COMPETENCY STANDARD

FOR

Computer Aided Design (CAD) for Garments

(RMG & Textile ISC)

Level: 04

Competency Standard Code: I10S004L4V1

National Skills Development Authority
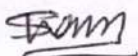**Prime Minister's Office, Bangladesh**

Contents

Introduction

The National Skills Development Authority (NSDA) aims to enhance an individual's employability by certifying competiveness 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 skill 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 programmes. **"CAD for Garments"** is selected as one of the priority occupations of **RMG and 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 students enrolled in TVET. Students who successfully pass the assessment will receive a qualification in the National Technical and Vocational Qualification Framework (NTVQF) 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 **RMG and Textile** 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.

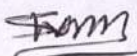Units of competency are documented in a standard format that comprises of:

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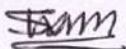
The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key components of a unit of competency, including:

- 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
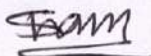
Bangladesh NTVQF with Job Classifications

NTVQF LEVELS	EDUCATION SECTORS			Job Classification
	Pre-Vocation Education	Vocational Education	Technical Education	
NTVQF 6			Diploma in engineering or equivalent	Middle Level Manager /Sub Assistant Engr. etc.
NTVQF 5		National Skill Certificate 5 (NSC 5)		Highly Skilled Worker / Supervisor
NTVQF 4		National Skill Certificate 4 (NSC 4)		Skilled Worker
NTVQF 3		National Skill Certificate 3 (NSC 3)		Semi-Skilled Worker
NTVQF 2		National Skill Certificate 2 (NSC 2)		Basic Skilled Worker
NTVQF 1		National Skill Certificate 1 (NSC 1)		Basic Worker
Pre-Voc 2	National Pre-Vocation Certificate 2 (NPVC 2)			Pre-Vocation Trainee
Pre-Voc 1	National Pre-Vocation Certificate 1 (NPVC 1)			Pre-Vocation Trainee

NTVQF Level Descriptors

NTVQF Level	Knowledge	Skill	Responsibility	Job Class.
6	• Comprehensive actual and theoretical knowledge within a specific study area with an awareness of the limits of that knowledge	• Specialised and restricted range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems	• Mange a team or teams in workplace activities where there is unpredictable change • Identify and design learning programs to develop performance of team members	Supervisor / Middle Level Manager /Sub Assistant Engr. etc.
5	• Very broad knowledge of the underlying, concepts, principles, and processes in a specific study area	• Very broad range of cognitive and practical skills required to generate solutions to specific problems in one or more study areas.	• Take overall responsibility for completion of tasks in work or study • Apply past experiences in solving similar problems	Highly Skilled Worker / Supervisor
4	• Broad knowledge of the underlying, concepts, principles, and processes in a specific study area	• 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	• Take responsibility, within reason, for completion of tasks in work or study • Apply past experiences in solving similar problems	Skilled Worker
3	• Moderately broad knowledge in a specific study area.	• 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	• Work or study under supervision with some autonomy	Semi-Skilled Worker
2	• Basic underpinning knowledge in a specific study area.	• Basic skills required to carry out simple tasks	• Work or study under indirect supervision in a structured context	Basic Skilled Worker
1	• Elementary understanding of the underpinning knowledge in a specific study area.	• Limited range of skills required to carry out simple tasks	• Work or study under direct supervision in a structured context	Basic Worker
Pre-Voc 2	• Limited general knowledge	• Very limited range of skills and use of tools required to carry out simple tasks	• Work or study under direct supervision in a well-defined, structured context.	Pre-Vocation Trainee
Pre-Voc 1	• Extremely limited general knowledge	• Minimal range of skills required to carry out simple tasks	• Simple work or study exercises, under direct supervision in a clear, well defined structured context	Pre-Vocation Trainee

List of Abbreviation

General

DTE – Directorate of Technical Education

BTEB – Bangladesh Technical Education Board

NTVQF – National Technical and Vocational Qualifications Framework

SEIP – Skills for Employment Investment Program

ISC – Industry Skills Council

PPP -- Public Private Partnership

SCDC – Standards and Curriculum Development Committee

TVET – Technical Vocational Education and Training

UoC – Unit of Competency

The Occupation Specific Abbreviations

CAD – Computer Aided Design

MSDS – Material Safety Data Sheet

OSH – Occupational Safety and Health

PPE – Personal Protective Equipment
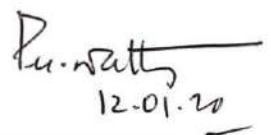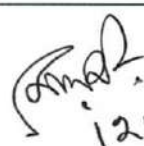
SOP – Standard Operating Procedures
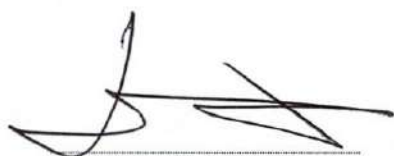
RMG - Readymade Garments

MSDS - Material Safety Data Sheet

Approval of Competency Standard

Members of the Approval Committee:

Member	Signature
Md. Faruque Hossain Executive Chairman (Secretary) National Skills Development Authority (NSDA)	
Pijush Kanti Nath Additional Secretary Member (Admin & Finance) National Skills Development Authority (NSDA)	12.01.20
Mohammad Rezaul Karim Additional Secretary Member (Skills Standard & Certification) National Skills Development Authority (NSDA)	12.01.2020
Md. Abdur Razzaque Joint Secretary Member (Planning & Research) National Skills Development Authority (NSDA)	12.01.2020

Md. Faruque Hossain
Executive Chairman (Secretary)
National Skills Development Authority (NSDA)
Date: 12.01.2020
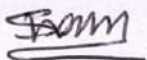
Course Structure

