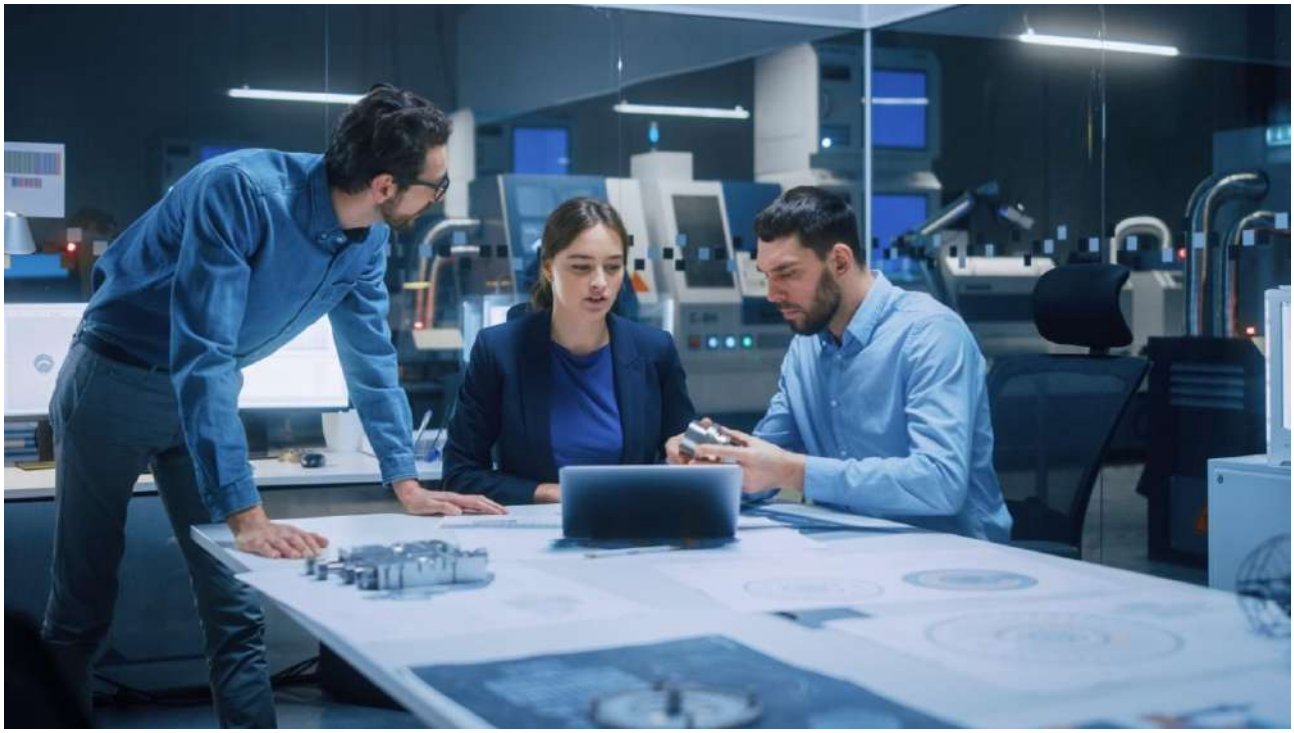

# Model Curriculum

**QP Name: Industrial Engineer-Apparel**

**QP Code: AMH/Q2001**

**QP Version: 4.0**

**NSQF Level: 6**

**Model Curriculum Version: 4.0**

Apparel, Made-ups & Home furnishing Sector Skill Council |Flat No. A312 To A323, Third Floor Somdatt Chamber –I Bikhaji Cama Place, Africa Avenue New Delhi-110066,

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# Training Parameters

| | |
|---|---|
| **Sector** | **Apparels** |
| **Sub-Sector** | Apparel, Made-Ups & Home Furnishing |
| **Occupation** | Production |
| **Country** | India |
| **NSQF Level** | 6 |
| **Aligned to NCO/ISCO/ISIC Code** | NCO-2015/2141.0300 |
| **Minimum Educational Qualification and Experience** | • Completed 1st year of 3-year/ 4-years UG((Mathematics/Science/B. Tech)) with 1.5 year relevant experience required<br>• Previous relevant Qualification of NSQF Level 5 with 3 year relevant experience |
| **Pre-Requisite License or Training** | Training in Industrial Engineering & Process Improvement, preferably |
| **Minimum Job Entry Age** | 20 Years |
| **Last Reviewed On** | 18-02-2025 |
| **Next Review Date** | 18-02-2028 |
| **NSQC Approval Date** | 18/02/2025 |
| **QP Version** | 4.0 |
| **Model Curriculum Creation Date** | 08/01/2025 |
| **Model Curriculum Valid Up to Date** | 18-02-2028 |
| **Model Curriculum Version** | 4.0 |
| **Minimum Duration of the Course** | 600 |
| **Maximum Duration of the Course** | 600 |

# Program Overview

This section summarizes the end objectives of the program along with its duration.

## Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Plan the sewing line operations based on production target.
- Supervise, analyse and evaluate performance on sewing floor.
- Resolve production problems to implement better production system.
- Manage data, forms and instructions for recording.
- Evaluate and ensure required quality of data prior to reporting.
- Perform industrial and organisational requirements.
- Adhere to regulatory compliances.
- Maintain a healthy, safe and secure working environment at the workplace.

Follow greening and energy conservation activities as per the guidelines

## Compulsory Modules

The table lists the modules, their duration and mode of delivery.

| NOS and Module Details | Theory Duration | Practical Duration | On-the-Job Training Duration (Mandatory) | On-the-Job Training Duration (Recommended) | Total Duration |
|---|---|---|---|---|---|
| **AMH/N2001: Select fabrics, trims and accessories as per specific product category**<br>**NOS Version- 3.0**<br>**NSQF Level- 6** | **45.00** | **75.00** | **30.00** | **0.00** | **150.00** |
| Module 1 Introduction and Orientation- Bridge Module | 3.00 | 0.00 | 0.00 | 0.00 | 3.00 |
| Module 2 Select fabrics, trims and accessories as per specific product category | 42.00 | 75.00 | 30.00 | 0.00 | 147.00 |
| **AMH/N2002: Supervise, Analyse and Evaluate Performance on Sewing Floor**<br>**NOS Version- 3.0**<br>**NSQF Level- 6** | **33.00** | **57.00** | **30.00** | **0.00** | **120.00** |
| Module 3 Supervise, Analyze and Evaluate Performance on Sewing Floor | 33.00 | 57.00 | 30.00 | 0.00 | 120.00 |

| | | | | | |
|---|---|---|---|---|---|
| **AMH/N2003: Research and Resolve production problems to implement better production system**<br>**NOS Version- 3.0**<br>**NSQF Level- 6** | **21.00** | **69.00** | **0.00** | **0.00** | **90.00** |
| Module 4 Research and Resolve production problems to implement better production system | 21.00 | 69.00 | 0.00 | 0.00 | 90.00 |
| **AMH/N2004: Manage data, forms and instructions for recording, evaluating and reporting quality and reliability data**<br>**NOS Version- 3.0**<br>**NSQF Level- 6** | **15.00** | **75.00** | **0.00** | **0.00** | **90.00** |
| Module 5 Manage data, forms and instructions for recording, evaluating and reporting quality and reliability data | 15.00 | 75.00 | 0.00 | 0.00 | 90.00 |
| **AMH/N0621: Adhere to industry, regulatory, and organizational standards and embrace environmentally sustainable practices**<br>**NOS Version- 1.0**<br>**NSQF Level- 5** | **15.00** | **15.00** | **0.00** | **0.00** | **30.00** |
| Module 6 Adhere to industry, regulatory, and organizational standards and embrace environmentally sustainable practices | 15.00 | 15.00 | 0.00 | 0.00 | 30.00 |
| **AMH/N1605: Maintaining a healthy, safe and secure working environment in the organization with Gender and PwD Sensitization**<br>**NOS Version- 4.0**<br>**NSQF Level- 6** | **15.00** | **15.00** | **0.00** | **0.00** | **30.00** |
| Module 7 Maintaining a healthy, safe and secure working environment in the organisation PWD & Gender Sensitivity Requirements | 15.00 | 15.00 | 0.00 | 0.00 | 30.00 |
| **DGT/VSQ/N0102: Employability Skills**<br>**NOS Version- 1.0**<br>**NSQF Level- 4** | **36.00** | **54.00** | **0.00** | **0.00** | **90.00** |
| Module 8 Employability Skills | 36.00 | 54.00 | 0.00 | 0.00 | 90.00 |
| **Total Duration** | **180.00** | **360.00** | **60.00** | **0.00** | **600.00** |

