



COMPETENCY STANDARD

Computer Operation

Level: 03

(ICT Sector)

Competency Standard Code: CS-ICT-CO-L3-EN-V2



National Skills Development Authority
Chief Adviser's Office
Government of the People's Republic of Bangladesh

Copyright

National Skills Development Authority
Chief Adviser'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.nstda.gov.bd.
National Skills Portal: <http://skillsportal.gov.bd>

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This Competency Standard for Computer Operation 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 ICT Sector ISC, 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. "Computer Operation" is selected as one of the priority occupations of ICT 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 (BNQF) 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 guides

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 Skills Certificate – Level-3 in Computer Operation in ICT Sector

Level Descriptors of 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

General	
NSDA	National Skills Development Authority
BMET	Bureau of Manpower Employment and Training
ILO	International Labor Organization
ISC	Industry Skills Council
NPVC	National Pre-Vocation Certificate
NSQF	National Skills Qualifications Framework
PPP	Public Private Partnership
SCVC	Standards and Curriculum Validation Committee
SEIP	Skills for Employment Investment Program
STP	Skills Training Provider
UoC	Unit of Competency
GU	Generic Unit
SU	Sector Unit
OU	Occupation Unit
Occupation Specific	
GUI	Graphical User Interface
ESD	Electro-static Discharge
ICT	Information Communication Technology (ICT)
KPI	Key Performance Indicator
LCD	Liquid Crystal Display
OSH	Occupational safety and health
PPE	Personal protective equipment
RAM	Random Access Memory
USB	Universal serial bus
CO	Computer Operation
OS	Operating System
VDU	Visual Display Unit
CD	Compact Disc
DVD	Digital Video Disc” or “Digital Versatile Disc.”
ASCII	American Standard Code for Information Interchange
CV	Curriculum Vitae
CPU	Central Processing Unit

Approval of Competency Standard

Approved by
38th Authority Meeting of NSDA
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**Competency Standards for National Skill Certificate – 3 in
Computer Operation in ICT Sector
Course Structure**

SL	Unit Code and Title		UoC Level	Nominal Duration (Hours)
Generic Units of Competencies				20
1.	GU-14-L3-V1	Carryout Communication with Clients	3	20
Sector Specific Units of Competencies				30
2.	SU-ICT-10-L2-V1	Practice Occupational Safety and Health (OSH) Standard in ICT.	2	15
3.	SU-ICT-03-L3-V1	Comply to Ethical Standards in the ICT Workplace	3	15
Occupation Specific Units of Competencies				240
4.	OU-ICT-CO-01-L3-V2	Operate a Personal Computer	3	20
5.	OU-ICT-CO-02-L3-V2	Prepare a Document Using Word Processor	3	80
6.	OU-ICT-CO-03-L3-V2	Prepare a Spreadsheet	3	70
7.	OU-ICT-CO-04-L3-V2	Prepare a Presentation	3	50
8.	OU-ICT-CO-05-L3-V2	Use and Manage Digital Resources	3	20
Total Nominal Learning Hours				290

Units & Elements at Glance

Generic Units of Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
GU-14-L3-V1	Carryout Communication with Clients	<ol style="list-style-type: none"> 1. Interpret client-based communication and etiquette 2. Prepare documents for endeavor/working environment/platform 3. Conduct communication 	20

Sector Specific Units of Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
SU-ICT-10-L2-V1	Practice Occupational Safety and Health (OSH) Standard in ICT	<ol style="list-style-type: none"> 1. Identify hazard and risk in the ICT Environment 2. Apply Personal Health and Safety Practices 3. Manage and Report Hazards 4. Respond to Emergencies 	15
SU-ICT-03-L3-V1	Comply to Ethical Standards in the ICT Workplace	<ol style="list-style-type: none"> 1. Uphold the requirements of clients 2. Deliver quality products and services 3. Maintain professionalism at workplace 4. Maintain workplace code of conduct. 	15

Occupation Specific Units of Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
OU-ICT-CO-01-L3-V2	Operate a Personal Computer	<ol style="list-style-type: none"> 1. Access computer, system information, and features 2. Manage user accounts 3. Organize files and folders 4. Identify Technical error 5. Fix Technical error 	20
OU-ICT-CO-02-L3-V2	Prepare a Document Using Word Processor	<ol style="list-style-type: none"> 1. Prepare for the Job 2. Create Document 3. Format Document 4. Review and Protect Document 5. Transfer document and print using Network printer 	80
OU-ICT-CO-03-L3-V2	Prepare a Spreadsheet	<ol style="list-style-type: none"> 1. Prepare for the Job 2. Create Spreadsheet 3. Apply formulas and functions 4. Perform data manipulation and presentation 5. Review and Protect Workbook 6. Print and Transfer Document 	70
OU-ICT-CO-04-L3-V2	Prepare a Presentation	<ol style="list-style-type: none"> 1. Prepare for the Job 2. Create Presentation 3. Furnish presentation 4. Apply slide master 5. Print and Transfer presentation 	50
OU-ICT-CO-05-L3-V2	Use and Manage Digital Resources	<ol style="list-style-type: none"> 1. Use cloud storage for resource sharing 2. Use an Online form to collect data 3. Use an Online Platform to schedule and conduct meetings 	20

