COMPETENCY STANDARD

FOR

FABRIC PRINTING MACHINE OPERATION

(RMG & Textile Sector)

Level: 03

Competency Standard Code: CS-RMGT-FPMO-L3-EN-V1

National Skills Development Authority
Prime Minister's Office
Government of the People's Republic of Bangladesh

Copyright

National Skills Development Authority
Prime Minister's Office
Level: 10-11, Biniyog Bhaban,
E-6 / B, Agargaon, Sher-E-Bangla Nagar Dhaka-1207, Bangladesh.
Email: ec@nsda.gov.bd
Website: www.nsda.gov.bd.
National Skills Portal: http:\\skillsportal.gov.bd

This Competency Standard for Occupation is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order to meet the qualification of individuals who graduated through the established standard via competency-based assessment for a relevant job.

This document has been developed by NSDA in association with RMG & Textile Sector, industry representatives, academia, related specialist, trainer and related employee.

Public and private institutions may use the information contained in this standard for activities benefitting Bangladesh.

Introduction

The NSDA aims to enhance an individual's employability by certifying completeness with skills. NSDA works to expand the skilling capacity of identified public and private training providers qualitatively and quantitatively. It also aims to establish and operationalize a responsive skills ecosystem and delivery mechanism through a combination of well-defined set of mechanisms and necessary technical supports.

Key priority economic growth sectors identified by the government have been targeted by NSDA to improve current job skills along with existing workforce to ensure required skills to industry standards. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training program. "**Fabric Printing Machine Operation**" is selected as one of the priority occupations of **RMG & Textile** Sector. This standard is developed to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISC's), employer associations and employers.

Generally, a competency standard informs curriculum, learning materials, assessment and certification of trainees enrolled in Skills Training. Trainees who successfully pass the assessment will receive a qualification in the National Skills Qualification Framework (NSQF) under Bangladesh National Qualification Framework and will be listed on the NSDA's online portal.

This competency standard is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements. A series of stakeholder consultations, workshops were held to develop this document.

The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of Units of Competence and its corresponding Elements.

Overview

A competency standard is a written specification of the knowledge, skills and attitudes required for the performance of an occupation, trade or job corresponding to the industry standard of performance required in the workplace.

The purpose of a competency standards is to:

- provide a consistent and reliable set of components for training, recognising and assessing people's skills, and may also have optional support materials
- enable industry recognised qualifications to be awarded through direct assessment of workplace competencies
- encourage the development and delivery of flexible training which suits individual and industry requirements
- encourage learning and assessment in a work-related environment which leads to verifiable workplace outcomes

Competency standards are developed by a working group comprised of representative from NSDA, Key Institutions, ISC, and industry experts to identify the competencies required of an occupation in Informal Sector.

Competency standards describe the skills, knowledge and attitude needed to perform effectively in the workplace. CS acknowledge that people can achieve technical and vocational competency in many ways by emphasizing what the learner can do, not how or where they learned to do it.

With competency standards, training and assessment may be conducted at the workplace or at training institute or any combination of these.

Competency standards consist of a number of units of competency. A unit of competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of competency are documented in a standard format that comprises of:

- unit title
- nominal duration
- unit code
- unit descriptor
- elements and performance criteria
- variables and range statement
- curricular content guide
- assessment evidence guide

Together, all the parts of a unit of competency:

- describe a work activity
- guide the assessor to determine whether the candidate is competent or not yet competent

The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key components of a unit of competency, including:

- a chart with an overview of all Units of Competency for the relevant occupation, trade or job including the Unit Codes and the Unit of Competency titles and corresponding Elements
- the Competency Standard that includes the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide.

Competency Standards for National Skill Certificate, Level - 03 in Fabric Printing Machine Operation in RMG & Textile Sector

Level Descriptors of NSQF (BNQF 1-6)

Level & Job classification	Knowledge Domain	Skills Domain	Responsibility Domain
6-Mid-Level Manager/ Sub Assistant Engineer	Comprehensive actual and theoretical knowledge within a specific work or study area with an awareness of the validity and limits of that knowledge, able to analyse, compare, relate and evaluate.	Specialised and wider range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems. Communicate professional issues and solutions to the team and to external partners/users.	Work under broad guidance and self-motivation to execute strategic and operational plan/s. Lead lower-level management. Diagnose and resolve problems within and among work groups.
5-Supervisor	Broad knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to scrutinize and break information into parts by identifying motives or causes.	Broad range of cognitive and practical skills required to generate solutions to specific problems in one or more work or study areas. Communicate practice-related problems and possible solutions to external partners.	Work under guidance of management and self-direction to resolve specific issues. Lead and take responsibility for the work and actions of group/team members. Bridge between management.
4-Highly Skilled Worker	Broader knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to solve problems to new situations by comparing and applying acquired knowledge.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information. Communicate using technical terminology and IT technology with partners and users as per workplace requirements.	Work under minimal supervision in specific contexts in response to workplace requirements. Resolve technical issues in response to workplace requirements and lead/guide a team/ group.
3-Skilled Worker	Moderately broad knowledge in a specific work or study area, able to perceive ideas and abstract from drawing and design according to workplace requirements.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools. Communicate with his team and limited external partners upholding the values, nature and culture of the workplace	Work or study under supervision with considerable autonomy. Participate in teams and responsible for group coordination.
2-Semi Skilled Worker	Basic understanding of underpinning knowledge in a specific work or study area, able to interpret and apply common occupational terms and instructions.	Skills required to carry out simple tasks, communicate with his team in the workplace presenting and discussing results of his work with required clarity.	Work or study under supervision in a structured context with limited scope of manipulation
1 –Basic Skilled Worker	Elementary understanding of ability to interpret the underpinning knowledge in a specific study area, able to interpret common occupational terms and instructions.	Specific Basic skills required to carry out simple tasks. Interpret occupational terms and present the results of own work within guided work environment/ under supervision.	Work under direct supervision in a structured context with limited range of responsibilities.