SL	Unit Code and Title		UoC Level	Nominal Duration (Hours)
The Generic Competencies (04 UoCs required)				**85**
1.	GCU02L1V1	Apply Occupational Safety and Health (OSH) Practices at Workplace	1	30
2.	GUC04L2V1	Perform Basic IT Skills	1	20
3.	GUC05L3V1	Carryout Workplace Interaction in English	2	15
4.	GUC07L3V1	Lead Small Team	3	20
The Sector Specific Competencies (02 UoCs required)				**45**
1.	SSU01I10L2V1	Recognize the RMG Business Scenario	2	30
2.	SSU03I10L3V1	Interpret Drawing and Specifications in Manuals for the RMG Industries	2	15
The Occupation Specific Competencies (06 UoCs Required)				**230**
1.	OSU01I10L4V1	Interpret Fundamentals of CAD Operations	4	25
2.	OSU02I10L4V1	Perform CAD Installation and Operation	4	20
3.	OSU03I10L4V1	Operate System of Pattern Making	4	80
4.	OSU04I10L4V1	Perform Digitizing Patterns	4	25
5.	OSU05I10L4V1	Perform Pattern Grading	4	30
6.	OSU06I10L4V1	Create Marker and Print	4	50
Total Nominal Learning Hours				**360**

Units & Elements at Glance

The Generic Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
GCU02L1V1	Apply OSH Practices in the Workplace	1. Identify, control and report OSH hazards 2. Conduct work safely 3. Follow emergency response procedures 4. Maintain and improve health and safety in the workplace	30
GUC04L2V1	Perform Basic IT Skills	1. Identify and use most commonly used IT tools 2. Operate Computer 3. Work with word processing Software 4. Use spread sheet packages to create /prepare worksheets 5. Use presentation packages to create / prepare presentation 6. Print documents 7. Use Internet and access E-Mail	20
GUC05L3V1	Carryout Workplace Interaction in English	1. Interpret Workplace Communication and Etiquette 2. Read and Understand Workplace Documents 3. Participate in workplace meetings and discussions 4. Practice professional ethics at workplace	15
GUC07L3V1	Lead Small Team	1. Provide team leadership 2. Assign responsibilities 3. Set performance expectations for team members 4. Supervise team performance	20
Total Hour			**85**

The Sector Specific Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
SSU01I10L2V1	Recognize the RMG Business Scenario	1. Identify basic business communication practices in RMG sector 2. Recognize history of RMG industries in Bangladesh 3. Identify major departments of RMG Industries 4. List prime export markets	15
SSU03I10L2V1	Interpret Drawing and Specifications in Manuals for the RMG Industries	1. Identify information from manual 2. Identify drawing and specifications 3. Interpret drawing and specifications 4. Store manuals	30
Total Hours			**45**

The Occupation Specific Competencies
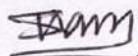
Code	Unit of Competency	Elements of Competency	Duration (hours)
OSU01I10L4V1	Interpret fundamentals of CAD operations	1. Understand requirements of CAD 2. Interpret job responsibility of CAD operators 3. Identify parts, points and measuring guides of garments 4. Interpret manual pattern and marker making	25
OSU02I10L4V1	Perform CAD installation and operation	1. Identify hardware and software required for CAD 2. Install CAD software	20
OSU03I10L4V1	Operate system of pattern making	1. Identify functions to operate system 2. Perform pattern making with software	80
OSU04I10L4V1	Perform digitizing patterns	1. Prepare for digitizing 2. Operate digitizer	25
OSU05I10L4V1	Perform pattern grading	1. Interpret size and measurement differences 2. Apply rule table for grading 3. Prepare and save graded patterns	30
OSU06I10L4V1	Create marker and print	1. Mark marker 2. Print pattern and marker	50
Total Nominal Hours			**230**
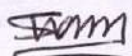
The Generic Competencies

Unit Code and Title	GCU02L1V1: Apply Occupational Health and Safety (OSH) Practices at Workplace
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to apply occupational health and safety (OSH) practices at workplace. It specifically includes – identify, control and report OSH hazards; conduct work safety; follow emergency response procedures; and maintain and improve health and safety in the workplace.
Nominal Hours	30 Hours
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborated in the Range of Variables
1. Identify, control and report OSH hazards	1.1 Immediate work area is routinely checked for Occupational Health and Safety (OSH) hazards prior to commencing and during work. 1.2 **Hazards** and unacceptable performance are identified and corrective action is taken within the level of responsibility. 1.3 OSH hazards and incidents are reported to appropriate personnel according to workplace procedures. 1.4 Safety signs and symbols are identified and followed.
2. Conduct work safety	2.1 OSH practices are applied in the workplace. 2.2 **Personal Protective Equipment (PPE)** is used.
3. Follow emergency response procedures	3.1 Emergency situations are identified and reported according to workplace requirements. 3.2 Emergency procedures are followed as appropriate to the nature of the emergency and according to workplace procedures. 3.3 **Workplace procedures** for dealing with accidents, fires and emergencies are followed whenever necessary within scope of responsibilities.

4. Maintain and improve health and safety in the workplace	4.1 Risks are identified and appropriate control measures are implemented in the workplace. 4.2 Recommendations arising from risk assessments are implemented within level of responsibility. 4.3 Opportunities for improving OSH performance are identified and raised with relevant personnel. 4.4 Safety records are maintained according to **company policies.**

Range of Variables

Variables	Range (may include but not limited to):
1. Hazards	1.1 OSH incidents include near misses, injuries, illnesses and property damage, noise, handling hazardous substances, other hazards 1.2 Working with and near moving equipment / load shifting equipment 1.3 Broken or damaged equipment or materials
2. Personal Protective Equipment (PPE)	2.1 Apron 2.2 Safety Helmet 2.3 Goggles 2.4 Ear muffs 2.5 Ear plugs 2.6 Gloves 2.7 Clothing 2.8 Safety Boots
3. Workplace procedures	3.1 OSH system and related documentation including policies and procedures 3.2 Standard Operating Procedures (SOPs) 3.3 Information on Hazards and work process, hazard alerts, safety signs and symbols 3.4 Labels 3.5 Material Safety Data Sheets (MSDSs) and manufacturers' advice
4. Company policies	4.1 Job related Standard Operating Procedures (SOPs) 4.2 Occupational Health and Safety (OSH) specific procedures 4.3 Examples of OSH procedures include – consultation and participation, emergency response to specific hazards, incident investigation, risk assessment,
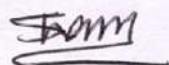
	reporting arrangement and issue resolution procedures.