# Module Details

## Module Name 1: Introduction and Orientation to Industrial Engineer (IE)

***Mapped to AMH/N2001: NOS (Version- 3.0)***

**Terminal Outcomes:**

- Describe the outline of the Apparel industry in India
- Recognize various employment opportunities for a 'Industrial Engineer' in the apparel industry.
- Identify apparel production process and the role that the 'Industrial Engineer' plays in the process.
- Understand the production process

| **Duration**: *<03:00>* | **Duration**: *<00:00>* |
|---|---|
| **Theory – Key Learning Outcomes** | **Practical – Key Learning Outcomes** |
| •Describe various employment opportunities for an 'Industrial Engineer (IE)' in the apparel industry.<br>•Describe the relationship between work role of an 'Industrial Engineer (IE)' and the overall manufacturing process.<br>•Describe the production process and the specific work activities that relate to the whole process.<br>•Explain the roles and responsibilities of an 'Industrial Engineer (IE)'. | |
| **Classroom Aids:** | |
| **C**harts, Models, Flip Chart, White-Board/Smart Board, Marker, Duster | |
| **Tools, Equipment and Other Requirements** | |
| **training kit (trainer guide, presentations)** | |

## Module Name 2: Select fabrics, trims and accessories as per specific product category

***Mapped to (AMH/N2001) (version 3.0)***

**Terminal Outcomes:**

- Distinguish types and grades of elastic and non-elastic fabrics, apparels and garments.
- Identify basic elements of fabric nap and identification of nap.
- The significance IE Job role in Apparel Industry.
- Understand the SAM & costing stage
- Importance of the Plan and establish the sequence of operations.

| *Duration: 42:00* | *Duration: 75:00* |
|---|---|
| **Theory – Key Learning Outcomes** | **Practical – Key Learning Outcomes** |
| • Analyse the business plan and strategy against implementation procedure and success factors.<br>• Prepare operation bulletin to estimate SAM (Standard Allowed Minute) with productivity at the costing stage<br>• cost analysis in consultation with relevant stakeholders.<br>• Determine worker functions and responsibilities by studying operations sequence, material flow, functional.<br>• Plan and establish the sequence of operations to fabricate and assemble parts or products and to promote efficient utilization.<br>• Regulate workflow schedules according to established manufacturing sequences and lead times to expedite production operations.<br>• Communicate to the concerned authority about production plan and standards.<br>• Analyse detailed instructions, drawings, or specifications to explain how devices,<br>• parts, equipment, or structures are to be fabricated, constructed, assembled, modified, maintained, or used.<br>• Classify defects as critical and non-critical.<br>• Analyse risk assessment processes. | • Identify current industrial policies related to factory, machine and method.<br>• Identify product requirements of construction specification and quality standards.<br>• Identify machine specifications and related regulations in the organisation.<br>• Design layout of equipment, materials, and workspace to achieve maximum<br>• efficiency, using drafting tools and computer.<br>• Evaluate the precision and accuracy of production and testing equipment and<br>• engineering drawings to formulate a corrective action plan.<br>• Identify critical defect zones.<br>• Identify the authorised personnel to whom problems should be referred in case the problem lies outside the limit of responsibility of own job role.<br>• Identify inter departmental material movement procedure.<br>• Explain the nature of logistics and supply chains.<br>• Identify compliance guidelines for vendors.<br>• Identify reporting procedures, formats and their periodicity followed in the organisation.<br>• Identify the escalation matrix of the organisation.<br>• Estimate sizes, distances, and quantities; for determining time, costs, resources, or materials needed to perform a work activity.<br>• Analyse factors involved in mathematical analysis and decision making.<br>• Statements, organization charts, and project information.<br>• Interpret the organization's tools, templates and processes for recording and monitoring process confirmation and deviations.<br>• Plan delivery schedule based on production forecasts, material substitutions, storage and handling facilities, and maintenance requirements. |
| **Classroom Aids:** | |
| Charts, Models, Flip Chart, White-Board/Smart Board, Marker, Duster | |
| **Tools, Equipment, and Other Requirements** | |
| **Training kit (trainer guide, presentations)**<br>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 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, 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

**Unique Equipment Required:**

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 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, 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