List of Abbreviations

CS	-	Competency Standard
ISC	-	Industry Skills Council
NSDA	-	National Skills Development Authority
NSQF	-	National Skills Qualifications Framework
OSH	-	Occupational Safety and Health
PPE	-	Personal Protective Equipment
SCVC	-	Standards and Curriculum Validation Committee
STP	-	Skills Training Provider
SOP	-	Standard Operating Procedure
UoC	-	Unit of Competency
CAPA	-	Corrective Action & Preventive Action
RCS	-	Root Cause Analysis
EPI	-	Ends per inch
TPI	-	Twist per inch
GSM	-	Gram per square meter
CVC	-	Cheap value of cotton

Approved by

---th Executive Committee (EC) Meeting of NSDA

Held on ----------

Md. Saniul Ferdous
Deputy Director (Admin)
and
Assigned Officer for Authority and EC meeting
National Skills Development Authority

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Competency Standards for National Skill Certificate, Leve-03 in Fabric Printing Machine Operation in RMG & Textile Sector

Course Structure

SL No	Unit code and Title		UOC Level	Nominal (hours)
Generic Units of Competencies				
1.	GU002L2V1	Apply Occupational Safety and Health (OSH) Procedure in the Workplace	2	15
2.	GU008L2V1	Work In a Team Environment	2	20
3.	GU019L2V1	Participate in Workplace Communication	2	10
Sub Total				**45**
Sector Specific Units of Competencies				
4.	SU-RMGT-01-L2-V1	Explore the History of Textile Sector	2	15
5.	SU-RMGT-02-L2-V1	Perform Measurement and Calculations	2	15
6.	SU-RMGT-03-L2-V1	Apply Quality Procedures	2	20
Sub Total				**50**
Occupation Specific Units of Competencies				
7.	OU-RMGT-FPMO-01-L3-V1	Illustrate Fabric Printing Process	3	35
8.	OU-RMGT-FPMO-02-L3-V1	Operate Flatbed Printing Machine	3	90
9.	OU-RMGT-FPMO-03-L3-V1	Operate Rotary Printing Machine	3	70
10.	OU-RMGT-FPMO-04-L3-V1	Operate Digital Printing Machine	3	70
Sub Total				**265**
Total Duration				**360**

Units & Elements at Glance

Generic Competencies

Code	Unit of competency	Elements of competency	Duration (hours)
GU002L2V1	Apply Occupational Safety and Health (OSH) procedure In the Workplace	1. Identify OSH policies and procedures 2. Follow OSH procedure 3. Report hazards and risks 4. Respond to emergencies 5. Maintain personal well-being	15
GU008L2V1	Work in a Team Environment	1. Define team role and scope 2. Identify individual role and responsibility 3. Participate in team discussions 4. Work as a team member	20
GU019L2V1	Participate in Workplace Communication	1. Obtain and convey workplace information 2. Speak English at a basic operational level 3. Participate in workplace meetings and discussions 4. Complete relevant work-related documents	10
		Total hours	**45**

Sector specific competencies

Code	Unit of competency	Elements of competency	Duration (hours)
SU-RMGT-01-L2-V1	Explore The History of Textile Sector	1. Examine the background of textile sector 2. Identify main industries with in textile sector 3. Identify prime local and export markets	15
SU-RMGT-02-L2-V1	Perform Measurement and Calculations	1. Identify and check measuring instruments 2. Carry out measurements 3. Interpret simple calculations 4. Maintain measuring instruments	15
SU-RMGT-03-L2-V1	Apply Quality Procedures	1. Identify quality procedures 2. Follow quality procedures 3. Maintain standard procedures	20
		Total hours	**50**

Occupation specific competencies

Code	Unit of competency	Elements of competency	Duration (hours)
OU-RMGT-FPMO-01-L3-V1	Illustrate Fabric Printing Process	1. Interpret fabric printing operation 2. Interpret printing finishing operation 3. Identify printing machineries 4. Identify dyes and chemicals for printing 5. Recognize different types of printing faults	35
OU-RMGT-FPMO-02-L3-V1	Operate Flatbed Printing Machine	1. Demonstrate flatbed printing machine 2. Collect printing paste 3. Prepare flatbed printing machine 4. Perform flatbed printing machine operation	90
OU-RMGT-FPMO-03-L3-V1	Operate Rotary Printing Machine	1. Demonstrate printing machine 2. Collect printing paste 3. Prepare rotary printing machine 4. Operate rotary printing machine	70
OU-RMGT-FPMO-04-L3-V1	Operate Digital Printing Machine	1. Demonstrate digital printing machine 2. Prepare digital printing machine 3. Operate digital printing machine	70
		Total Hours	**265**

Generic Units of Competencies

Unit Code and Title	**GU002L2V1: Apply Occupational Safety and Health (OSH) Procedure in the Workplace**
Unit Descriptor	This unit covers the knowledge, skills and attitudes (KSA) required in applying occupational safety and health (OSH) procedure in the workplace. It specifically includes identify OSH policies and procedures, follow OSH procedure, report hazards and risks, respond to emergencies and maintain personal well-being.
Nominal Hours	**15 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Identify OSH policies and procedures	1.1. **OSH policies** and **safe operating procedures** are accessed and stated 1.2. **Safety signs and symbols** are identified and followed 1.3. Emergency response, evacuation procedures and other contingency measures are determined according to workplace requirements
2. Follow OSH procedure	2.1 **Personal protective equipment (PPE)** is selected and collected as required 2.2 Personal protective equipment (PPE) is correctly used in accordance with organization OSH procedures and practices 2.3 A clear and tidy workplace is maintained as per workplace standard 2.4 PPE is maintained to keep them operational and compliant with OSH regulations
3. Report hazards and risks	3.1 **Hazards** and risks are identified, assessed and controlled 3.2 Incidents arising from hazards and risks are reported to designated authority
4. Respond to emergencies	4.1 Alarms and warning devices are responded 4.2 Workplace **emergency procedures** are followed 4.3 **Contingency measures** during workplace accidents, fire and other emergencies are recognized and followed in accordance with organization procedures 4.4 First aid procedures are applied during emergency situations
5. Maintain personal well-being	5.1 OSH policies and procedures are adhered to OSH awareness programs are participated in as per workplace guidelines and procedures.