Generic Units of Competencies

Unit Code and Title	GU-14-L3-V1: Carryout Communication with Clients
Unit Descriptor	This unit covers the knowledge, skills and attitudes required carryout communication with clients. It specifically includes the task of interpreting client-based communication and etiquette, preparing documents for endeavor/working environment/platform and conducting communication
Nominal Hours	20 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables Training Components
1. Interpret client-based communication and etiquette	1.1 Code of conduct of communication are interpreted as per working environment/platform 1.2 Manners and etiquette of communication is interpreted as 1.3 Questions about routine working environment/platform <u>procedures and matters</u> are explained as required
2. Prepare documents for endeavor/working environment/platform	2.1 Relevant <u>documents</u> are prepared for effective communication with work environment 2.2 <u>Validated sources</u> are identified as per client's requirements 2.3 Documents are validated by the authentic sources as per client's requirements 2.4 Documents are submitted as per standard procedure
3. Conduct communication	3.1 Appropriate means/ method/ <u>way of communication</u> are maintained as per working environment/ platform 3.2 <u>Channels of communication</u> are identified and followed 3.3 Communication is conducted in a <u>courteous manner</u> to gather and convey information 3.4 Appropriate non-verbal communication is used as required
Range of Variables	
Variable	Range (may include but not limited to):
1. Procedures and Matters	1.1 Notes 1.2 Agenda 1.3 Simple reports such as progress and incident reports 1.4 Job sheets 1.5 Operational manuals 1.6 Brochures and promotional material 1.7 Visual and graphic materials 1.8 Standards 1.9 OSH information 1.10 Signs

2. Documents	2.1 Personnel identification document 2.2 Portfolio 2.3 Financial document 2.4 Task proposal
3. Validated sources	3.1 Chamber of commerce 3.2 Related association 3.3 High commission 3.4 Related Bank 3.5 Local authority 3.6 Related legal entities
4. Way of Communication	4.1 Verbal 4.2 Written 4.3 Online communication
5. Channels of communication	5.1 Marketplace messenger 5.2 Zoom 5.3 Google meet 5.4 Microsoft team 5.5 Go meeting 5.6 Boithok 5.7 Webex 5.8 Skype 5.9 Whatsapp
6. Courteous Manner	6.1 Effective questioning 6.2 Active listening 6.3 Speaking skills
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 interpreted client-based communication and etiquette 1.2 prepared documents for endeavour/working/environment/platform 1.3 conducted communication
2. Underpinning Knowledge	2.1. Working platform 2.2. Terms and condition in platform 2.3. Documents for communication 2.4. Validated sources 2.5. Way of communication 2.6. Channel of communication 2.7. Courteous manner
3. Underpinning Skills	3.1 Handling personal computer/laptop 3.2 Interpreting communication needs 3.3 Using channels of communication

	3.4 Logging with online platform 3.5 Interpreting terms and condition
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 Relevant tools, Equipment, software and facilities needed to perform the activities. 5.2 Required learning materials.
6. Methods of Assessment	Methods of assessment may include but not limited to: 6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning
7. Context of Assessment	7.1 Competency assessment must be done in a NSDA accredited assessment centre 7.2 Assessment should be done by an 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 Bangladesh National Qualification Framework (BNQF). Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.	

Sector Specific Units of Competencies

Unit Code and Unit Title	SU-ICT-10-L2-V1: Practice Occupational Safety and Health (OSH) Standard in ICT.
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to Practice Occupational Safety and Health (OSH) Standard in ICT. It includes identifying hazard and risk in the ICT Environment, applying Personal Health and Safety Practices, managing and Report Hazards and responding to Emergencies
Nominal Hours	15 Hours
Elements of Competency	Performance Criteria
1. Identify hazard and risk in the ICT Environment	<p>1.1 <u>Common safety and health risks</u> specific to IT workplaces are identified.</p> <p>1.2 <u>Workplace types and layout</u> and conditions are assessed for compliance with OSH standards.</p> <p>1.3 Types and appropriate usage of <u>Personal Protective Equipment (PPE)</u> for IT-related tasks are identified.</p> <p>1.4 <u>Hazards</u> are identified in ICT environment</p>
2. Apply Personal Health and Safety Practices	<p>2.1 <u>Ergonomically sound practices</u> are implemented including proper workstation setup and posture.</p> <p>2.2 <u>Preventive measures</u> are taken to reduce physical and mental strain.</p> <p>2.3 Cleanliness and orderliness in the workplace are maintained to reduce risks.</p> <p>2.4 Personal Protective Equipment (PPE) is worn and stored properly after use.</p> <p>2.5 Workplace safety conditions are inspected and issues are reported to the designated authority.</p>
3. Manage and Report Hazards	<p>3.1 Routine checks of the immediate work area are conducted to identify hazards and risks.</p> <p>3.2 Corrective actions are taken to mitigate risks within the scope of responsibility.</p> <p>3.3 Internet and social media addiction is minimized to enhance workplace focus and safety.</p> <p>3.4 Detail records of incidents, hazards, and corrective actions are maintained as per workplace standard</p> <p>3.5 Hazards, risks, and incidents are reported accurately and promptly to the designated authority.</p>
4. Respond to Emergencies	<p>4.1 <u>Emergencies</u> are identified and reported according to workplace protocols.</p> <p>4.2 <u>Workplace emergency response procedures</u> are followed effectively as per organizational policy during incidents.</p> <p>4.3 Basic first aid is administered or assistance is sought from qualified personnel as required.</p>
Range of Variables	