## Module Name 3: Supervise, Analyse and Evaluate Performance on Sewing Floor

*Mapped to (AMH/N2002) (version 3.0)*

**Terminal Outcomes:**

- Set the production time as per the SAM.
- Set the work target to supervisors.
- Identify Framework as per the guideline's ion.
- Identify documentation process
- Understand the work process at the shop floor.
- Identify the process of documentation process for the work

| *Duration: 33:00* | *Duration: 57:00* |
|---|---|
| **Theory – Key Learning Outcomes** | **Practical – Key Learning Outcomes** |
| • Explain the operations sequence, material flow, functional statements to evaluate the production flow process.<br>• Set goals and targets as per production directives for all operators in a production line.<br>• Explain the elements of a professional code of ethics and standards of practice.<br>• Interpret framework and guidelines prescribed by the organization for redressal of queries and problems.<br>• Interpret documentation requirements for performance evaluation of operations and operators. | • Identify the documentation requirements for each procedure carried out as part of roles and responsibilities.<br>• Analyse subordinate reporting executives' problems and queries and document it in the organization's prescribed format.<br>• Identify redressal documentation mechanisms available in the organisation.<br>• Maintain documentation related to redressals.<br>• Interpret framework and guidelines prescribed in the organisation for performance evaluations<br>• Analyse the process flow for performance evaluation and documentation.<br>• Evaluate the precision and accuracy of production and testing equipment and layout to formulate a corrective action plan.<br>• Review production schedules, engineering specifications, orders, and related information to obtain knowledge of manufacturing methods, procedures, and activities.<br>• Monitor all the activities performed by operators and ensure optimization to achieve the set goals.<br>• Select a tangible measuring system for operators as per the goals and targets assigned.<br>• Analyse statistical data and product specifications to determine standards and |

| | |
|---|---|
| | establish quality and reliability objectives of finished product.<br>• Ensure strict adherence of all activities performed by operators to production guidelines.<br>• Evaluate the performance of operators and reporting on the designed measures and metrics as per the production guidelines<br>• Create quantified measures and metrics to analyse the performance delivered by operators.<br>• Explain the basic elements of software or format such as MS word, excel, power point and management information system (MIS), general sewing data (GSD), pre-determined motion time systems (PMTS) etc. as prescribed by the organisation.<br>• Provide necessary feedback to concerned line supervisors whenever necessary.<br>• Escalate all the documents and appropriate support measures to the human resources department for official records. |
| **Classroom Aids:** | |
| Charts, Models, Flip Chart, White-Board/Smart Board, Marker, Duster | |
| **Tools, Equipment, and Other Requirements** | |
| 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 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, 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<br><br>**Unique Equipment Required:**<br><br>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 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, 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 | |

## Module Name 4: Research and Resolve production problems to implement better production system

***Mapped to (AMH/N2003) (version 3.0)***

**Terminal Outcomes:**

- Set the production time as per the SAM.
- Set the work target to supervisors.
- Identify Specification of Garment construction.
- Identify the work by checking the ticket or job card.
- Evaluate the garment.

| *Duration: 21:00* | *Duration: 69:00* |
|---|---|
| **Theory – Key Learning Outcomes** | **Practical – Key Learning Outcomes** |
| • Explain specifications for garment construction.<br>• Explain quality systems and other processes practiced in the organisation.<br>• Explain the various types of problems associated with different kind of<br>• production system and how to report them<br>• to appropriate people.<br>• Interpret safe working practices and organisational procedures.<br>• Analyse labour utilization standards, and cost analysis systems to develop efficiency and productivity.<br>• Describe the importance of complying with written instructions.<br>• Provide feedback regarding methods for improving utilization of personnel, material, and utilities.<br>• Interpret the organization's tools, templates and processes for export marketing related operations.<br>• Interpret routing guidelines.<br>• Explain the invoice in instructions and process. | • Identify the manufacturer's guidelines for the machine.<br>• Interpret the organisation's policies, procedures, guidelines and standards.<br>• Analyse different type of production system and their feasibility with product requirement.<br>• Evaluate the method to adopt for operating the machine.<br>• Interpret required manufacturing standards and procedures.<br>• Develop garment manufacturing methods.<br>• Identify the sequence of operations for manufacturing.<br>• Review the production process in terms of method and machine requirement.<br>• Apply statistical methods and perform mathematical calculations to determine manufacturing process problems.<br>• Identify who to refer problems to when they are outside the limit of own authority.<br>• Identify reporting procedure in case of faults in own/ other processes.<br>• Carry out process re-engineering and set the production benchmarks. |
| **Classroom Aids:** | |
| Charts, Models, Flip Chart, White-Board/Smart Board, Marker, Duster | |
| **Tools, Equipment, and Other Requirements**<br>Data management and recording software, Sewing Data Analysis software. | |
| **Unique Equipment Required:**<br><br>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 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, 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 | |

## Module Name 5: Manage data, forms and instructions for recording, evaluating and reporting quality and reliability data