	5.2 Corrective actions are implemented to correct unsafe condition in the workplace 5.3 **"Fit to work" records** are updated and maintained according to workplace requirements
Range of Variables	
Variables	**Range** (may include but not limited to):
1. OSH policies	1.1. Bangladesh standards for OSH 1.2. Fire Safety Rules and Regulations 1.3. Code of Practice 1.4. Industry Guidelines
2. Safe operating procedures	2.1 Orientation on emergency exits, fire extinguishers, fire escape, etc. 2.2 Emergency procedures 2.3 First Aid procedures 2.4 Tagging procedures 2.5 Use of PPE 2.6 Safety procedures for hazardous substances
3. Safety signs and symbols	3.1 Direction signs (exit, emergency exit, etc.) 3.2 First aid signs 3.3 Danger Tags 3.4 Hazard signs 3.5 Safety tags 3.6 Warning signs
4. Personal Protective Equipment (PPE)	4.1 Gas Mask 4.2 Gloves 4.3 Safety boots 4.4 Face mask 4.5 Overalls 4.6 Goggles and safety glasses 4.7 Sun block 4.8 Chemical/Gas detectors
5. Hazards	5.1 Chemical hazards 5.2 Biological hazards 5.3 Physical Hazards 5.4 Mechanical and Electrical Hazard 5.5 Mental hazard 5.6 Ergonomic hazard
6. Emergency procedures	6.1 Fire fighting 6.2 Earthquake 6.3 Medical and first aid 6.4 Evacuation

7. Contingency measures	7.1 Evacuation 7.2 Isolation 7.1 Decontamination
8. "Fit to Work" records	8.1 Medical Certificate every year 8.2 Accident reports, if any 8.3 Eye vision certificate
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 stated OSH policies and safe operating procedures 1.2 followed safety signs and symbols 1.3 used personal protective equipment (PPE) 1.4 maintained workplace clear and tidy 1.5 assessed and Controlled hazards 1.6 followed emergency procedures 1.7 followed contingency measures 1.8 implemented corrective actions
2. Underpinning knowledge	2.1 Define OSH 2.2 OSH Workplace Policies and Procedures 2.3 Work Safety Procedures 2.4 Emergency Procedures 2.5 Hazard control procedure 2.6 Different types of Hazards 2.7 PPE and there uses 2.8 Personal Hygiene Practices 2.9 OSH Awareness
3. Underpinning skills	3.1 Accessing OSH policies 3.2 Handling of PPE 3.3 Handling cleaning tools and equipment 3.4 Writing report 3.5 Responding to emergency procedures
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1 Workplace

	5.2 Equipment and outfits appropriate in applying safety measures 5.3 Tools, equipment, materials and documentation required 5.4 OSH Policies and Procedures
6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

Accreditation Requirements

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	GU008L2V1: Work in a Team Environment
Unit Descriptor	This unit covers the knowledge, skills and attitudes (KSAs) required in working in a team environment. It includes define team role and scope, identify individual role and responsibility, participate in team discussions and work as a team member.
Nominal Hours	**20 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Define team role and scope	1.1. Role and objectives of the team are defined 1.2. Team structure, responsibilities and reporting relations are identified from team discussions and other external sources
2. Identify individual role and responsibility	2.1 Individual roles and responsibilities of **team members** are identified 2.2 Reporting relationships among team members are defined and clarified 2.3 Reporting relationships external to the team are defined and clarified
3. Participate in team discussions	3.1 Ideas related to team plans are contributed 3.2 Recommendations for improving team work are put forward
4. Work as a team member	4.1 Effective forms of communication are used to interact with team members 4.2 Communication channels are followed 4.3 OHS practices are followed
Range of Variables	
Variables	**Range** (may include but not limited to):
1. Team Members	1.1 Coach/mentor 1.2 Supervisor/Manager 1.3 Peers/Colleagues 1.4 Employee representative
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 demonstrated knowledge in working in a team environment.

	1.2 satisfied the requirements mentioned in the 1.3 Performance Criteria and Range of Variables
2. Underpinning knowledge	2.1 Team Structure, Role and Responsibility 2.2 Individual Members' Roles and Responsibilities 2.3 Communication Flow and Reporting Structures 2.4 Team Planning 2.5 Interpersonal Communication Skills 2.6 Team Meeting Procedures 2.7 OHS Practices
3. Underpinning skills	3.1 Identifying the role and responsibility of the team 3.2 Identifying roles and responsibilities of individual members 3.3 Participating in team discussions 3.4 Working as a team member
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1. Pens 5.2. Telephone 5.3. Computer 5.4. Writing materials 5.5. Online communication
6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