Variable	Range (may include but not limited to):
1. Common safety and health risks	1.1 Ergonomics 1.2 Repetitive strain injuries 1.3 Eye strain 1.4 Radiation 1.5 Carpal tunnel syndrome 1.6 Electrical hazards.
2. Workplace Type and layout	2.1 Hardware servicing labs 2.2 Software development rooms 2.3 IT Training Lab 2.4 Server room 2.5 Networking infrastructure
3. Personal Protective Equipment (PPE)	3.1 Aprons, 3.2 Earplugs 3.3 Face mask 3.4 UV-protected eye ware 3.5 Anti-static wristband 3.6 Anti-static shoes. 3.7 Gloves
4. Hazards	4.1 Physical Hazard 4.1.1 Cables running across the floor 4.2 Slippery floor 4.3 Dust 4.2 Mechanical Hazard 4.2.1 Computer case 4.3 Chemical Hazard 4.3.1 Display cleaning chemical 4.3.2 Keyboard cleaning chemical
5. Ergonomically sound practices	5.1 Using adjustable seating 5.2 Maintaining proper posture 5.3 Ensuring proper lighting.
6. Preventive measures	6.1. Regular breaks 6.2. Adequate lighting 6.3. Time management 6.4. Ergonomic furniture 6.5. Adequate ventilation
7. Emergencies	7.1 Equipment failures/malfunctions 7.2 Fires 7.3 Electrical fires 7.4 Explosions 7.5 Natural disasters.
8. Workplace emergency response procedures	8.1 First aid 8.2 Emergency treatment 8.3 Firefighting protocols 8.4 Evacuation plans
Evidence Guide	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 Identified and mitigated OSH issues in IT workplaces.

		1.2 Ensured a safe and hygienic work environment. 1.3 Reported hazards and followed emergency procedures. 1.4 Prevented and addressed social media/internet addiction. 1.5 Demonstrate the ability to identify and manage workplace hazards. 1.6 Demonstrated observance of safety procedures and ergonomic practices. 1.7 Followed emergency response procedures effectively.
2. Underpinning knowledge		2.1 OSH policies, regulations, and standards for IT workplaces. 2.2 Common hazards in IT environments 2.3 Emergency response procedures and safety protocols. 2.4 Principles of Occupational Safety and Health (OSH). 2.5 Common IT workplace hazards and associated risks 2.6 Workplace safety regulations and organizational policies
3. Underpinning skills		3.1 Safe operation and maintenance of IT equipment and tools 3.2 Practical application of ergonomic practices 3.3 Documenting incidents and communicating with relevant personnel 3.4 Effective communication of safety concerns to peers and supervisors 3.5 Ability to respond promptly to emergencies
4. Required attitudes		4.1 Commitment to maintaining a safe and healthy work environment 4.2 Proactive approach to identifying and mitigating risks 4.3 Accountability for personal and workplace safety 4.4 Cooperation and respect for peers, supervisors, and safety policies 4.5 Willingness to participate in training and continuous improvement efforts 4.6 Mindfulness to avoid workplace distractions like excessive use of social media
5. Resource implication		5.1 IT workplace setup (actual or simulated). 5.2 PPE and safety equipment. 5.3 Workplace policies and emergency response documentation.
6. Methods of Assessment		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 center. 7.2. Assessment should be done by 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 BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.		

Unit Code and Title	SU-ICT-04-L3-V1: Comply to Ethical Standards in the ICT Workplace
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to comply to ethical standards in the ICT workplace. It specifically includes the task of upholding the requirements of clients, delivering quality products and services, maintaining professionalism at workplace, and maintaining workplace code of conduct.
Nominal Hours	15 Hours
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables
1. Uphold the requirements of clients	1.1 Clients' requirements are identified. 1.2 Confidentiality of information is maintained in accordance with workplace policies / organizational policies/ national legislation. 1.3 Potential conflicts of interest are identified and involved parties of potential conflicts are notified. 1.4 Proprietary rights of client/customer is asserted.
2. Deliver quality products and services	2.1. Products and services are provided according to the clients' requirements. 2.2. Work is completed as per standards. 2.3. Quality processes are implemented when developing products and services.
3. Maintain professionalism at workplace	3.1 Work processes are delivered as per standards. 3.2 Skills, knowledge and qualifications are presented in a professional manner. 3.3 Services and products developed by self and others are delivered as per workplace standard. 3.4 Unbiased and objective information are provided to clients. 3.5 Realistic estimates for time, cost and delivery of outputs are presented during negotiation.
4. Maintain workplace code of conduct.	4.1 Workplace code of conduct are interpreted 4.2 Workplace code of conduct is followed.
Range of variables	
Variables	Range (may include but not limited to):
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	

