20	10	10
	PC1. Execute job responsibilities according to organizational standards, with a strong emphasis on eco-friendly solutions, while strictly adhering to established procedures, policies, and legal regulations.	2	1	1
	PC2. Implement and uphold organizational policies and procedures, integrating sustainable consumption practices into daily operations.	2	1	1
	PC3. Actively engage in enhancing organizational performance by driving the transition towards environmentally friendly processes and practices.	2	1	1
	PC4. Safely handle materials, equipment, computers, and software to maintain a clean and hazard-free work environment, actively supporting the adoption of eco-friendly practices throughout the workplace.	3	2	2
	PC5. Perform routine maintenance and cleaning tasks within assigned duties and agreed-upon schedules, effectively managing any interruptions to workflow.	3	1	1
	PC6. Immediately report any instances of unsafe equipment or hazardous incidents to the appropriate personnel to ensure swift resolution and mitigate risks.	2	1	1
	PC7. Utilize appropriate cleaning equipment and techniques tailored to specific tasks, promoting efficiency and sustainability in workplace maintenance.	2	1	1
	PC8. Proactively request system or software upgrades as necessary to optimize work efficiency, while also maintaining backup files to ensure data integrity and security when using various design software.	2	1	1
	PC9. Maintain digital copies of design work in organized files for future reference, ensuring accessibility and preservation of valuable project assets.	2	1	1
<b>NOS Total</b>	<b>20</b>	<b>10</b>	<b>10</b>	

<b>AMH/N1605: Maintaining a healthy, safe and secure working environment in the organization with Gender and PwD Sensitization</b>	Comply with health, safety and security requirements at work with Gender and PwD Sensitization	6	21	3
	PC1. Comply with health safety gender and PwD (People with disability) related instructions applicable to the workplace	1	3	0.5
	PC2. Use and maintain materials and equipment as per protocol	1	3	0.5
	PC3. Monitor the work place and processes for potential risks and threats and report hazards and potential risks/ threats to supervisors or other authorized personnel	1	2	0.5
	PC4. Actively participate in mock drills/ evacuation procedures; group discussions, training sensitization programs for gender and PwD awareness organized at the workplace	1	5	0.5
	PC5. Capable to perform first-aid, firefighting or any other emergency response procedures	1	5	0.5
	PC6. Follow organization procedures for shutdown and evacuation when required	1	3	0.5
	<b>NOS Total</b>	<b>6</b>	<b>21</b>	<b>3</b>
<b>DGT/VSQ/N0103: Employability Skills (90 Hours)</b>	Introduction to Employability Skills	1	1	-
	PC1. understand the significance of employability skills in meeting the current job market requirement and future of work	-	-	-
	PC2. identify and explore learning and employability relevant portals	-	-	-
	PC3. research about the different industries, job market trends, latest skills required and the available opportunities	-	-	-
	Constitutional values – Citizenship	1	1	-
	PC4. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-
	PC5. follow environmentally sustainable practices	-	-	-
	Becoming a Professional in the 21st Century	1	3	-
	PC6. recognize the significance of 21st Century Skills for employment	-	-	-
	PC7. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-
	PC8. adopt a continuous learning mindset for personal and professional development	-	-	-
	Basic English Skills	3	4	-
	PC9. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-
	PC10. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-
	PC11. write short messages, notes, letters, e-mails etc. in English	-	-	-
Career Development & Goal Setting	1	2	-	
PC12. identify career goals based on the skills, interests, knowledge, and personal attributes	-	-	-	
PC13. prepare a career development plan with short- and long-term goals	-	-	-	
	Communication Skills	2	2	-