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	1.1 Used Personal Protective Equipment (PPE). 1.2 Identified hazards. 1.3 Took corrective action of different hazards. 1.4 Took corrective action for emergency procedure. 1.5 Reported emergency situation to the Supervisor / Manger. 1.6 Satisfied requirements mentioned in the performance criteria and range of variables.
2. Underpinning knowledge	2.1 OSH Workplace Policies and Procedures 2.2 Work Safety Procedures 2.3 Fire and emergency procedures 2.4 Types of Hazards (Biological, Chemical and Physical) and their effects) 2.5 PPE types and uses 2.6 Personal Hygiene Practices 2.7 OSH Awareness 2.8 Steps of Hazard Identification 2.9 Principles of Hazards control 2.10 Employer's Role 2.11 Supervisor's Responsibilities
3. Underpinning skills	3.1 Identifying OSH policies and procedures 3.2 Following personal work safety practices 3.3 Reporting hazards and risks 3.4 Responding to emergency procedures 3.5 Maintaining physical well-being in the workplace 3.6 Identify tools and equipment related to OSH 3.7 Improving OSH performance

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 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 Tools and equipment appropriate to workplace 5.3 Materials relevant to the proposed activity 5.4 All tools, equipment, material and documentation required 5.5 Relevant specifications or work instructions
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral Questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training institute or in an actual or simulated after completion of the training module. 7.2 Assessment should be done by NSDA certified 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 any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	GCU04L1V1: Perform Basic IT Skills
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to perform basic IT skills. It specifically includes – identify and use most commonly used IT tools; operate computer; work with word processing software; use spreadsheet packages to create / prepare worksheets; use presentation packages to create / prepare presentation; print documents; and use internet and access e-mail.
Nominal Hours	20 Hours
Elements of Competency	Performance Criteria **Bold &underlined** terms are elaborated in the Range of Variables
1. Identify and use most commonly used IT Tools	1.1 Context of IT is interpreted. 1.2 Commonly used **IT tools** are identified. 1.3 Safe work practice and OSH Standards are followed.
2. Operate Computer	2.1 **Peripherals** are checked and connected with computer as per standard. 2.2 Power cords / adapter are connected with computer and power outlets socket as per standard. 2.3 Computer is switched as per standard. 2.4 PC **desktop / GUI settings** are arranged and customized as per requirement. 2.5 Files and folders are created, opened, copied, renamed, deleted and sorted as per requirement. 2.6 Properties of files and folders are viewed and searched. 2.7 Disks are defragmented, formatted as per requirement.
3. Work with word processing software	3.1 Word Processing software is selected and installed. 3.2 Basic typing techniques are demonstrated.
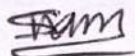
	3.3 **Documents** are created as per requirement in personal use and office environment. 3.4 **Contents** are entered. 3.5 Documents are **formatted.** 3.6 Paragraph and page settings are performed. 3.7 Saving and retrieving technique of a document are interpreted.
4. Use spreadsheet packages to create / prepare worksheets	4.1 Spreadsheet packages are selected and opened. 4.2 Worksheets are created as per requirement in Personal use and office environment. 4.3 Data are entered. 4.4 **Functions** are used for calculating and editing logical operation. 4.5 Worksheets are formatted as per requirement. 4.6 Charts are created. 4.7 Charts / Sheets are previewed.
5. Use presentation packages to create / prepare presentation	5.1 Appropriate presentation software packages are selected and installed. 5.2 Presentation are created as per requirement in personal use and office environment. 5.3 Image, Illustrations, text, table, symbols and media are entered as per requirements. 5.4 Presentations are formatted and animated. 5.5 Presentations are previewed.
6. Print documents	6.1 Printer is connected with computer and power outlet as pre standard. 6.2 Power is switched on at both the power outlet and printer. 6.3 Printer is installed and added. 6.4 Correct printer settings are selected and document is printed.
7. Use internet and access e-mail	7.1 Appropriate **internet browsers** are selected. 7.2 Search engines are used to access information 7.3 Video / Information are Shared /downloaded / uploaded from / to web site / social media. 7.4 Web based resources are used. 7.5 E-mail services are identified and selected to create a new email address. 7.6 Document is prepared, attached and sent to

	recipients.
	7.7 E-mail is read, forwarded, replied and deleted as per requirement.
	7.8 Custom e-mail folders are created and manipulated.
	7.9 E-mail messages are printed.

Range of Variables

Variable	Range (may include but not limited to):
1. IT tools	1.1 Phone 1.2 Cell Phone 1.3 TABs 1.4 Computers 1.5 Laptops 1.6 Notebooks 1.7 Internet 1.8 Software
2. Peripherals	2.1 Monitor 2.2 Keyboard 2.3 Mouse 2.4 Modem 2.5 Scanner 2.6 Printer
3. Desktop / GUI settings	3.1 Icons 3.2 Taskbar 3.3 View 3.4 Resolutions
4. Documents	4.1 Word documents 4.2 Standard CV / Bio-Data with different text & fonts, image and table 4.3 Application / Official letter with proper paragraph and indenting, spacing, styles, illustrations, tables, header & footers and symbols 4.4 Standard report / newspaper items with column, footnote and endnote, drop cap, indexing and page numbering

5. Contents	5.1 Illustrations and styles 5.2 Text 5.3 Table 5.4 Symbols 5.5 Header & Footer
6. Formatted	6.1 Bold 6.2 Italic 6.3 Underline 6.4 Font size, colour, 6.5 Change case 6.6 Alignment and intend
7. Functions	7.1 Mathematics 7.2 Logical 7.3 Simple Statistical
8. Internet Browsers	8.1 Internet Explorer 8.2 Firefox 8.3 Google Chrome 8.4 Opera 8.5 Safari 8.6 Omni Web