1. Critical aspects of competency	<p>Assessment required evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1 asserted proprietary rights of client/customer. 1.2 completed work to industry and international standards. 1.3 implemented quality processes when developing products and services. 1.4 delivered services and products developed by self and others. 1.5 provided unbiased and objective information to clients. 1.6 followed workplace code of conduct.
2. Underpinning knowledge	<ol style="list-style-type: none"> 2.1. Corporate code of confidentiality of information 2.2. organizational policies, national legislation and workplace policies in relation to IT sector 2.3. Law and regulations pertaining to proprietary rights 2.4. Quality processes for products and services 2.5. Procedure of provided to client information 2.6. Method of estimating for time, cost and delivery products and services 2.7. Workplace code of conduct in IT sector
3. Underpinning Skills	<ol style="list-style-type: none"> 3.1. Upholding confidentiality of information in accordance with organizational policies, national legislation and workplace policies 3.2. Asserting proprietary rights of client/customer 3.3. Completing work in accordance with industry and international standards 3.4. Implementing quality processes when developing products and services 3.5. Delivering correctly services and products developed by self and others 3.6. Providing unbiased and objective information are to clients. 3.7. Presenting realistic estimates for time, cost and delivery of outputs during negotiation 3.8. Following workplace code of conduct
4. Underpinning Attitudes	<ol style="list-style-type: none"> 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	<p>The following resources must be provided:</p> <ol style="list-style-type: none"> 5.1 Relevant tools, Equipment, software and facilities needed to perform the activities. 5.2 Required learning materials.

6. Methods of Assessment	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 center. 7.2. Assessment should be done by NSDA certified/nominated assessor
<p>Accreditation Requirements</p> <p>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 BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

Occupation Specific Units of Competencies

Unit Code and Title	OU-ICT-CO-01-L3-V2: Operate a Personal Computer
Unit Descriptor	This unit covers the knowledge, skills, and attitude required to operate a personal computer. It specifically includes the requirements of accessing computer, system information, and features, managing user accounts, organizing files and folders, identifying technical error and fixing Technical error
Nominal Hours	25 hours
Elements of Competency	Performance Criteria <u>Bold and underlined</u> terms are elaborated in the range of variables
1. Access computer, system information, and features	1.1 Workspace, furniture, and equipment are adjusted to suit user <u>ergonomic requirements.</u> 1.2 <u>Work arrangements</u> are ensured to meet organizational and <u>Occupational Safety and Health (OSH) requirements</u> for computer operation. 1.3 Personal Computer and all the Peripherals are checked and ensured operational as per job requirement. 1.4 The computer is started or logged on according to user procedures. 1.5 Basic functions and features are identified using system information. 1.6 <u>Common applications</u> of OS are accessed. 1.7 Help functions are used as required.
2. Manage user accounts	2.1 Existing <u>user account</u> is manipulated. 2.2 A new user account is created and managed. 2.3 User privileges are managed.
3. Organize files and folders	3.1 Folders are created with an appropriate name 3.2 Files are organized in appropriate folders 3.3 Rename and move folders and files as required 3.4 Identify folder and <u>file attributes</u> 3.5 Move folders and files using cut and paste, and drag and drop techniques 3.6 Save folders and files to <u>appropriate media</u> where necessary 3.7 Folders and files are searched 3.8 Deleted folders and files are restored as necessary
4. Identify Technical error	4.1 Hardware & Software are checked for malfunctions 4.2 <u>Problems</u> are identified, recorded and reported to authority.
5. Fix Technical error	5.1 Possible solutions for error are selected and applied 5.2 Faulty Software or missing fonts are identified. 5.3 Possible solutions for Faulty <u>Software or fonts</u> are selected and applied. 5.4 Regular updates for software are checked and updated
Range of Variables	

Variable	Range (May include but not limited to:)
1. Ergonomic requirements	1.1 Avoid radiation from screens. 1.2 Adjust screen position, chair height, and workstation layout. 1.3 Use document holders, proper keyboard and mouse placement, and lighting. 1.4 Minimize noise and maintain correct posture. 1.5 Consider footrests and periodic breaks.
2. Work arrangements	2.1. Exercise breaks 2.2. Mix of repetitive and other activities 2.3. Rest periods 2.4. Visual display unit (VDU) eye testing
3. Occupational safety and health requirements	3.1. OSH guidelines related to the: 3.1.1. Use of the screen equipment, 3.1.2. Computing equipment and peripherals 3.1.3. Ergonomic workstations, 3.1.4. Security procedures, 3.1.5. Customization requirements 3.2. Statutory requirements
4. Common applications	4.1 Word pad 4.2 Note pad 4.3 Paint 4.4 Media player 4.5 Calculator 4.6 Sticky Notes 4.7 Snipping Tool 4.8 Text Document
5. User account	5.1 Local user account 5.2 Microsoft account
6. File attributes	6.1 Dates 6.2 Size 6.3 File Name 5.3 File Type
7. Appropriate media	7.1 CDs/DVD 7.2 External hard drive 7.3 Locations on a Network/Cloud 7.4 USB/ Flash/Thumb drives
8. Problems	Hardware 1.1 Device power issue 1.2 Data cable issue 1.3 Device Date & Time mismatch 1.4 Boot Device fault Software: 1.5 OS Failure 1.6 Application software error Network: 6.4 Network connection
9. Software and missing fonts	1.1 Office Application Software 1.2 Bangla Typing Software 1.2.1 Bijoy