PC14. follow verbal and non-verbal communication etiquette while communicating in professional and public settings	-	-	-
PC15. use active listening techniques for effective communication	-	-	-
PC16. communicate in writing using appropriate style and format based on formal or informal requirements	-	-	-
PC17. work collaboratively with others in a team	-	-	-
Diversity & Inclusion	1	1	-
PC18. communicate and behave appropriately with all genders and PwD	-	-	-
PC19. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-
Financial and Legal Literacy	2	3	-
PC20. identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.	-	-	-
PC21. carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook	-	-	-
PC22. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-
PC23. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-
Essential Digital Skills	3	5	-
PC24. operate digital devices and use their features and applications securely and safely	-	-	-
PC25. carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.	-	-	-
PC26. display responsible online behaviour while using various social media platforms	-	-	-
PC27. create a personal email account, send and process received messages as per requirement	-	-	-
PC28. carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications	-	-	-
PC29. utilize virtual collaboration tools to work effectively	-	-	-
Entrepreneurship	2	3	-
PC30. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-
PC31. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-
PC32. identify sources of funding, anticipate, and mitigate any financial/legal hurdles for the potential business opportunity	-	-	-
Customer Service	1	2	-
PC33. identify different types of customers and ways to communicate with them	-	-	-
PC34. identify and respond to customer requests and needs in a professional manner	-	-	-
PC35. use appropriate tools to collect customer feedback	-	-	-
PC36. follow appropriate hygiene and grooming standards	-	-	-
Getting ready for apprenticeship & Jobs	2	3	-

	PC37. create a professional Curriculum vitae (Résumé)	-	-	-
	PC38. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-
	PC39. apply to identified job openings using offline /online methods as per requirement	-	-	-
	PC40. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-
	PC41. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-
	<b>NOS Total</b>	<b>20</b>	<b>30</b>	-

## Annexure III

## List of QR Codes Used in PHB

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
<b>Module 1: Introduction and Orientation to Industrial Engineer (IE) (AMH/N2001)</b>	Unit 1.1: Role and Scope of an Industrial Engineer (IE) in Apparel Manufacturing	1.1.1 Employment Opportunities for Industrial Engineer	8	<a href="https://youtu.be/-lvDrmg0U-mOM-?si=HohNf0NnjXDA_pV5">https://youtu.be/-lvDrmg0U-mOM-?si=HohNf0NnjXDA_pV5</a>	 Beginning Engineers Industrial Engineering
		1.1.2 Roles and Responsibilities of an Industrial Engineer	8	<a href="https://youtu.be/-bw9IsT-j5VuQ-?si=-XKnjQyNMQGm-WNEz">https://youtu.be/-bw9IsT-j5VuQ-?si=-XKnjQyNMQGm-WNEz</a>	 Role of Industrial Engineers in Industry
		1.1.3 Relationship with the Manufacturing Process	8	<a href="https://youtu.be/-Aez-KyDdoHvw-?si=smtLYW82eSI-H567C">https://youtu.be/-Aez-KyDdoHvw-?si=smtLYW82eSI-H567C</a>	 What is Industrial Engineering
<b>Module 2: Select fabrics, trims and accessories as per specific product category (AMH/N2001)</b>	Unit 2.1: Business Planning and Strategy	2.1.2 SAM (Standard Allowed Minute)	38	<a href="https://youtu.be/-OX-Qm-da6W9Y-?si=64gT8KA-9KlfZ5zjo">https://youtu.be/-OX-Qm-da6W9Y-?si=64gT8KA-9KlfZ5zjo</a>	 SAM Calculation for Young Engineers in Garment Industry

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
	Unit 2.2: Design, Tools and Equip- ment	2.2.3 Machine Specifications and Safety Standards	38	<a href="https://youtu.be/-NZDa8qpA-IUc?si=J99PNJHMsLmJYmbq">https://youtu.be/-NZDa8qpA-IUc?si=J99PNJHMsLmJYmbq</a>	 Types of sew- ing machines used in apparel industry
	Unit 2.3: Procedures, Reporting and Regulations	2.3.3 Logistics and Supply Chain	38	<a href="https://youtu.be/-TEZ6FPKbt-Kg?si=JapNCVUktOjfaJMw">https://youtu.be/-TEZ6FPKbt-Kg?si=JapNCVUktOjfaJMw</a>	 The Apparel Logistics Group - Apparel Third Party Logistics Services
<b>Module 3: Supervise, Analyse and Evaluate Performance on Sewing Floor (AMH/ N2002)</b>	Unit 3.4: Communica- tion and Soft- ware Tools	3.4.3 Basic Software Tools in Apparel Pro- duction	68	<a href="https://youtu.be/-KCfwX98E-Wlc?si=nrQIkEiucV3rr2fk">https://youtu.be/-KCfwX98E-Wlc?si=nrQIkEiucV3rr2fk</a>	 MS Word Full Course in Just 90 Minutes
		3.4.4 Indus- try-Specific Tools: MIS, GSD, and PMTS	68	<a href="https://youtu.be/-0t2Maqm5DSk?si=l-3jta03ZpVJCpBBJ">https://youtu.be/-0t2Maqm5DSk?si=l-3jta03ZpVJCpBBJ</a>	 Management Information system, MIS