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Unit Code and Title	**GU019L2V1: Participate in Workplace Communication**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to participate in workplace communication. It specifically includes obtain and convey workplace information, speak English at a basic operational level, Participate in workplace meetings and discussions and complete relevant work-related documents
Nominal Hours	**10 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Obtain and convey workplace information	1.1 Specific and relevant information is accessed from **appropriate sources** 1.2 Effective questioning, active listening and speaking skills are used to gather and convey information 1.3 Appropriate **medium** is used to transfer information and ideas 1.4 Appropriate non- verbal communication is used 1.5 Appropriate lines of communication with supervisors and colleagues are identified and followed 1.6 Defined workplace procedures for the location and **storage** of information is used 1.7 Personal interaction is carried out clearly and concisely
2. Speak English at a basic operational level	2.1 Simple conversations on familiar topics with work colleagues are participated 2.2 Simple verbal instructions or requests are responded to simple requests are made 2.3 Routine procedures are described 2.4 Likes, dislikes and preferences are expressed 2.5 Different **forms** of expression in English are identified
3. Participate in workplace meetings and discussions	3.1 Team meetings are attended on time 3.2 Own opinions are clearly expressed and those of others are listened to without interruption 3.3 Meeting inputs are consistent with the meeting purpose and established **protocols** 3.4 **Workplace interactions** are conducted in a courteous manner 3.5 Questions about simple routine workplace procedures and matters concerning working conditions of employment are asked and responded to 3.6 Meeting's outcomes are interpreted and implemented

4. Complete relevant work-related documents	4.1 Range of forms related to conditions of employment are completed accurately and legibly 4.2 Workplace data is recorded on standard workplace forms and documents 4.3 Basic mathematical processes are used for routine Calculations 4.4 Errors in recording information on forms/ documents are identified and corrected as required 4.5 Reporting requirements to supervisor are completed according to work place guidelines
Range of Variables	
Variables	**Range** (may include but not limited to):
1. Appropriate sources	1.1 Suppliers 1.2 Trade personnel 1.3 Local government/Authority 1.4 Industry bodies
2. Medium	2.1 Memorandum 2.2 Circular 2.3 Notice 2.4 Information discussion 2.5 Follow-up or verbal instructions 2.6 Face to face communication
3. Storage	3.1 Manual filing system 3.2 Computer-based filing system
4. Forms	4.1 Personnel forms 4.2 Telephone message forms 4.3 Safety reports forms 4.4 Collateral forms
5. Protocols	5.1 Observing meeting 5.2 Compliance with meeting decisions
6. Workplace interactions	6.1 Face to face 6.2 Telephone 6.3 Social Network Service (SNS) 6.4 Electronic and two-way radio
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	

1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 prepared written communication following standard format of work place 1.2 accessed information using communication equipment 1.3 spoken English at a basic operational level 1.4 made use of relevant terms as an aid to transfer 1.5 information effectively 1.6 conveyed information effectively adopting the formal or informal communication
2. Underpinning knowledge	2.1 Effective communication 2.2 Different modes of communication 2.3 Written communication 2.4 Work place policies 2.5 Communication procedures and systems 2.6 Technology relevant to the work place 2.7 Individual's work responsibilities
3. Underpinning skills	3.1 Speaking with simple spoken English 3.2 Performing routine workplace duties following simple written notices 3.3 Participating in workplace meetings and discussions 3.4 Completing work related documents 3.5 Estimating, calculating and recording routine workplace measures 3.6 Applying basic mathematical processes of addition, subtraction, division and multiplication 3.7 Building good relation to people of social range in the workplace 3.8 Gathering and providing information in response to workplace requirements
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1. Computer/Laptop 5.2. Telephone 5.3. Relevant tools, Equipment, software and facilities needed to perform the activities. 5.4. Required learning materials

6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

Accreditation Requirements

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Sector Specific Units of Competencies

Unit Code and Title	**SU-RMGT-01-L2-V1: Explore the History of Textile Sector**
Unit Descriptor	This unit covers the knowledge, skill and attitude required in explore the history of textile sector. It specifically includes examine the background of textile sector, identify main industries with in textile sector and prime local and export markets.
Nominal Hours	**15 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Examine the background of textile sector	1.1 The historical background of textile sector is examined and described 1.2 **Steps of textile processing** are clearly identified 1.3 Backward and forward linkages are identified
2. Identify main industries with in textile sector	2.1 Main industries of the textile sector are identified 2.2 Importance of textile sector and main industries is explored and analyzed
3. Identify prime local and export markets	3.1 Prime **local markets** and **export markets** are identified 3.2 Local and export markets are listed
Range of Variables	
Variables	**Range** (may include but not limited to):
1. Steps of textile processing	1.1 Spinning 1.2 Weaving 1.3 Dying 1.4 Printing 1.5 Finishing 1.6 Apparel manufacture
2. Local markets	2.1 Processing mills 2.2 Processing factories 2.3 Wholesale markets 2.4 Wholesale retailers
3. Export markets	3.1 Europe 3.2 United states 3.3 Australia
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 illustrated history of Textile sector

	1.2 identified basic steps of textile processing 1.3 identified prime local and export markets
2. Underpinning knowledge	2.1 History of textile sector 2.2 Steps of textile processing 2.3 Prime local and export markets
3. Underpinning skills	3.1. Describing the history of textile sector 3.2. Identifying steps of textile processing 3.3. Identifying prime local and export markets
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1. Manuals 5.2. Drawings 5.3. Specifications
6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