	1.2.2 Avro 1.3 Fonts 1.3.1 ASCII (sutonnyjm, ananda) 1.3.2 Unicode (nikosh, solaimanlipi, kalpurush, mukti, vrinda, Sonar Bangla) 6.5 Antivirus Software (Sophos, Kaspersky, McAfee, Norton, Bitdefender, Avira, Eset)
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, and recent and meet the requirements of the current version of the unit of competency.	
1. Critical aspects of competency	Assessment required evidence that the candidate: <ul style="list-style-type: none"> 1.1 Ensured Safety and Ergonomics 1.2 Set up a workstation that complies with ergonomic standards. 1.3 Followed Occupational Safety and Health (OSH) guidelines for computer operation. 1.4 Operated and Navigated the System 1.5 Started and shut down the computer safely and in compliance with organizational procedures. 1.6 Accessed and utilized system features and basic OS applications. 1.7 Managed User Accounts 1.8 Created, modified, and managed user accounts effectively, including assigning appropriate privileges. 1.9 Organized Files and Folders 1.10 Created, renamed, moved, and stored files and folders efficiently. 1.11 Used search functions to locate files and folders. 1.12 Restored deleted files when necessary. 1.13 Utilized Storage Media 1.14 Saved files to appropriate storage media (e.g., USB drives, network, cloud storage). 1.15 Demonstrated Problem-Solving Skills 1.16 Used help functions or troubleshoot basic computer issues.
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1 Principles of ergonomics for computer workstations. 2.2 OSH guidelines related to computer operation and workstation safety. 2.3 Basic Computer Components and Peripherals 2.4 Functions of the CPU, monitor, keyboard, mouse, and common peripherals (e.g., printers, scanners). 2.5 Basic features and functions of the operating system. 2.6 Navigation and use of desktop elements. 2.7 File Management Concepts 2.8 File organization principles, folder structures, and attributes. 2.9 Storage options (e.g., USB, external drives, cloud storage). 2.10 User Account Management 2.11 Types of user accounts (local, Microsoft).

	2.12 Privilege levels and their implications. 2.13 Uses and features of tools like WordPad, Paint, Media Player, and Calculator. 2.14 Common computer errors and their resolution. 2.15 Utilizing help functions or manuals.
3. Underpinning skill	3.1 Starting computer 3.2 Running application software 3.3 Understanding components like the keyboard, mouse, monitor, and ports. 3.4 Navigating Operating System 3.5 Creating, renaming, organizing, and locating files and folders. 3.6 Using devices such as printers, scanners, and external storage drives
4. Required attitude	4.1 Attention to Detail for ensuring accuracy in file organization and account management. 4.2 Reactiveness to regularly maintaining an organized digital workspace. 4.3 Adopting preventive measures to ensure equipment functionality. 4.4 Problem-solving mindset for addressing minor technical issues independently. 4.5 Commitment to Safety for maintaining a safe and ergonomic working environment. 4.6 Willingness to learn to adapt to new tools, software, and systems. 4.7 Professionalism for following organizational protocols for computer usage and data handling.
5. Resource implication	5.1 Relevant tools, Equipment, software and facilities needed to perform the activities. 5.2 Required learning materials.
6. Methods of assessment	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 center. 7.2 Assessment should be done by 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 BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.	

Unit Code Title	OU-ICT-CO-02-L3-V2: Prepare a Document Using Word Processor
Unit Descriptor	This unit covers the knowledge, skills, and attitudes required to prepare a document using word processing software. This specifically includes preparing for the job, creating documents, formatting documents, reviewing and protecting documents, and printing and transferring documents.
Nominal Hours	80 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables)
1. Prepare for the Job	1.1 Safe work practices according to workplace procedures are observed and followed. 1.2 <u>Necessary Software</u> is checked and ensured operational as per job requirement. 1.3 Availability of required fonts for typing of Bangla and English are Ensured. 1.4 <u>Type of Documents</u> are identified to be prepared.
2. Create Document	2.1. A new document is created from blank/ library as per requirement. 2.2. Word options and ribbon display options are set as required. 2.3. <u>Page layouts</u> are set as per job requirements. 2.4. <u>Contents</u> are inserted as per specification. 2.5. <u>Breaks Options</u> are applied as per requirement. 2.6. <u>Mail Marge</u> is performed as per requirements.
3. Format Document	3.1 <u>Formatting</u> is used as per instructions. 3.2 <u>References</u> are applied to make a document with a professional look. 3.3 Document is saved in a specific directory/ destination with appropriate <u>file format</u> .
4. Review and Protect Document	4.1 Document is reviewed against job specification in track change mode. 4.2 Comments are inserted as required 4.3 Document is Protected using Password 4.4 Document is saved after finalization.
5. Transfer document and print using Network printer	5.1 Appropriate network printer is identified and selected. 5.2 <u>Print settings</u> is configured according to task requirements. 5.3 Appropriate size of paper is ensured as required 5.4 Print preview is checked 5.5 Documents for printing is prepared and sent.