***Mapped to (AMH/N2004) (version 3.0)***

**Terminal Outcomes:**

- Carryout the process of data managing as per the company norms.
- Knowledge of documentation process.
- Carry out operations at a rate which maintains work flow and meets production targets.
- Explain the Organization policy.
- Explain the costing as per the product and SAM.
- Understand the software of IE.

| *Duration: 15:00* | *Duration: 75:00* |
|---|---|
| **Theory – Key Learning Outcomes** | **Practical – Key Learning Outcomes** |
| • Describe the organisation's policies and procedures.<br>• Explain the protocol to obtain more information on work-related tasks.<br>• Identify the documentation and reporting formats of the organisation.<br>• Interpret the documentation framework related to industrial engineering.<br>• Interpret the protocol and format for reporting work-related risks/problems.<br>• Analyse the method of obtaining/giving feedback related to performance.<br>• Interpret the process for offering/obtaining work-related assistance.<br>• Explain the record keeping method followed in the organisation.<br>• Explain how to evaluate information collected during the inspection.<br>• Supervise the process of documentation of various processes.<br>• Document the Operation Bulletin created to estimate SAM with productivity at the costing stage.<br>• Record special and new operations via video and build a database for operations with Sewing Data Analysis software.<br>• Explain the importance of teamwork and harmonious working relationships. | • Monitor recording of information to ensure currency of engineering drawings and documentation of production problems.<br>• List the guidelines for storage of records.<br>• Maintain documents such as standard operating procedures of various functions\ according to organisation norms.<br>• Store the information according to organisation norms.<br>• Record relevant information using an appropriate data management software effectively.<br>• Check and validate the operation bulletin and the SAMs in the production floor, thereby regulating the unnecessary operations.<br>• Store the records, SOPs and other analysis documents in such a way that it can be retrieved easily whenever required.<br>• Demonstrate report writing method and techniques.<br>• Document the operation bulletin as per organisation's procedure and protocol.<br>• Maintain and store all reports in a safe and secure condition as per organisational norms.<br>• Maintain confidentiality of the reports /data/analysis, wherever applicable.<br>• Ensure all reports and documents are prepared as per the specified format. |
| **Classroom Aids:** | |
| Charts, Models, Flip Chart, White-Board/Smart Board, Marker, Duster | |
| **Tools, Equipment, and Other Requirements** | |
| **Training kit (trainer guide, presentations)**<br>**Unique Equipment Required:**<br><br>Fabric checking(inspection) 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, metallic comb, tweezer, 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 meters, 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),fabric, samples(garments, made ups and home furnishing) | |

## Module Name 6 : Adhere to industry, regulatory, and organizational standards and embrace environmentally sustainable practices

*Mapped to (AMH/N0621) (version 1.0)*

**Terminal Outcomes:**

- Importance of Punctuality
- Understand the organizational requirement
- Importance of Green jobs in organization
- Optimize usage of material and resources at workplace.

| Duration: 15:00 | Duration: 15:00 |
|---|---|
| **Theory – Key Learning Outcomes** | **Practical – Key Learning Outcomes** |
| • State the importance of having an ethical and value-based approach to governance.<br>• State benefits to self and the organisation due to practice of values and ethics.<br>• State the importance of punctuality and attendance.<br>• State customer specific requirements mandated as a part of the work process.<br>• State country/customer specific regulations for the apparel sector and their importance.<br>• State reporting procedure of the organisation in case of deviations.<br>• State limits of personal responsibility.<br>• Report any possible deviation to regulatory requirements.<br>• Clarify doubts on policies and procedures, from the supervisor or other authorized personnel.<br>• Explain importance of greening solutions, procedures, policies, legislation and regulations<br>• Discuss the significance of specified usage of resources at work area<br>• Evaluate the different ways to conserve energy in Apparel sector | • Provide support to the supervisor and team members in enforcing the organisational considerations.<br>• Identify procedures to follow if legal, regulatory and ethical requirements of the organisation are not met.<br>• Interpret correctly legal, regulatory and ethical requirements specific to the apparel industry.<br>• Carry out work functions in accordance with organizational standards, greening solutions, procedures, policies, legislation and regulations.<br>• Making conscious and sustainable decisions for achieving effective and green workplace.<br>• Follow the organisational policies and procedures within limits of self-authority.<br>• Discussed the importance of switch of the machine when not in use.<br>• Carrying out work functions in accordance with organizational standards, greening solutions, procedures, policies, legislation and regulations.<br>• Demonstrate the method of handling and storage of waste materials such as paper, sketches, colouring tools, electronic waste, etc<br>• Dimonsatrat the process of sagraction of waste |
| Classroom Aids: | |
| Charts, Models, Flip Chart, White-Board/SmartBoard, Marker, Duster | |
| **Tools, Equipment, and Other Requirements**<br>Documents related to the subject, Computer with peripherals | |
| Basic Stationery | |