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Unit Code and Title	**SU-RMGT-02-L2-V1: Perform Measurement and Calculations**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required for performing measurement and calculations in textile sector. It specially includes Identify & check measuring instruments, carry out measurements, interpret simple calculations, and maintain measuring instruments.
Nominal Hours	**15 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Identify and check measuring instruments	1.1. Work instructions are confirmed and applied 1.2. Materials to be measured are identified and classified 1.3. Appropriate **measuring devices** are selected based on materials to be measured 1.4. Specifications are obtained from relevant **documents** 1.5. Tolerance and clearance limits are identified and adjusted according to job requirements
2. Carry out measurements	2.1 Accurate **measurements** are obtained in accordance with job requirements 2.2 Systems of measurements are identified and measurement conversions done as per requirement 2.3 Measurements are confirmed and recorded in the given company format
3. Interpret simple calculations	3.1 Simple calculations involving **basic operations** are carried out 3.2 **Other operations** are used to complete tasks 3.3 Appropriate formulas for calculating quantities of materials are selected 3.4 **calculations** are performed and verified 3.5 Material quantities are calculated and shared with team as per requirement
4. Maintain measuring instruments	4.1 Cleaning equipment and materials are collected 4.2 Measuring devices are cleaned, maintained and stored
Range of Variables	
Variables	**Range** (may include but not limited to):
1. Measuring device	1.1. Measuring Tape 1.2. Steel rule 1.3. Calculator

	1.4. Sets square
2. Documents	2.1 Technical Manuals 2.2 Specifications 2.3 Sketches 2.4 Charts 2.5 Photographs
3. Measurements	3.1 Length 3.2 Width 3.3 Weight 3.4 Tolerance
4. Basic operation	4.1 Addition 4.2 Subtraction 4.3 Multiplication 4.4 Division
5. Other operations	5.1 Fractions 5.2 Percentages 5.3 Mixed numbers 5.4 Conversions 5.5 Scales
6. Calculations	6.1 Area 6.2 Volume 6.3 Circumference 6.4 CBM 6.5 Volumetric Weight
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 selected measuring devices based on materials to be measured 1.2 iidentified systems of measurements 1.3 obtained measurements as per job requirements 1.4 carried out calculations for quantities of materials 1.5 confirmed and recorded measurements as per standard 1.6 maintained measuring devices
2. Underpinning knowledge	2.1 Information on measuring devices 2.2 Units of Measurement 2.3 Units of Conversion 2.4 Selection technique of appropriate measuring devices 2.5 Measurement and calculation technique for apparel merchandising 2.6 Techniques of recording measurements 2.7 Way to allowance and Tolerance

	2.8 Presentation of data and information 2.9 Instructions to use of measuring devices
3. Underpinning skills	3.1 Identifying measuring devices based on materials to be measured 3.2 Obtaining specification of measuring devices from relevant document 3.3 Taking measurement according to the job requirements 3.4 Identifying tolerance and clearance limits and adjusting according to the job requirements 3.5 Interpret calculations for quantities of materials 3.6 Conforming and recording measurements as per standard 3.7 Maintaining measuring devices
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1 Work instructions 5.2 Relevant Documents 5.3 Measuring instruments & other tools, equipment and physical facilities appropriate to perform activities. 5.4 Materials to be measured
6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

Accreditation Requirements

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Unit Code and Title	SU-RMGT-03-L2-V1: Apply Quality Procedures
Unit Descriptor	This unit covers the knowledge, skills and attitude required for applying quality procedures. It specially includes Identify & follow quality procedures & maintain standard procedures.
Nominal Hours	**20 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Identify quality procedures	1.1. **Manuals** are collected as per sample 1.2. Importance of manuals is recognized 1.3. Instructions and procedures are identified 1.4. Required information are collected from manuals 1.5. Performance measurement systems are identified
2. Follow quality procedures	2.1 Instructions and procedures are followed strictly and duties are performed in accordance with demand of **quality improvement system** 2.2 Concept of supplying product or service to meet the **customer quality requirements** is understood and accordingly applied 2.3 Conformance to specifications is ensured 2.4 Defects are detected and reported to authority according to standard operating procedures
3. Maintain standard procedures	3.1 Performance is assessed at regular interval 3.2 Specifications and standard operating procedures are established 3.3 Quality of product is checked and verified 3.4 Quality control and quality assurance system procedures for each job are followed 3.5 Conformance to specification is ensured in every case at all situations
Range of Variables	
Variables	**Range** (may include but not limited to):
1. Manuals	1.1 Buyers specification manual 1.2 Compliance manual 1.3 Maintenance procedure manual 1.4 Periodic maintenance manual 1.5 Quality manual 1.6 Signs and symbols, instruction manuals

2. quality improvement system	2.1 Quality inspection 2.2 Testing 2.3 Quality control 2.4 Quality assurance 2.5 Total Quality Management
3. Customer quality requirements	3.1 Performance 3.2 Features 3.3 Reliability 3.4 Conformance 3.5 Aesthetics 3.6 Durability
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 followed instructions and procedures strictly 1.2 performed duties in accordance with demand of quality system 1.3 ensured conformance to specifications 1.4 detected defects and reported to authority in accordance to standard operating procedures 1.5 understood concept of supplying product or service to meet the customer quality requirements 1.6 held responsible for quality work 1.7 followed quality control and quality assurance system procedures for each job
2. Underpinning knowledge	2.1 Importance of maintaining quality 2.2 quality, quality assurance, quality control, quality inspection, quality improvement and total quality control 2.3 Process and procedures for improving and maintaining quality 2.4 Procedures for addressing defects. 2.5 Record keeping within the quality improvement system in workplace 2.6 Factors, which affect successful implementation of the quality systems and procedures
3. Underpinning skills	3.1 Maintaining good quality 3.2 Eliminating poor quality 3.3 Understanding the meaning of the key terms - quality, quality assurance, quality control, quality inspection, quality improvement and total quality control. 3.4 Improving and maintaining quality 3.5 Addressing defects and procedures

	3.6 Recording within the quality improvement system in workplace. 3.7 Implementing quality systems and procedures
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1 Tools, equipment and physical facilities appropriate to perform activities. 5.2 Materials, consumables to perform activities
6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