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
<b>Module 4: Research and resolve production problems to implement better production system (AMH/ N2003)</b>	Unit 4.1: Standards, Procedures, and Specifications	4.1.1 Garment Specifications and Manufacturing Standards	90	<a href="https://youtu.be/-tLSqEv-jzquo-?si=i4KfNz09u8DRK1gl">https://youtu.be/-tLSqEv-jzquo-?si=i4KfNz09u8DRK1gl</a>	 M-37.Apparel quality analysis – initial inspection, quality standards and specifications in raw mate
	Unit 4.2: Production Systems and Problem Management	4.2.1 Garment Production Systems	90	<a href="https://youtu.be/-xcHgd-Sh_T-o-?si=F0DWE0dO9sH-Fqp0l">https://youtu.be/-xcHgd-Sh_T-o-?si=F0DWE0dO9sH-Fqp0l</a>	 TYPES OF GARMENT PRODUCTION SYSTEMS
		4.2.5 Statistics for Problem Identification	90	<a href="https://youtu.be/-KQRWHPup-dxQ-?si=F56tPpruZtvGhvcY">https://youtu.be/-KQRWHPup-dxQ-?si=F56tPpruZtvGhvcY</a>	 Pareto Principle 80 20 Rule   Pareto's law 80 20 Rule Explained
	Unit 4.3: Productivity, Operations, and Efficiency	4.3.4 Sequence of Operations in Garment Manufacturing	90	<a href="https://youtu.be/-7MPm_jDApc8-?si=cLA25iukVSMYdB-kX">https://youtu.be/-7MPm_jDApc8-?si=cLA25iukVSMYdB-kX</a>	 OPERATION BREAKDOWN IN APPAREL INDUSTRY

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
<b>Module 5: Manage data, forms and instructions for recording, evaluating and reporting quality and reliability data (AMH/N2004)</b>	Unit 5.2: Documentation Methods and Reporting Systems	5.2.7 Operation Bulletin (OB) and SAM at Costing Stage	114	<a href="https://youtu.be/-i_nAab-4p6xw-?si=6tqtJJe5sO4b14Nk">https://youtu.be/-i_nAab-4p6xw-?si=6tqtJJe5sO4b14Nk</a>	 TYPES OF OPERATION BULLETIN
		5.2.8 Data Management Software and Digital Tools	114	<a href="https://youtu.be/-gBXJ_PhIADQ-?si=LISAOAkEuLWYjyqj">https://youtu.be/-gBXJ_PhIADQ-?si=LISAOAkEuLWYjyqj</a>	 Enterprise Resource Planning (ERP) in 15 minutes
<b>Module 6: Adhere to industry, regulatory, and organizational standards and embrace environmentally sustainable practices (AMH/N0621)</b>	Unit 6.1: Health, Safety, Emergency Preparedness and Workplace Hygiene	6.1.1 Ethics and Values in the Workplace	135	<a href="https://youtu.be/-Aqqk1FUy-lrw-?si=lmAJ27MHJzVcA---">https://youtu.be/-Aqqk1FUy-lrw-?si=lmAJ27MHJzVcA---</a>	 What is Workplace Ethics?
	Unit 6.3: Sustainability, Resource Efficiency and Waste Management	6.3.4 Waste Segregation and Disposal	135	<a href="https://youtu.be/-K6ppCC3l-boU-?si=jljDL9HoQ2ZavJfn">https://youtu.be/-K6ppCC3l-boU-?si=jljDL9HoQ2ZavJfn</a>	 What is Waste Management?
<b>Module 7: Maintaining a healthy, safe and secure working environment in the organisation PWD &amp; Gender Sensitivity Requirements (AMH/N1605)</b>	Unit 7.1: Workplace Safety Protocols and Compliance	7.1.4 Safe Equipment Handling and Use of PPE	170	<a href="https://youtu.be/-p_9hOqd-w75o-?si=9carQ06bt6VjguCq">https://youtu.be/-p_9hOqd-w75o-?si=9carQ06bt6VjguCq</a>	 Personal Protective Equipment (PPE)







**Skill India**  
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सत्यमेव जयते  
GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT  
& ENTREPRENEURSHIP



**APPAREL MADE-UPS HOME FURNISHING  
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