	5.6 Print job status is monitored and output is retrieved. 5.7 <u>Common printing issues</u> are resolved if necessary 5.8 Document is transferred using <u>Storage Media</u> .
Range of Variables	
Variable	Range (may include but not limited to):
1. Necessary Software's	1.1 Word Processing Application Software 1.1.1. Microsoft Word 1.1.2. LibreOffice Writer 1.1.3. WPS Office Free Writer 1.1.4. Google Doc 1.2 Bangla typing Software 1.2.1. Bijoy 1.2.2. Avro 1.3 Converter 1.3.1 Unicode to ASCII code (Bijoy) 1.3.2 ASCII code (Bijoy) to Unicode
2. Type of documents	2.1 Application 2.2 CV 2.3 Cover letter 2.4 Report 2.5 Project Proposal
3. Page layout	3.1 Page Orientations 3.2 Page Size 3.3 Margin 3.4 Header and Footer 3.5 Page Number 3.6 Columns 3.7 Page Background
4. Contents	4.1 Text 4.2 Table 4.3 Illustrations 4.4 Symbols 4.5 Equation 4.6 Links
5. Breaks Options	5.1 Page Break 5.2 Column Break 5.3 Section Break
6. Mail Merge	6.1 Mail Merge 6.1.1. Letter 6.1.2. Email 6.1.3. Envelopes 6.2 Label

7. Formatting	7.1 Font 7.2 Paragraph 7.3 Image size 7.4 Alignment
8. References	8.1 Footnote 8.2 Endnote 8.3 Citations & Bibliography 8.4 Index 8.5 Captions 8.6 Table of Authorities 8.7 Comments 8.8 Table of Contents 8.9 Table of figure
9. File Format	9.1 .doc 9.2 .docx 9.3 .pdf 9.4 .rtf 9.5 .txt 9.6 .dot 9.7 .dotx 9.8 .dotm
10. Print settings	10.1 Printing Page 10.2 Single/Both side Print. 10.3 Odd/Even Page Print 10.4 Collated 10.5 Page Orientation 10.6 Paper Size 10.7 Margins 10.8 Page Per sheet
11. Common printing issues	11.1 Paper jam 11.2 Low toner/ink 11.3 Connectivity issues 11.4 Printer driver error 11.5 Incorrect print output
12. Storage Media	12.1 USB Pen drive 12.2 Portable Hard drive 12.3 Optical Disk
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 safe work practices during document preparation.

	<ul style="list-style-type: none"> 1.2 Utilized appropriate word processing software for creating and formatting documents. 1.3 Identified and created different types of documents based on requirements (e.g., CVs, reports, proposals). 1.4 Applied advanced formatting options, including page layout, fonts, tables, and references. 1.5 Used tools like mail merge and breaks to enhance document functionality. 1.6 Reviewed, edited, and protected documents with features like track changes, comments, and password protection. 1.7 Identified appropriate network printer 1.8 Configured print settings configuration 1.9 Performed paper Management to ensure the printer is loaded with the correct paper size and type, and troubleshooting if paper-related issues arise. 1.10 Used print preview options 1.11 Identified and resolved common printing issues. 1.12 Prepared documents for output by configuring printer settings and transferring files via storage media.
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1 Word Processing Applications 2.2 Features and uses of software like Microsoft Word, LibreOffice Writer, WPS Office, and Google Docs. 2.3 Document Requirements 2.4 Understand the different types of documents 2.5 Margin and page layout. 2.6 The structure and format for applications, CVs, reports, and proposals. 2.7 Formatting Techniques 2.8 Fonts, alignment, paragraph styles, image adjustments, and references (e.g., footnotes, citations). 2.9 Content 2.10 Use of text, tables, symbols, illustrations, and equations. 2.11 Typing software like Bijoy and Avro is used for multilingual document preparation. 2.12 keyboard layout. 2.13 File format/extension. 2.14 Save and Save As 2.15 Security Features to protect documents using passwords and restrict unauthorized changes. 2.16 Printing process 2.17 Print settings, paper size, and 2.18 Transferring documents via USB drives or other storage media. 2.19 Printer Types and Functionality 2.20 Differences between network and local printers

	2.21 Features and specifications of available printers (e.g., color vs. monochrome, duplex printing, etc.). 2.22 Print Settings and Configurations 2.23 Network Connectivity 2.24 Document Formatting 2.25 Document layout, including margins, page size, and alignment, as well as how these settings affect the print output. 2.26 Troubleshooting Techniques for common printer issues (e.g., paper jams, low ink/toner, and printer offline).
3. Underpinning skills	3.1 Operating a personal computer 3.2 Typing in English and Bangla 3.3 Operate Printer
4. Required attitudes	The candidate should demonstrate: 4.1 Commitment to occupational safety and health. 4.2 Attention to Detail for ensuring documents meet job specifications and are free of errors. 4.3 Professionalism for producing well-formatted, structured, and visually appealing documents. 4.4 Adaptability to work with different software, file formats, and document requirements. 4.5 Commitment to Quality for ensuring the document aligns with professional standards and user needs. 4.6 Security Consciousness for prioritizing document protection and confidentiality. 4.7 Time Management for completing tasks efficiently within allocated timeframes.
5. Resource implication	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 are not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning
7. Context of assessment	7.1 Competency assessment must be done in an NSDA-accredited center. 7.2 Assessment should be done by an NSDA-certified/nominated assessor