Accreditation Requirements

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Occupation Specific Units of Competencies

Unit Code and Title	**OU-RMGT-FPMO-01-L3-V1: Illustrate Fabric Printing Process**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to illustrate fabric printing process. It specifically includes interpreting fabric printing operation, printing finishing operation, identifying printing machineries, identifying dyes and chemicals for printing and recognizing different types of printing faults.
Nominal Hours	**35 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Interpret fabric printing operation	1.1 **Types of fabric** are identified in terms of printing methods 1.2 **Printing terminology** are defined 1.3 **Printing styles** are identified 1.4 **Printing methods** are described 1.5 Printing process flow chart are interpreted
2. Interpret printing finishing operation	2.1. **Printing finishing terminology** are defined 2.2. **Printing finishing methods** are described
3. Identify printing machineries	3.1 **Printing machines** are identified and listed 3.2 Major parts of printing machines are identified 3.3 Functions of major parts printing machines are listed
4. Identify dyes and chemicals for printing	4.1 Printing dyes are identified 4.2 Printing chemicals are identified
5. Recognize different types of printing faults	5.1. **Printing faults** are identified and listed 5.2. Causes and remedial measures of printing faults are explained
Range of Variables	
Variables	**Range** (may include but not limited to):
1. Types of Fabric	1.1 Woven Fabric 1.1.1 Plain 1.1.2 Twill 1.1.3 Sateen 1.1.4 Jacquard 1.2 Knit Fabric 1.2.1 Single jersey 1.2.2 Double jersey
2. Printing terminology	2.1 Color standard (pantone and swatch) 2.1.1 Textile paper extended (TPX)

	2.1.2 Textile cotton extended (TCX) 2.2 Dots per inch (DPI) 2.3 Ends per inch (EPI) 2.4 Picks per inch (PPI) 2.5 Gram per Square Meter (GSM) 2.6 Screen mesh 2.7 Screen size 2.8 Screen preparation 2.9 Design repeat size 2.10 pH 2.11 Print paste
3. Printing styles	3.1 Placement print 3.2 All over print 3.3 Direct printing 3.3.1 Reactive 3.3.2 Pigment 3.3.3 Disperse 3.3.4 Glitter 3.3.5 Rubber 3.3.6 Burn out 3.4 Discharge printing 3.4.1 White discharge 3.4.2 Color discharge 3.5 Resist printing 3.6 Flock printing 3.7 Transfer printing 3.7.1 Foil 3.7.2 Sublimation 3.8 Digital printing 3.8.1 Plastisol 3.8.2 Reactive 3.8.3 Disperse 3.8.4 Pigment
4. Printing methods	4.1 Block print 4.2 Rotary print 4.3 Flatbed print 4.4 Digital print
5. Printing finishing terminology	5.1 Gram per square meter (GSM) 5.2 Steaming and curing
6. Printing finishing methods	6.1 Curing 6.2 Steaming 6.3 Heat press

7. Printing Machines	7.1 Rotary printing machine 7.2 Flatbed machine 7.3 Transfer printing machine 7.4 Digital printing machine
8. Printing faults	8.1 Miss print 8.2 Flashing 8.3 Design setting out 8.4 Uneven print 8.5 Shade variation 8.6 Color bleeding 8.7 Color staining 8.8 Overlapping 8.9 Side to center variation
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 interpreted fabric printing operation 1.2 interpreted printing finishing operation 1.3 identified printing machineries 1.4 identified dyes and chemicals for printing 1.5 recognized different types of printing and finishing faults
2. Underpinning knowledge	2.1. Types of printing 2.2. Types of finishing 2.3. Printing and finishing terminology 2.4. Types of printing methods 2.5. Flow chart of printing 2.6. Printing faults
3. Underpinning skills	3.1 Listing printing machines 3.2 Listing major parts of printing machines 3.3 Interpreting printing methods 3.4 Listing flow chart of printing 3.5 Listing printing faults
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1. Workplace (simulated or actual) 5.2. Relevant materials

	5.3. Work instruction 5.4. Pens 5.5. Paper
6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

Accreditation Requirements

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Unit Code and Title	**OU-RMGT-FPMO-02-L3-V1: Operate Flatbed Printing Machine**
Unit Descriptor	This unit covers the knowledge, skills, and attitudes required to operate flatbed printing machine. It specifically includes demonstrating flatbed printing machine, collecting printing paste, preparing flatbed printing machine and performing flatbed printing machine operation
Nominal Hours	**90 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Demonstrate flatbed printing machine	1.1 Personal protective equipment (PPE) is collected and worn 1.2 **Components of flatbed printing machine** are identified 1.3 Functions of components of flatbed printing machine are described
2. Collect printing paste	2.1 **Printing paste** are identified as per job requirement 2.2 Printing paste are collected as per printing requirement
3. Prepare flatbed printing machine	3.1 Fabric is collected according to work instructions 3.2 Screen patterns are checked in accordance with work instruction 3.3 Screens are set in machine maintaining sequence and aligned with reference marks 3.4 Machine is prepared according to **standard operating procedure** 3.5 Test sample is produced and checked according to workplace practice 3.6 Machine adjustments are made as per requirements
4. Perform flatbed printing machine operation	4.1 Machine is operated in accordance with standard operating procedures 4.2 Paste in screen is maintained according to work standard 4.3 Screen damage is identified and rectified as required 4.4 Fabric is printed according to job specification 4.5 Quality of printing is checked and faults are rectified as per product specification 4.6 Printed fabric is transferred to next operation as per workplace procedure 4.7 Machine is cleaned according to workplace practice
Range of Variables	
Variables	**Range** (may include but not limited to):