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	1.1 Followed OSH standard and safe work procedures. 1.2 Completed application software installations properly. 1.3 Performed simple trouble shooting with computer. 1.4 Configured appropriate printer settings and printed the document. 1.5 Demonstrated ability to create e-mail accounts.
2. Underpinning knowledge	2.1 Basic components of PC. 2.2 IT and IT Tools. 2.3 Type of software and application packages. 2.4 Use of word processor, spreadsheet and presentation software. 2.5 Type of math and logical functions. 2.6 Computer troubleshooting. 2.7 Techniques to access internet.
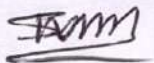
3. Underpinning skills	3.1 Identifying and using IT Tools. 3.2 Demonstrating simple troubleshooting with computer. 3.3 Demonstrating typing on word processing software. 3.4 Creating, opening, copying, renaming, deleting and sorting files and folders as per requirement. 3.5 Saving and retrieving documents on word processing software. 3.6 Demonstrating ability to create e-mail accounts. 3.7 Opening an e-mail account and use it for different purpose. 3.8 Configuring appropriate printer settings and print documents. 3.9 Using functions for calculating and editing logical operation in spreadsheet.
4. Underpinning attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors at workplace 4.8 Communication with peers and seniors at workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 IT Tools 5.3 Computers with word processing application 5.4 Internet connection 5.5 Learning manuals
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio

7. Context of assessment	7.1 Competency assessment must be done in a training centre or in an actual or simulated workplace after Completion of the training module.
	7.2 Assessment should be done by NSDA certified 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 any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	GCU05L3V1: Carryout Workplace Interaction in English
Unit Descriptor	This unit covers the knowledge, skills and attitude required to carry out workplace interaction in English. It specifically includes – interpret workplace communication and etiquette; read and understand workplace documents; participate in workplace meetings and discussions; and practice professional ethics at workplace.
Nominal Hours	15 Hours
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborated in the Range of Variables
1. Interpret workplace communication and etiquette	1.1 Workplace code of conducts are interpreted as per organizational guidelines. 1.2 Appropriate lines of communication are maintained with supervisors and colleagues. 1.3 Workplace interactions are conducted in a **courteous manner** to gather and convey information. 1.4 Questions about routine **workplace procedures and matters** are asked and responded as required.
2. Read and understand workplace documents	2.1 Workplace documents are interpreted as per standard. 2.2 Assistance is taken to aid comprehension when required from peers / supervisors. 2.3 Visual information / symbols / signage's are understood and followed. 2.4 Specific and relevant information are accessed from **appropriate sources.** 2.5 Appropriate medium is used to transfer information and ideas.
3. Participate in workplace meetings and discussions	3.1 Team meetings are attended on time and meeting procedures and etiquette are followed. 3.2 Own opinions are expressed and others opinions are listened without interruption.

	3.3 Inputs are provided consistent with meeting purpose and meeting outcomes are implemented.
4. Practice professional ethics at workplace	4.1 Responsibilities as a team member are demonstrated and kept promises and commitments made to others. 4.2 Tasks are performed in accordance with workplace procedures. 4.3 Confidentiality is respected and maintained. 4.4 Situations and actions considered inappropriate or which present a conflict of interest are avoided.

Range of Variables

Variable	Range (may include but not limited to):
1. Courteous manner	1.1 Effective questioning 1.2 Active listening 1.3 Speaking skills

2. Workplace procedures and matters	2.1 Notes
	 2.2 Agenda
	 2.3 Simple reports
	     2.3.1 Progress report
	     2.3.2 Incident report
	 2.4 Job sheets
	 2.5 Operational manuals
	 2.6 Brochures and promotional material
	 2.7 Visual and graphic materials
	 2.8 Standards
	 2.9 OSH information
	 2.10 Signs

3. Appropriate sources	3.1 HR Department 3.2 Managers 3.3 Supervisors

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	1.1 Maintained workplace communication and etiquette. 1.2 Followed workplace instructions and symbols. 1.3 Followed team meetings procedures.
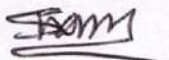
2. Underpinning knowledge	2.1 Workplace communication and etiquette.
	2.2 Workplace documents, signs and symbols.
	2.3 Meeting procedure and etiquette.
3. Underpinning skills	3.1 Interpreting workplace communication and etiquette.
	3.2 Following workplace instructions and symbols.
	3.3 Following workplace meeting procedures.
4. Underpinning attitude	4.1 Commitment to occupational health and safety
	4.2 Promptness in carrying out activities
	4.3 Sincere and honest to duties
	4.4 Eagerness to learn
	4.5 Environmental concerns
	4.6 Respect for rights of peers and seniors at workplace
	4.7 Communication with peers and seniors at workplace
5. Resource implications	The following resources must be provided:
	5.1 Workplace (actual or simulated)
	5.2 Materials relevant to the proposed activity
	5.3 All tools, equipment, material and documentation required.
	5.4 Relevant specifications or work instructions
6. Methods of assessment	Methods of assessment may include but not limited to:
	6.1 Written test
	6.2 Demonstration
	6.3 Oral questioning
	6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.
	7.2 Assessment should be done by NSDA certified 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 any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	**GCU07L3V1: Lead Small Team**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to lead small team. It specifically includes – provide team leadership; assign responsibilities; set performance expectations for team members; and supervised team performance.
Nominal Hours	**20 Hours**
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborated in the Range of Variables
1. Provide team leadership	1.1 **Work requirements** are identified and presented to team members. 1.2 Reasons for instructions and requirements are communicated to team members. 1.3 **Team members' queries and concerns** are recognized, discussed and dealt with.
2. Assign responsibilities	2.1 Duties, and responsibilities are allocated having regard to the skills, knowledge and attitudes required to properly undertake the assigned task. 2.2 Duties are allocated having regard to individual preference, domestic and personal considerations, whenever possible.
3. Set performance expectations for team members	3.1 Performance expectations are established based on client needs and according to assignment requirements. 3.2 Performance expectations are based on individual team members' duties and area of responsibility. 3.3 Performance expectations are discussed and directed to implement in the workplace.

4. Supervise team performance	4.1 **Monitoring of performance** are taken place against defined performance criteria and / or assignment instructions and corrective action taken if required.
	4.2 Team members are provided **feedback**, positive support and advice on strategies to overcome any deficiencies.
	4.3 **Performance issues** which cannot be rectified or addressed within the team are referenced to appropriate personnel.
	4.4 Team members are kept informed of any changes in the priority allocated to assignments or tasks which might impact on clients' / customers' needs and satisfaction.
	4.5 Team operations are monitored to ensure that employer / client needs and requirements are met.
	4.1 Follow-up communication is provided on all issues affecting the team.
	4.6 All relevant documentation is completed.