Accreditation Requirements

Training Providers must be accredited by the 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 BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	OU-ICT-CO-03-L3-V2: Prepare a spreadsheet
Unit Descriptor	<p>This unit covers the knowledge, skills and attitudes required to prepare a spreadsheet.</p> <p>This specifically includes the task of preparing for the Job, creating Spreadsheet, applying formulas and functions, performing data manipulation and presentation, reviewing and Protect workbook, printing and transferring document.</p>
Nominal Hours	70 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Prepare for the Job	<p>1.1 Safe work practices according to workplace procedures are observed and followed.</p> <p>1.2 <u>Necessary Software</u> is checked and ensured operational as per job requirement.</p> <p>1.3 <u>Types of documents</u> are identified to be prepared.</p>
2. Create Spreadsheet	<p>2.1 Workbook is created from blank/ library as per requirement.</p> <p>2.2 <u>Components of spreadsheet</u> interface are identified</p> <p>2.3 <u>Cell formatting</u> is performed as per <u>data type</u></p> <p>2.4 <u>Page layout</u> is set as per job requirements.</p> <p>2.5 Data <u>Contents</u> is inserted as per specification.</p> <p>2.6 <u>Paste Special</u> options are used if required.</p> <p>2.7 Freeze pane is used if required</p> <p>2.8 Spell check (for English) is performed.</p> <p>2.9 Workbook is saved in a specific directory/ destination as instructed with appropriate <u>File format</u>.</p>
3. Apply formulas and functions	<p>3.1. Formulas are applied using <u>operators</u></p> <p>3.2. <u>Functions</u> are applied as per requirement</p> <p>3.3. <u>Data validation</u> is performed as per requirement</p>
4. Perform data manipulation and presentation	<p>4.1 Data is sorted with different criteria.</p> <p>4.2 Data is filtered with different conditions.</p> <p>4.3 Conditional Formatting is applied</p> <p>4.4 <u>Data manipulation tools</u> are applied</p> <p>4.5 Data is presented using <u>Charts</u> as required</p>
5. Review and Protect Workbook	<p>5.1 Workbook is reviewed against job specification in track change mode.</p> <p>5.2 Comments are inserted as required</p> <p>5.3 Workbook is saved after finalization.</p> <p>5.4 Workbook is Protected using Password</p>

6. Print and Transfer Document	6.1 Page layout is set using <u>print titles</u> options 6.2 Printer is selected and <u>printer settings</u> are confirmed 6.3 Appropriate size of paper is ensured as required 6.4 Print preview is checked. 6.5 Workbook is Printed 6.6 Document is transferred using <u>Storage Media.</u>
Range of Variables	
Variable	Range (may include but not limited to):
1. Necessary Software	1.1 Spreadsheet Application Software 1.2 Excel 1.3 LibreOffice Calc 1.4 OpenOfficeOrg 1.5 Google sheet 1.6 Numbers (MacOS)
2. Type of documents	2.1 Calendar 2.2 Monthly budget 2.3 Salary sheet 2.4 Work schedule 2.5 Loan calculator 2.6 Organizational chart 2.7 Invoice 2.8 Inventory list 2.9 Result sheet 2.10 Data Summary Report
3. Components of spreadsheet	3.1. Title bar 3.2. TAB 3.3. Ribbon 3.4. Formula Bar 3.5. Workbook views 3.6. Zoom Option
4. Cell formatting	4.1 Alignment 4.2 Font 4.3 Border 4.4 Fill 4.5 Protection
5. Data type	5.1. Text 5.2. Number 5.3. Currency 5.4. Accounting 5.5. Date 5.6. Time 5.7. Percentage 5.8. Text 5.9. Special

	5.10. Custom
6. Page layout	6.1 Page Orientations 6.2 Page Size 6.3 Margin 6.3.1 Top 6.3.2 Bottom 6.3.3 Left 6.3.4 Right 6.4 Header and Footer 6.5 Page Number 6.6 Columns
7. Contents	7.1 Text 7.1.1 Wrap text 7.1.2 Merge 7.2 Table 7.2.1 Row 7.2.2 Column 7.2.3 Merge & Split 7.2.4 Alignment 7.3 Illustrations 7.4 Symbols 7.5 Links 7.5.1 Hyperlink 7.5.2 Cell 7.5.3 Sheet
8. Paste Special	8.1 Formulas 8.2 Values 8.3 Formats 8.4 Transpose 8.5 Paste Link
9. File format	9.1 .xls 9.2 .xlsx 9.3 .csv 9.4 .xml
10. Operator	10.1 Arithmetic 10.1.1 + (Addition) 10.1.2 - (Subtraction) 10.1.3 * (Multiplication) 10.1.4 / (Division) 10.2 Logical 9.2.1. AND 9.2.2. OR 9.2.3. NOT 10.3 Relation 10.3.1 = (Equal)