1. Components of flatbed printing machine	1.1 Conveyer belt 1.2 Blanket 1.3 Fabric feed and tension system 1.4 Screens 1.5 Print head 1.6 Squeeze 1.7 Magnetic rod 1.8 Machine controls 1.9 Edge guide 1.10 Belt adhesive system
2. Printing paste	2.1 Pigment 2.2 Reactive 2.3 Disperse 2.4 Discharge 2.5 Burn out
3. Standard operating procedure	3.1 Squeeze type and size 3.2 Print paste at specified screen 3.3 Printing strokes length 3.4 Screen to belt gap 3.5 Fabric adheres to belt 3.6 Blanket adhesive 3.7 Back side tension 3.8 Printing speed 3.9 Roller pressure 3.10 Dryer temperature 3.11 Water flow rate 3.12 Air flow rate 3.13 Steam or gas burner
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 Demonstrated flatbed printing machine 1.2 Collected printing paste 1.3 Prepared flatbed printing machine 1.4 Performed flatbed printing machine operation
2. Underpinning knowledge	2.1 Sections of flatbed printing machine 2.2 Dyes and printing auxiliaries 2.3 Types of printing paste 2.4 Pigment printing paste 2.5 Discharge printing paste 2.6 Workplace standard

3. Underpinning skills	3.1 Collecting dyes and printing auxiliaries 3.2 Preparing printing paste 3.3 Preparing machine 3.4 Checking screen patterns 3.5 Operating machine 3.6 Clearing dirt and contamination
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1. Calculator 5.2. Printing machine 5.3. Printing paste 5.4. Standard operating procedure (sop) 5.5. Pen
6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

Accreditation Requirements

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Unit Code and Title	**OU-RMGT-FPMO-03-L3-V11: Operate Rotary Printing Machine**
Unit Descriptor	This unit covers the knowledge, skills, and attitudes required to operate rotary printing machine. It specifically demonstrates rotary printing machine, collect printing paste, perform rotary printing machine and operate rotary printing machine.
Nominal Hours	**70 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Demonstrate rotary printing machine	1.1 Personal protective equipment (PPE) is collected and worn 1.2 **Components of rotary printing machine** are identified 1.3 Functions of components of rotary printing machine are described
2. Collect printing paste	2.1 Types of printing paste are identified as per job requirement 2.2 Printing paste are collected as per job requirement
3. Prepare rotary printing machine	3.1 Fabric is collected according to work instructions 3.2 Screen patterns are checked in accordance with work instruction 3.3 Screens are set in machine maintaining sequence and aligned with reference marks 3.4 Machine is prepared according to **standard operating procedure** 3.5 Test sample is produced and checked according to workplace practice 3.6 Machine adjustments are made as per requirements
4. Operate rotary printing machine	4.1 Paste is placed on the rotary screen according to work standard 4.2 Machine is operated in accordance with standard operating procedures 4.3 Fabric is printed according to job specification 4.4 Quality of printing is checked and faults are rectified as per product specification 4.5 Printed fabric is transferred to next operation as per workplace procedure 4.6 Machine is cleaned according to workplace practice
Range of Variables	

Variables	**Range** (may include but not limited to):
1. Components of rotary printing machine	1.1 Fabric feed system 1.2 Screens 1.3 Print head 1.4 Squeegee 1.5 Rod 1.6 Machine controls 1.7 Pumps
2. Standard operating procedure	2.1 Squeeze type and size 2.2 Type and size of magnetic rod 2.3 Print paste at specified screen 2.4 Screen to belt gap 2.5 End ring 2.6 Colour pump pressure 2.7 Fabric adheres to belt 2.8 Blanket adhesive 2.9 Back side tension 2.10 Printing speed 2.11 Roller pressure 2.12 Dryer temperature 2.13 Water flow rate 2.14 Air flow rate 2.15 Steam or gas burner
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 demonstrated rotary printing machine 1.2 collected printing paste 1.3 prepared rotary printing machine 1.4 operated rotary printing machine
2. Underpinning knowledge	2.1 Sections of rotary printing machine 2.2 Types of printing paste 2.3 Dyes and printing auxiliaries 2.4 Design pattern 2.5 Machine adjustment procedure
3. Underpinning skills	3.1 Collecting dyes and printing auxiliaries 3.2 Preparing printing paste 3.3 Clipping fabric into machine 3.4 Setting up machine adjustment 3.5 Placing paste on the roller 3.6 Operating machine 3.7 Drying fabric

4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1. Personal protective equipment (PPE) 5.2. Printing paste 5.3. Rotary printing machine 5.4. Paper 5.5. Pen
6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

Accreditation Requirements

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Unit Code and Title	**OU-RMGT-FPMO-04-L3-V1: Operate Digital Printing Machine**
Unit Descriptor	This unit covers the knowledge, skills, and attitudes required to operate digital printing machine. It specifically demonstrates digital printing machine, prepare digital printing machine and operate digital printing machine.
Nominal Hours	**70 Hours**
Elements of Competency	**Performance Criteria** **Bold & Underlined** terms are elaborated in the Range of Variables
1. Demonstrate digital printing machine	1.1 Personal protective equipment (PPE) is collected and worn 1.2 **Digital printing machine components** are identified 1.3 Functions of digital printing machine components are stated
2. Prepare digital printing machine	2.1. **Printing ink** are selected and collected as per printing requirement 2.2. Printing ink is set in the machine as per standard operating procedure 2.3. Final design is uploaded to the printing machine 2.4. Fabric is set into machine according to work instructions
3. Operate digital printing machine	3.1 Machine is run as test basis for checking the quality 3.2 Printing quality is examined as per the standard 3.3 Machine is adjusted if required 3.4 Fabric is printed as per job specification 3.5 Printing quality is checked as per the product specification 3.6 Printed fabric is transferred to next operation as per workplace procedure 3.7 Machine is cleaned according to workplace practice
Range of Variables	
Variables	**Range** (may include but not limited to):
1. Digital printing machine components	1.1 Control panel 1.2 Fabric roller 1.3 Print head 1.4 Ink supply pump 1.5 Output table
2. Printing ink	2.1 Reactive Ink 2.2 Pigment Ink 2.3 Disperse Ink
Evidence Guide	