Range of Variables

Variable	Range (may include but are not limited to):
1. Work requirements	1.1 Client Profile 1.2 Assignment instructions
2. Team member's queries and concerns	2.1 Roster 2.2 Shift details
3. Monitoring of performance	3.1 Formal process 3.2 Informal process
4. Feedback	4.1 Formal process 4.2 Informal process 4.3 Sandwich process
5. Performance issues	5.1 Work output 5.2 Work quality 5.3 Team participation 5.4 Compliance with workplace protocols 5.5 Safety 5.6 Customer service

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.
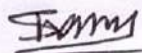
1. Critical aspects of competency	1.1 Maintained or improved individuals and / or team performance given a variety of possible scenario. 1.2 Assessed and monitored team and individual performance against set criteria. 1.3 Represented concerns of a team and individual to next level of management or appropriate specialist and to negotiate on their behalf. 1.4 Allocated duties and responsibilities, having regard to individual's knowledge, skills and aptitude and the needs of the tasks to be performed. 1.5 Set and communicated performance expectations for a range of tasks and duties within the team and provided feedback to team members.
2. Underpinning knowledge	2.1 Company policies and procedures. 2.2 Relevant legal requirements. 2.3 How performance expectations are set. 2.4 Methods of monitoring performance. 2.5 Client expectations. 2.6 Team members' duties and responsibilities.
3. Underpinning skills	3.1 Counselling informal performance skills. 3.2 Building team skills. 3.3 Negotiating skills.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 Tools, equipment and facilities appropriate to processes or activity

	5.3 Materials relevant to the proposed activity 5.4 Equipment and outfits appropriate in applying safety measures 5.5 Relevant drawings, manuals, codes, standards and reference material
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training centre or in an actual or simulated workplace after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

Accreditation Requirements

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The Sector Specific Competencies

Unit Code and Title	SSU01I10L2V1: Recognize the RMG Business Scenario
Unit Descriptor	This unit covers the knowledge; skills and attitudes required to recognize the RMG business scenario. It specifically includes – identify basic business communication practices in RMG industries; recognize history of RMG industries in Bangladesh; identify major departments of RMG industries; and list prime export markets.
Nominal Hours	15 Hours
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborated in the Range of Variables
1. Identify basic business communication practices in RMG industries	1.1 The communication requirements in the RMG industries are recognized in alignment to the role of RMG industries. 1.2 **Modes of Communication** are explained. 1.3 Communication policies and guidelines are identified and interpreted.
2. Recognize history of RMG Industries in Bangladesh	2.1 **Background of RMGIndustries** in Bangladesh is inferred with reference to the past history, present status and expected future trends. 2.2 Importance of the RMG industries in relation to Bangladesh labour market is stated with emphasis on manpower and economic impact. 2.3 Present and projected future trends and technologies relevant to the sector are summarized.
3. Identify major departments of RMG Industries	3.1 Scope and nature of **major departments** of the RMG sector are identified. 3.2 Role and responsibilities of individuals are identified in relation to the department and organization as a whole. 3.3 The **machines** used in different departments are identified.

4. List prime export markets	4.1 The types of **prime export markets** are categorized on the basis of their current and future potential. 4.2 Export marketing process is interpreted.

Range of Variables

Variable	Range (may include but not limited to):
1. Modes of Communication	1.1 E-mail 1.2 Social Media 1.3 Telephonic Conversation 1.4 Fax 1.5 Meetings 1.6 Video Conference 1.7 Courier
2. Background of RMG Industries	2.1 History of Bangladesh RMG Industries 2.2 Economy of Bangladesh 2.3 SWOT analysis on RMG Industries 2.4 Gender dynamics of garments industry in Bangladesh. 2.5 Wages & efficiency in the garments industry 2.6 Compliance
3. Major Departments	3.1 PDS 3.2 Store 3.3 Cutting 3.4 Embellishment 3.5 Sewing 3.6 Washing 3.7 Finishing 3.8 Quality 3.9 Industrial Engineering 3.10 Production Planning and Control 3.11 Maintenance 3.12 Merchandising
4. Machines	4.1 Single needle machine 4.2 Double needle Machine 4.3 Over lock Machine 4.4 Flat lock Machine 4.5 Feed of the arm Machine 4.6 Kansai Multi Needle Machine 4.7 Bar tuck Machine

	4.8 Button Hole Machine 4.9 Button Stitch Machine 4.10 Snap Attach Machine
5. Prime export markets	5.1 American market 5.2 European market 5.3 Asian market 5.4 Newly explored market

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	1.1 Identified mode communication. 1.2 Interpreted production process. 1.3 Identified prime export markets.
2. Underpinning knowledge	2.1 Policies and Guidelines. 2.2 History of RMG Industries. 2.3 Trends in the RMG Industries. 2.4 Production process. 2.5 Different Department in RMG Industries. 2.6 Own roles and responsibilities. 2.7 Types of prime export markets.
3. Underpinning skills	3.1 Identifying policies and guidelines in RMG industries. 3.2 Interpreting business communication technique. 3.3 Interpreting trends of RMG industries. 3.4 Identifying departments in RMG industries. 3.5 Identifying machines used in different departments.
4. Underpinning attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate

	to perform activities. 5.3 Materials consumable to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

Accreditation Requirements

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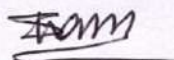| Unit Code and Title	**SSU03I10L3V1: Interpret Drawing and Specifications in Manuals for the RMG Industries**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to interpret drawing and specifications in manuals for RMG industries. It specifically includes – identify information from manuals; identify drawing and specifications; interpret drawings and specifications; and store manuals.
Nominal Hours	**30 Hours**
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborate in the Range of Variables
1. Identify information from manuals	1.1 Appropriate **manuals** are identified. 1.2 Version and date of manuals are checked to ensure up-to-date specifications of tools, equipment and materials.
2. Identify drawing and specifications	2.1 Relevant **drawing** and **specifications** are identified. 2.2 **Terms and abbreviation** are identified. 2.3 **Signs and symbols** are identified.
3. Interpret drawing and specifications	3.1 Drawing and specifications are interpreted. 3.2 Schedules, dimensions, and specifications contained in drawing are interpreted.
4. Store manuals	4.1 Documents are stored appropriately to prevent damage, ready access and updating of information when required.
Range of Variables	
Variable	**Ranges**(may include but not limited to):
1. Manuals	1.1 Manufacturer's Specification Manual 1.2 Repair Manual 1.3 Maintenance Procedure Manual 1.4 Periodic Maintenance Manual 1.5 Quality Manual