## Module Name 7: Maintaining a healthy, safe and secure working environment in the organization PWD & Gender Sensitivity Requirements

*Mapped to (AMH/N1605) (version 4.0)*

**Terminal Outcomes:**

- Demonstrate the process involved to keep up the Safety and secure working environment
- Discussed the importance of PWD & Gender Sensitivity

| Duration: 15:00 | Duration: 15:00 |
|---|---|
| **Theory – Key Learning Outcomes** | **Practical – Key Learning Outcomes** |
| • Explain health and safety related practices applicable at the workplace.<br>• Explain importance of complying with health, safety, gender and PWD related instructions applicable to workplace<br>• Explain gender equality in apparel industry Describe the layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points.<br>• Follow environment management system related procedures.<br>• Comply with health and safety related instructions applicable in the workplace.<br>• List potential hazards, risks and threats based on the nature of operations.<br>• List potential risks due to own actions and methods to minimize these.<br>• Report hazards and potential risks/ threats to supervisors or other authorized personnel.<br>• Seek clarifications, from supervisors or other authorized personnel in case of perceived risks.<br>• State reporting protocol and documentation required.<br>• Describe occupational health and safety risks and methods.<br>• State organizational procedures for safe handling of equipment and machine operations.<br>• Explain various personal protective equipment and their method of use.<br>• Report unsafe equipment and other dangerous occurrences.<br>• List details of personnel trained in first aid, fire-fighting and emergency response.<br>• Describe actions to take in the event of a mock drill/ evacuation procedures or actual accident, emergency or fire.<br>• Participate in mock drills/ evacuation procedures organized at the workplace.<br>• Undertake first aid, fire-fighting and emergency response training.<br>• Report any service malfunctions that cannot be rectified. | • Discuss importance of training sensitization programs for gender, and PWD awareness organized at workplace.<br>• State environmental management system related procedures to be followed at the workplace.<br>• Discussed how to accommodate employees with disabilities<br>• Discuss importance of adapting environment friendly processes<br>• Describe potential accidents, emergencies and response to these scenarios.<br>• Monitor the workplace and work processes for potential risks and threats.<br>• Ensure the work area is free from potential hazards.<br>• Carry out periodic walk-through to keep the work area free from hazards and obstructions, if assigned.<br>• State importance of sound health, hygiene and good habits.<br>• Minimize health and safety risks to self and others due to own actions.<br>• Identify and correct (if possible) malfunctions in machinery and equipment.<br>• Explain identification, handling and storage of hazardous substances.<br>• Identify signage related to health and safety and their meaning.<br>• Use appropriate personal protective equipment as per protocol.<br>• Carry out own activities in line with approved guidelines and procedures.<br>• Take action based on instructions in the event of fire, emergencies or accidents.<br>• Follow organization procedures for shutdown and evacuation when required. |

| |
|---|
| Classroom Aids: |
| Charts, Models, Flip Chart, White-Board/Smart Board, Marker, Duster |
| **Tools, Equipment, and Other Requirements**<br><br>Training kit (Trainer guide, Presentations), appropriate personal protective equipment (PPE), First aid box with all contents. |
| **Unique Equipment Required:**<br><br>Fabric checking(inspection) 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, metallic comb, tweezer, 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 and chair, first aid & dustbin, basic stationary items(pens, pencils, erasers),fabric, samples(garments, made ups and home furnishing) |

## Module Name 8: Employability Skills

*DGT/VSQ/N0102: NOS (Version- 1.0)*

**Terminal Outcomes:**

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

| |
|---|
| *Duration: 60:00( Theory 24 Hrs + Practical 36 Hrs)* |
| **Key Learning Outcomes** |
| Introduction to Employability Skills Duration: 1.5 Hours<br>After completing this programme, participants will be able to:<br>1. Discuss the Employability Skills required for jobs in various industries<br>2. List different learning and employability related GOI and private portals and their usage<br><br>Constitutional values - Citizenship Duration: 1.5 Hours<br>3. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen<br>4. Show how to practice different environmentally sustainable practices.<br><br>Becoming a Professional in the 21st Century Duration: 2.5 Hours |

5. Discuss importance of relevant 21st century skills.
6. Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.
7. Describe the benefits of continuous learning.