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 demonstrated digital printing machine 1.2 prepared digital printing machine 1.3 operated digital printing machine
2. Underpinning knowledge	2.1 Sections of digital printing machine 2.2 Printing ink setting procedure 2.3 Checking printing quality 2.4 Machine operating procedure
3. Underpinning skills	3.1 Collecting printing ink 3.2 Setting design disk 3.3 Setting fabric into machine 3.4 Checking printing quality 3.5 Adjusting machine 3.6 Printing fabric
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	5.1. Personal Protective Equipment (PPE) 5.2. Tools and equipment 5.3. Pigment ink 5.4. Digital printing machine 5.5. Paper 5.6. Pen
6. Methods of assessment	Competency should be assessed by: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited assessment centre 7.2 Assessment should be done by a NSDA certified/nominated assessor

Accreditation Requirements

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Development of Competency Standard

The Competency Standards for National Skills Certificate in Fabric Printing Machine Operation, Level-03 is developed by RTISC and SEIP.

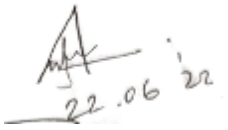
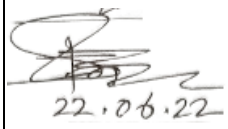
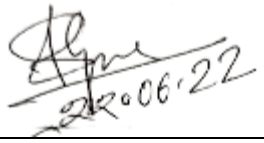
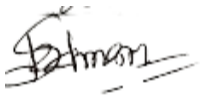
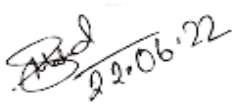
List of Members

Sl No	Name and Address	Position in the committee
1.	Mr. Mohammad Nasir, Chairperson, RTISC	Chairperson
2.	Mr. M Shahadat Hossain, Vice Chairperson, RTISC	Member
3.	Mr. Mohammad Yasin, DEPD, (Public), SEIP	Member
4.	Mr. Dr. Md Sanwar Jahan, DEPD, Private-01, SEIP	Member
5.	Mr. Mohiuzzaman, Course Specialist, SEIP	Member
6.	Mr. Md. Riad Mashrub Shourov, QAO, SEIP	Member
7.	Ms. Shilpi Akter, Associate Professor, BUTEX	Member
8.	Mr. Md Mahabub Hasan, Associate Professor, NITER	Member
9.	Mr. Md. Motin, Deputy Manager, Square Denims Ltd.	Member
10.	Mr. Md Yasin, Deputy Manager, Hamza Textiles Mills Ltd.	Member
11.	Mr. Md. Yousuf Mollah, Assistant Manager, SIM Fabrics Mills Ltd.	Member
12.	Mr. Md Maruf Al Hasan, Assistant Manager, Noman Terry Towel Millls Ltd.	Member
13.	Mr. Md. Habibullah Bilali, Coordinator-Monitoring & Evaluation, BTMA-SEIP	Member
14.	Mr. Syed Azharul Haque, CEO, Skills Zone	Member
15.	Md. Amir Hossain, Consultant, DPDS Consulting Support,	Member
16.	Wg, Cdr Zaglul Hayder (Rtd), CEO, RTISC.	Member
17.	Mr. Md. Sharif Nowaz, Executive (Curriculum Development & training) RTISC.	Member
18.	Mr. Md. Moniruzzaman, Executive (Assessment & Certification), RTISC.	Member

Validation of Competency Standard

The Competency Standards for National Skills Certificate in Fabric Printing Machine Operation, Level-03 is validated by NSDA on 22nd June 2022.

List of Members

Sl No	Name and Address	Position in the committee	Signature
1.	Mr. Mohammad Nasir, Chairperson, RTISC	Chairperson	
2.	Mr. Ahsan Habib, Assistant Specialist (LMD), Bangladesh Technical Education Board (BTEB), Cell: 01712926566, Email: ahsan.iman@gmail.com	Member	
3.	Mr. Ramjan Ali, Manager, Abed Textile Processing Mills Limited, Cell: +88 01711966840, Email: raselexeng043@gmail.com	Member	
4.	Ismat Zerin, Asst. Professor, Dept. of Textile Engineering, National Institute of Textile Engineering and Research (NITER), Cell: +88 01558081658, Email: ismat.zerin777@gmail.com	Member	
5.	Abu Saleque, Asst Manager, Pidilite Group, Cell: +88 01753095830, Email: abu.saleque@pidilite.com.bd	Member	
6.	Engr. Saidur Rahman, Trainer, BKMEA. Cell: +88 01786477767, Email: saidur@bkmea.com	Member	
7.	Shakil Mahmud, Manager, Radical International, Cell: +88 01744661525, Email: shakilbutex07@gmail.com	Member	
8.	Mr. Md. Sharif Nowaz, Executive (Curriculum Development & training) RTISC, Cell: +88 01733459745, Email: sharifnowaz@gmail.com	Member	
9.	Mr. Syed Azharul Haque, CEO, Skills Zone, Cell: +88 01711047815, Email: azharulhaque2008@gmail.com	Member	
10.	Dr, Md. Shahadat Hossain, Specialist-02, NSDA, Cell: +88 01715360652, Email: hossainsm61@gmail.com	Member	
11.	Md. Amir Hossain, Process Expert, NSDA, Mobile: +88 01631670445, Email: razib.consultant@yahoo.com	Member