	1.6 Manual of Instruction
2. Drawing	2.1 Technical Drawing 2.2 Sketch
3. Specifications	3.1 Products specifications 3.2 Performance specifications 3.3 Methods specifications
4. Terms and abbreviation	4.1 Refers to all terms and specifications associated with the construction sector
5. Sign and symbols	5.1 Include all sign and symbols associated with the construction sector

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	1.1 Interpreted drawings and specifications. 1.2 Identified signs and symbols. 1.3 Satisfied the requirements mentioned in the performance criteria and range of variables.
2. Underpinning knowledge	2.1 Types of RMG manuals. 2.2 Identification of signs and symbols. 2.3 Identification of units of measurement. 2.4 Identification of units of conversion. 2.5 Drawings and specifications. 2.6 Terms and abbreviations used.
3. Underpinning skills	3.1 Identifying appropriate manuals. 3.2 Identifying drawings and specifications. 3.3 Interpreting drawings and specifications. 3.4 Storing manuals.
4. Required attitude	4.1 Commitment to occupational health and safety. 4.2 Promptness in carrying out activities. 4.3 Sincere & honest to duties. 4.4 Tidiness & timeliness. 4.5 Eagerness to learn. 4.6 Environmental concerns. 4.7 Respect for rights of peers and seniors at workplace. 4.8 Communication with peers & seniors at workplace.

5. Resources implications	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Availability of all manuals. 5.3 Accessibility of storage area. 5.4 Instructions sheet. 5.5 Module.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Writtentest. 6.2 Demonstration. 6.3 Oral questioning. 6.4 Portfolio.
7. Context of assessment	7.1 Competencyassessment must be done in a training center or in an actual or simulated workplace after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

Accreditation Requirements

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The Occupation Specific Competencies

Unit Code and Title	OSU01I10L4V1: Interpret Fundamentals of CAD Operations
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to interpret fundaments of CAD operations. It specifically includes - understand requirements of CAD; interpret job responsibility of CAD operators; identify parts, points and measuring guides of garments; and interpret manual pattern and marker making.
Nominal Hours	25 Hours
Elements of Competency	Performance Criteria **Bold &underlined** terms are elaborated in the Range of Variables
1. Understand requirements of CAD	1.1 **CAD system** is interpreted as per RMG industry. 1.2 **Functions of CAD** systems are identified and described. 1.3 **Working sequence** of CAD section in RMG industry is understood. 1.4 Basic **CAD software** is identified.
2. Interpret job responsibility of CAD operators	2.1 **Job role of a CAD operator** is identified. 2.2 Prime job responsibilities are listed as per RMG industries.
3. Identify parts, points and measuring guides of garments	3.1 Parts of human body are identified and concisely described. 3.2 Horizontal and vertical measurement process are identified. 3.3 Specification for garment guides are identified as per job requirements. 3.4 Basic **points of measurement** are identified as per measurement chart.

4. Interpret manual pattern and marker making	4.1 Manual pattern making methods are identified. 4.2 Manual pattern is interpreted as per measurement sheet. 4.3 Pattern grading is interpreted and understood. 4.4 Manual marker making is interpreted.

Range of Variables

Variable	Range (may include but not limited to):
1. CAD system	1.1 History of CAD 1.2 Application of CAD 1.3 Apparel design systems 1.4 Fabric Print design/placement 1.5 Texture mapping: 3D draping software
2. Functions of CAD	2.1 Specification 2.2 Pattern making 2.3 Digitizing 2.4 Grading 2.5 Marker making 2.6 Consumption 2.7 Saving for future use
3. Working sequence	3.1 CAD for manual pattern to digitalization 3.2 CAD for auto pattern 3.3 CAD for marker generation
4. CAD Software	4.1 LECTRA (Modaris & Diamino) 4.2 Garber garment technology 4.3 Investronica 4.4 TUKACAD (Tukatech) 4.5 Optitex PDS 4.6 GT resources 4.7 Winda 4.8 Euro CAD 4.9 Rich piece
5. Job role of a CAD operator	5.1 Collecting specification 5.2 Analyzing styles 5.3 Operating garment CAD 5.4 Digitizing patterns on digitizer 5.5 Generating auto patterns 5.6 Grading patterns
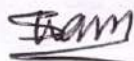
	5.7 Creating marker 5.8 Checking marker efficiency 5.9 Providing consumption 5.10 Printing marker 5.11 Reporting
6. Points of measurement	**Top measurement:** 6.1 Body length 6.2 Chest 6.3 Waist 6.4 Sleeve length and opening 6.5 Bicep and shoulder 6.6 Armhole 6.7 Neck width **Bottom measurement:** 6.8 Length 6.9 Waist 6.10 Hip 6.11 Thigh 6.12 Knee 6.13 Leg opening 6.14 Front rise 6.15 Back rise

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	1.1 Listed job roles and responsibilities of CAD operator. 1.2 Identified and interpreted points of measurements. 1.3 Performed marker making. 1.4 Carried out manual pattern and marker making.
2. Underpinning knowledge	2.1 CAD system and functions. 2.2 Basic CAD software. 2.3 Roles and responsibilities of CAD operator. 2.4 Basic points of measurement. 2.5 Manual marking methods.