Basic English Skills Duration: 10 Hours
8. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
9. Read and interpret text written in basic English
10. Write a short note/paragraph / letter/e -mail using basic English

Career Development & Goal Setting Duration: 2 Hours
11. Create a career development plan with well-defined short- and long-term goals

Communication Skills Duration: 5 Hours
12. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
13. Explain the importance of active listening for effective communication
14. Discuss the significance of working collaboratively with others in a team

Diversity & Inclusion Duration: 2.5 Hours
15. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
16. Discuss the significance of escalating sexual harassment issues as per POSH act.

Financial and Legal Literacy Duration:5 Hours
17. Outline the importance of selecting the right financial institution, product, and service
18. Demonstrate how to carry out offline and online financial transactions, safely and securely

19. List the common components of salary and compute income, expenditure, taxes, investments etc.
20. Discuss the legal rights, laws, and aids
Essential Digital Skills Duration: 10 Hours
21. Describe the role of digital technology in today's life
22. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
23. Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, e-mails, etc., safely and securely
24. Create sample word documents, excel sheets and presentations using basic features
25. utilize virtual collaboration tools to work effectively

Entrepreneurship Duration: 7 Hours
26. Explain the types of entrepreneurship and enterprises
27. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan
28. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement
29. Create a sample business plan, for the selected business opportunity

Customer Service Duration: 5 Hours
30. Describe the significance of analyzing different types and needs of customers
31. Explain the significance of identifying customer needs and responding to them in a professional manner.
32. Discuss the significance of maintaining hygiene and dressing appropriately

Getting Ready for apprenticeship & Jobs Duration: 8 Hours
33. Create a professional Curriculum Vitae (CV)

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| 34. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively<br>35. Discuss the significance of maintaining hygiene and confidence during an interview<br>36. Perform a mock interview<br>37. List the steps for searching and registering for apprenticeship opportunities |
| **Classroom Aids:** |
| Charts, Models, Flip Chart, White-Board/SmartBoard, Marker, Duster |
| **Tools, Equipment, and Other Requirements** |
| 1.Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed)<br>(all software should either be latest version or one/two version below)<br>As required<br>2.UPS As required 3. Scanner cum Printer As required 4. Computer Tables As required 5. Computer Chairs As required<br>6. LCD Projector As required 7. White Board 1200mm x 900mm As required |

# Annexure

## Trainer Requirements

**Trainer Prerequisites**

| Minimum Educational Qualification | Specialization | Relevant Industry Experience | | Training Experience | | Remarks |
|---|---|---|---|---|---|---|
| | | *Years* | *Specialization* | *Years* | *Specialization* | |
| Diploma | | 4 Year | Industrial Engineer (IE) | 0 | Industrial Engineer (IE) | The candidate should be able to communicate in English and local language. The candidate should have knowledge of equipment, tools, material, Safety, Health & hygiene. |
| Graduation | | 3 Year | Industrial Engineer (IE) | 0 | Industrial Engineer (IE) | |
| Post graduate diploma | | 2 Year | Industrial Engineer (IE) | 0 | Industrial Engineer (IE) | |
| Post Graduate Degree in relevant trade or sector | | 1 Year | Industrial Engineer (IE) | 0 | Industrial Engineer (IE) | |

**Trainer Certification**

| Domain Certification | Platform Certification |
|---|---|
| Certificate for Job Role: **"Industrial Engineer Apparel''mapped to QP: "AMH/Q2001" Minimum accepted score is 80%.** | Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "Master Trainer (VET and Skills) MEP/Q2601 v2.0". Minimum accepted score is 80%. |

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## Assessor Requirements

| Assessor Prerequisites | | | | | | |
|---|---|---|---|---|---|---|
| **Minimum Educational Qualification** | **Specialization** | **Relevant Industry Experience** | | **Training Experience** | | **Remarks** |
| | | ***Years*** | ***Specialization*** | ***Years*** | ***Specialization*** | |
| ITI | | 4 Year | Industrial Engineer (IE) | 0 | Industrial Engineer (IE) | The candidate should be able to communicate in English and local language. The candidate should have knowledge of equipment, tools, material, Safety, Health & hygiene. |
| Diploma | | 4 Year | Industrial Engineer (IE) | 0 | Industrial Engineer (IE) | |
| Graduation | | 3 Year | Industrial Engineer (IE) | 0 | Industrial Engineer (IE) | |
| Post graduate diploma | | 2 Year | Industrial Engineer (IE) | 0 | Industrial Engineer (IE) | |
| Post Graduate Degree in relevant trade or sector | | 1 Year | Industrial Engineer (IE) | 0 | Industrial Engineer (IE) | |