3. Underpinning skills	3.1 Listing of job roles of CAD operator. 3.2 Interpreting points of measures. 3.3 Performing marker making. 3.4 Performing manual pattern and marker making.
4. Underpinning attitudes	4.1 Commitment to occupational health and safety. 4.2 Promptness in carrying out activities. 4.3 Sincere and honest to duties. 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials consumable to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

Accreditation Requirements

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Unit Code and Title	**OSU02I10L4V1: Perform CAD Installation and Operation**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to perform CAD installation and operation. It specifically includes – identify hardware and software required for CAD; and install CAD software.
Nominal Hours	**20 Hours**
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborated in the Range of Variables
1. Identify hardware and software required for CAD	1.1 Fundamentals of appropriate computer applications are identified and applied. 1.2 Configuration of computer is identified and interpreted. 1.3 **CAD hardware** is identified. 1.4 CAD software is identified.
2. Install CAD software	2.1 Installation process in CAD software is identified and described. 2.2 CAD software is correctly installed.
Range of Variables	
Variables	**Range** (may include but not limited to):
1. CAD hardware	1.1 System unit 1.2 Hard disk 1.3 CD-ROM 1.4 Monitor 1.5 Printers and plotters 1.6 Digitizer board 1.7 External storage device

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	1.1 Used computer applications. 1.2 Identified CAD hardware and software. 1.3 Performed installation process of CAD software.
2. Underpinning knowledge	2.1 CAD hardware. 2.2 CAD software. 2.3 Installation process.
3. Underpinning skills	3.1 Using computer applications 3.2 Identifying CAD hardware 3.3 Installing CAD software
4. Underpinning attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 Computer/laptop/notebook 5.3 CAD hardware 5.4 CAD software 5.5 Instruction sheet/manual 5.6 Stationary 5.7 Learning manual
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio

7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.
	7.2 Assessment should be done by NSDA certified assessor.

Accreditation Requirements

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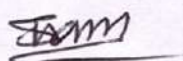
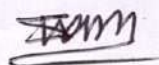| Unit Code and Title	**OSU03I10L4V1: Operate System of Pattern Making**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to operate system of pattern making. It specifically includes – identify functions to operate system; and perform pattern making with software.
Nominal Hours	**80 Hours**
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborated in the Range of Variable
1. Identify functions to operate system	1.1 Pattern Design System (PDS) is identified and selection as per job requirement. 1.2 Technical terms and **functions of PDS** are identified and interpreted. 1.3 Size table and styles are recognised and followed. 1.4 **Tools and icons** are identified and interpreted.
2. Perform pattern making with software	2.1 Parts of garment are created by functions as per styling requirements. 2.2 Size table is created as per specification. 2.3 Sewing allowance and shrinkage is calculated. 2.4 Variant and exporting process is performed. 2.5 Pattern making systems are converted to other software.
Range of Variables	
Variables	**Range** (may include but not limited to):
1. Functions of Pattern Design System (PDS)	1.1 Point and line functions 1.2 Tools, orientation and notches 1.3 Modification 1.4 Synchronization of Specification (Industrialisation

	and piece)
	1.5 Derived piece folds and cams
	1.6 Grading
	1.7 Evaluation system and nest modification
	1.8 Measure, assembly and variant
2. Tools and icons	2.1 File 2.2 Edit 2.3 Sheet 2.4 Display 2.5 Size 2.6 Grading 2.7 Layer 2.8 Parameters 2.9 Configuration 2.10 Tools 2.11 Print 2.12 Curve pints 2.13 Flat pattern 2.14 Cut piece

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.

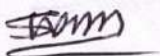|	
1. Critical aspects of competency	1.1 Fashioned size table. 1.2 Created parts of garment functioning. 1.3 Performed variant and exporting process. 1.4 Converted pattern making system to other software.
2. Underpinning Knowledge	2.1 Functions of PDS. 2.2 Size table, style and layer. 2.3 User interface. 2.4 Variant and exporting process.
3. Underpinning skills	3.1 Fashioning size table. 3.2 Creating parts of garment functioning. 3.3 Performing variant and exporting process. 3.4 Converting pattern making systems to other software.

4. Underpinning attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 Computer/laptop/notebook 5.3 Software (Lectra Modaris) 5.4 Working table 5.5 Materials 5.6 Stationary 5.7 Learning manual
1. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
2. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

Accreditation Requirements

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Unit Code and Title	OSU04I10L4V1: Perform Digitizing Patterns
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to perform digitizing patterns. It specifically includes – prepare for digitizing; and operate digitizer.
Nominal Hours	25 Hours
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborated in the Range of Variables
1. Prepare for digitizing	1.1 Pattern parts and components are identified and collected. 1.2 **Digitizer tools** are checked and organized for use.
2. Operate digitizer	2.1 Pattern is placed on the digitizer. 2.2 Points and notches of pattern are checked. 2.3 Points of pattern are marked using cursor. 2.4 Digitized patterns are saved and stored.
Range of Variables	
Variables	**Range** (may include but not limited to):
1. Digitizer tools	1.1 Cursor 1.2 Laser 1.3 Table/board 1.4 Functions keys and menu bar 1.5 Camera for digitizing

Evidence Guide
The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.
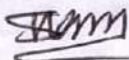
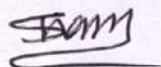|	
1. Critical aspects of competency	1.1 Identified pattern parts and components. 1.2 Organized digitizer tools. 1.3 Marked points of the pattern using cursor. 1.4 Performed digitizing of patterns. 1.5 Checked pattern points and notches.
2. Underpinning knowledge	2.1 Pattern parts and components 2.2 CAD software functioning 2.3 Digitizer tools 2.4 Points of the pattern
3. Underpinning skills	3.1 Interpreting parts and components 3.2 Organizing tools 3.3 Marking points 3.4 Performing digitizing 3.5 Checking pattern points and notches
4. Underpinning attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carryout activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 Computer/laptop/notebook 5.3 CAD software 5.4 Pattern board 5.5 Materials 5.6 Stationary 5.7 Learning manual

6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Oral questioning 6.3 Demonstration 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

Accreditation Requirements

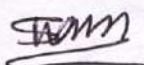Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.
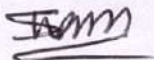
Unit Code and Title	**OSU05I10L4V1: Perform Pattern Grading**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to perform pattern grading. It specifically includes – interpret size and measurement; apply rule table for grading; and prepare and save graded patterns.
Nominal Hours	**30 Hours**
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborated in the Range of Variable
1. Interpret size and measurement	1.1 **Sizes** are interpreted as per the buyer's requirements. 1.2 Measurement differences between the sizes are calculated and confirmed.
2. Apply rule table for grading	2.1 Appropriate rule table is employed. 2.2 **Grading of patterns** is undertaken and pattern adjusted for variances. 2.3 Graded pattern is checked.
3. Prepare and save graded patterns	3.1 Graded patterns are collected for marker making. 3.2 Graded patterns are prepared. 3.3 Prepared patterns are saved and stored.
Range of Variables	
Variable	**Range** (may include but not limited to):
1. Sizes	1.1 Numeric 1.2 Alphabetic

2. Grading of patterns	1.3 Basic size selection 1.4 Addition of size 1.5 Deletion of size 1.6 Measurement differences 1.7 Use of axis

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.

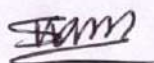|	
1. Critical aspects of competency	1.1 Calculated measurements and sizes. 1.2 Used appropriate rule table. 1.3 Applied grading and adjusted for variances. 1.4 Checked and prepared graded patterns. 1.5 Saved and stored approved patterns for marker making.
2. Underpinning knowledge	2.1 Different sizes and measurements 2.2 Rule table 2.3 Graded pattern process
3. Underpinning skills	3.1 Calculating sizes and measurements. 3.2 Applying appropriate rule table. 3.3 Applying grading and adjust for variances. 3.4 Checking graded pattern. 3.5 Preparing graded patterns. 3.6 Saving approved patterns for marker making.
4. Underpinning attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace

5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 Computer / laptop / notebook 5.3 Software 5.4 Measurement chart 5.5 Instruction sheet 5.6 Stationary 5.7 Learning manual	
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio	
7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.	

Accreditation Requirements

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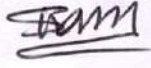| Unit Code and Title	**OSU06I10L4V1: Create Marker and Print**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to create marker and print. It specifically includes - make marker; and print pattern and marker.
Nominal Hours	**50 Hours**
Elements of Competency	**Performance Criteria** **Bold &underlined** terms are elaborated in the Range of Variables
1. Make marker	1.1 Marker making software is identified and selected. 1.2 **Marker generalities and composition** table are filled with necessary information. 1.3 **Marker making** is performed.
2. Print pattern and marker	2.1 Printer is connected to CAD system. 2.2 Paper width in printer is checked and ensured ready for use. 2.3 Sequence of print software is followed and **print command** is applied. 2.4 Pattern and marker is printed.
Range of Variables	
Variable	**Range** (may include but not limited to):
1. Marker generalities and composition	1.1 Name 1.2 Comments 1.3 Size 1.4 Quantity 1.5 Width 1.6 Length 1.7 Salvage value 1.8 Efficiency 1.9 Global spacing 1.10 Fabric edges 1.11 Moving tolerance 1.12 Fine rotation

	1.13 Model name 1.14 Variant name 1.15 Save
2. Marker making	2.1 Pop and drag 2.2 Auto nesting
3. Print command	3.1 Vigi print 3.2 Just print

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	1.1 Performed marker making. 1.2 Checked paper width in printer. 1.3 Followed printing sequence.
2. Underpinning knowledge	2.1 Marker making software 2.2 Order ratio 2.3 ICT (printer) 2.4 CAD system
3. Underpinning skills	3.1 Performing marker making. 3.2 Connecting printer to CAD system. 3.3 Checking paper width in printer. 3.4 Following printing sequence.
4. Underpinning attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated) 5.2 Computer / laptop / notebook 5.3 Software 5.4 Calculator 5.5 Plotter 5.6 Printer

	5.7 Instruction sheet 5.8 Stationary 5.9 Learning manual
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module. 7.2 Assessment should be done by NSDA certified assessor.

Accreditation Requirements

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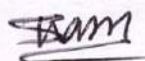
Experts involved on developing this standard

Industry and subject matter experts who provided their valuable inputs to construct this Competency Standard (Jan – Mar, 2018)

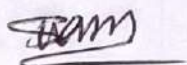| Name	Organisation	Designation
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Mr. Md. Zubayer Alam	Institute of Science Trade & Technology (ISTT)	HOD, DTFM
Mr. Md. Masud Rana	Vintage Denim Studio Ltd.	Pattern Master
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Mr. Syed Azharul Haque	British Council - SD03	National Subject Matter Consultant - RMG Sector

Development Workshop

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Mr. Hedayet islam khan	BGMEA	Coordinator (Up Skilling)
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Mr. Md. Masud Rana	Vintage Denim Studio	Pattern Master
Mr. Ruhul Amin Rana	Brothers Fashion Limited	Senior Technician
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Engr. Abdur Razzaque	SEIP	Specialist-1 Competency
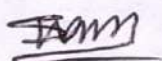
		Standard
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Mr. Syed Azharul Haque	British Council - SD03	National Subject Matter Consultant - RMG Sector

Validation Workshop

Competency standard validation workshop participants (25th Mar 2018).

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Mr. Md. Abdur Rahman	Aba Group	Pattern Master
Mr. Md. Zubayer Alam	Institute of Science and Trade & Technology	HOD
Mr. Rony Mia	NITER	Lecturer
Mr. Md. Atikur Rahman	AR Jeans Producer Ltd.	Technical Manager
Engr. Md. Abdur Razzaque	SEIP	Specialist-1 Competency Standard
Mr. Syed Nasir Ershad	SEIP	AEPD (Public-1)
Mr. Md. Ahsan Habib	SEIP	TVET Specialist
Mr. Mohiuzzaman	SEIP	Course Specialist
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Mr. David King	British Council - SD03	Team Leader
Mr. Syed Azharul Haque	British Council - SD03	National Subject Matter Consultant - RMG Sector

Validation of Competency Standard by Standard and Curriculum Validation Committee (SCVC)

The Competency Standards for National Skills Certificate in **Computer Aided Design (CAD) for Garments, NTVQF L-IV** Qualification is validated by SCVC on 12 November 2019 and approved by NSDA.

Respectable members of the SCVC:

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12	Mahbub Ul Huda, Curriculum Coordinator (Consultant), NSDA	Facilitator

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This Competency Standard for **Computer Aided Design (CAD) for Garments** 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 for individuals who graduated through the established standard via competency-based assessment to be suitably qualified for a relevant job.

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