| Assessor Certification | |
|---|---|
| **Domain Certification** | **Platform Certification** |
| Certificate for Job Role: **"Industrial Engineer Apparel'' mapped to QP: "AMH/Q2001" Minimum accepted score is 80%.** | Recommended that the Assessor is certified for the Job Role: "Assessor", mapped to the Qualification Pack: "Assessor (VET and Skills) MEP/Q2701 v2.0". Minimum accepted % as per respective SSC guidelines is 80%. |

| Trainer Prerequisites Employability Skills |
|---|

| Minimum Educational Qualification | Specialization | Relevant Industry Experience | | Training/Assessment Experience | | Remarks |
|---|---|---|---|---|---|---|
| | | *Years* | *Specialization* | *Years* | *Specialization* | |
| **Graduate/CITS** | Any discipline | | | 2 | Teaching experience | Prospective ES trainer should:<br>• have good communication skills<br>• be well versed in English<br>• have digital skills<br>• have attention to detail<br>• be adaptable<br>• have willingness to learn |
| **Current ITI trainers** | Employability Skills Training (3 days full-time course done between 2019-2022) | | | | | |
| **Certified current EEE trainers (155 hours)** | from Management SSC (MEPSC) | | | | | |
| **Certified Trainer** | Qualification Pack: Trainer (MEP/Q0102) | | | | | |

| **Trainer Certification Employability Skills** | |
|---|---|
| **Domain Certification** | **Platform Certification** |
| **Certified in 60-hour Employability NOS (2022), with a minimum score of** 80%<br>OR<br>**Certified in 120-, 90-hour Employability NOS (2022), with a minimum score of** 80% | NA |

| **Master Trainer Prerequisites Employability Skills** | | | | | | |
|---|---|---|---|---|---|---|
| **Minimum Educational Qualification** | **Specialization** | **Relevant Industry Experience** | | **Training/Assessment Experience** | | **Remarks** |
| | | *Years* | *Specialization* | *Years* | *Specialization* | |

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|---|---|---|---|---|---|---|
| **Graduate/CITS** | Any discipline | | | 3 | Employability Skills curriculum training experience with an interest to train as well as orient other | Prospective ES Master trainer should:<br>• have good communication skills<br>• be well versed in English<br>• have basic digital skills<br>• have attention to detail<br>• be adaptable<br>• have willingness to learn<br>• be able to grasp concepts fast and is creative with teaching practices and likes sharing back their learning with others |
| **Certified Master Trainer** | Qualification Pack: Master Trainer (MEP/Q2602 | | | 3 | EEE training of Management SSC (MEPSC) (155 hours) | |

| **Master Trainer Certification Employability Skills** | |
|---|---|
| **Domain Certification** | **Platform Certification** |
| **Certified in 60-hour Employability NOS (2022), with a minimum score of** 90%.<br>OR<br>**Certified in 120-, 90-hour Employability NOS (2022), with a minimum score of** 90% | NA |

## Assessment Strategy

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. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS. examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each.
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on these criteria.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% aggregate in QP.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

## Acronyms and Abbreviations

| | |
|---|---|
| **NOS** | National Occupational Standard(s) |
| **NSQF** | National Skills Qualifications Framework |
| **QP** | Qualifications Pack |

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| **TVET** | Technical and Vocational Education and Training |

## Glossary

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| **Sector** | Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests. |
| **Sub-sector** | Sub-sector is derived from a further breakdown based on the characteristics and interests of its components. |
| **Occupation** | Occupation is a set of job roles, which perform similar/ related set of functions in an industry. |
| **Job role** | Job role defines a unique set of functions that together form a unique employment opportunity in an organization. |
| **Occupational Standards (OS)** | OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts. |
| **Performance Criteria (PC)** | Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task. |
| **National Occupational Standards (NOS)** | NOS are occupational standards which apply uniquely in the Indian context. |
| **Qualifications Pack (QP)** | QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code. |
| **Unit Code** | Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N' |
| **Unit Title** | Unit title gives a clear overall statement about what the incumbent should be able to do. |
| **Description** | Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for. |
| **Scope** | Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required. |
| **Knowledge and Understanding (KU)** | Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard. |

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| **Organisational Context** | Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility. |
| **Technical Knowledge** | Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities. |
| **Core Skills/ Generic Skills (GS)** | Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles. |
| **Electives** | Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives. |
| **Options** | Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options. |