	10.3.2 < (Less Than) 10.3.3 > (Greater Than) 10.3.4 <= (Less Than Equal) 10.3.5 >= (Greater Than Equal) 10.3.6 <> (Not Equal)
11. Function	11.1. SUM 11.2. SUMIF 11.3. SUMIFS 11.4. MAX 11.5. MIN 11.6. AVERAGE 11.7. AVERAGEA 11.8. RANK 11.9. IF 11.10. Count 11.11. CountA 11.12. CountIF 11.13. VLookup 11.14. Concatenate 11.15. Len 11.16. Trim
12. Data Validation	12.1. List 12.2. Text Length 12.3. Date 12.4. Time 12.5. Custom 12.6. Number
13. Data manipulation Tools	13.1. Text to Column 13.2. Remove Duplicate 13.3. Consolidate 13.4. Group / Ungroup 13.5. Table 13.6. Pivot Table 13.7. Hyperlink
14. Chart	14.1. Column 14.2. Line 14.3. Pie 14.4. Bar
15. Print titles	15.1. Set Print Area 15.2. Rows to repeat at Top 15.3. Columns to repeat to Left 15.4. Page Order

16. Printer settings	16.1. Printing Page 16.2. Single/Both side Print. 16.3. Odd/Even Page print 16.4. Collated 16.5. Page Orientation 16.6. Paper Size 16.7. Margins 16.8. Page Per sheet
17. Storage Media	17.1 USB Pen drive 17.2 Portable Hard drive 17.3 Optical Disk
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, and recent and meet all requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	Assessment required evidence that the candidate: <ul style="list-style-type: none"> 1.1 Followed safe work practices and complied with workplace procedures. 1.2 Prepared spreadsheets with accuracy to create spreadsheets according to specifications, ensuring proper formatting, formulas, and functions are applied effectively. 1.3 Utilized software features using advanced tools such as data validation, conditional formatting, and charts for manipulation and presentation. 1.4 Protected and shared documents to secure workbooks with appropriate protection and transfer documents using storage media. 1.5 Reviewed and finalized output to ensure the workbook is error-free through spell-check, track changes, and proper print setup. 1.6 Developed a range of documents as per workplace requirements.
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1 Spreadsheet Software Basics 2.2 Use of spreadsheet application software. 2.3 Knowledge of tools such as Microsoft Excel, Google Sheets, LibreOffice Calc, and their interfaces. 2.4 File format/extension of spreadsheet application program 2.5 Concepts of cell formatting (e.g., alignment, fonts, borders) and page layout (e.g., orientation, margins). 2.6 Understanding arithmetic and logical operators, as well as essential functions like SUM, IF, VLOOKUP, and COUNTIF.

	<p>2.7 Data Management Techniques such as Sorting, filtering, pivot tables, and handling duplicates.</p> <p>2.8 Charting and Visualization</p> <p>2.9 Types of charts and their use in presenting data effectively.</p> <p>2.10 File Management</p> <p>2.11 Different file formats, saving practices, and transferring documents securely.</p> <p>2.12 Safe work practices and protecting sensitive information with passwords.</p>
3. Underpinning skills	<p>3.1 Performing demonstration of</p> <p>3.2 Using Logical Functions</p> <p>3.3 Creating table</p> <p>3.4 Using Operators</p>
4. Required attitudes	<p>The candidate should demonstrate:</p> <p>4.1 Commitment to occupational safety and health.</p> <p>4.2 Attention to Detail for precision in formatting, and calculations to meet job specifications and are free of errors.</p> <p>4.3 Professionalism for producing well-formatted, structured, and visually appealing documents.</p> <p>4.4 Adaptability to work with different spreadsheet tools or software</p> <p>4.5 Commitment to Quality for ensuring the document aligns with professional standards and user needs.</p> <p>4.6 Security Consciousness for prioritizing document protection and confidentiality.</p> <p>4.7 Ensuring data integrity and confidentiality</p> <p>4.8 Time Management for completing tasks efficiently within allocated timeframes.</p> <p>4.9 Engaging effectively with team members during reviews and comments.</p> <p>4.10 Determined for clear, accurate, and professional spreadsheet outputs.</p>
5. Resource implication	<p>The following resources must be provided:</p> <p>5.1 Workplace (actual or simulated).</p> <p>5.2 Tools, equipment, and physical facilities appropriate to perform activities.</p> <p>5.3 Materials consumable to perform activities.</p>
6. Methods of assessment	<p>Methods of assessment may include but are not limited to:</p> <p>6.1 Written test</p> <p>6.2 Demonstration</p> <p>6.3 Oral questioning</p>

7. Context of assessment	<p>7.1 Competency assessment must be done in NSDA accredited center.</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor</p>
<p>Accreditation Requirements</p> <p>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 BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

Unit Code and Title	OU-ICT-CO-04-L3-V2: Prepare a Presentation
Unit Descriptor	<p>This unit covers the knowledge, skills, and attitudes required to prepare a presentation.</p> <p>This specifically includes preparing for the job, creating and furnishing presentations, applying slide master, and printing and transferring the presentation.</p>
Nominal Hours	50 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Prepare for the Job	1.1 Safe work practices according to workplace procedures are observed and followed. 1.2 <u>Necessary software</u> is checked and ensured operational as per job requirements. 1.3 <u>Types of presentation</u> are identified to be prepared.
2. Create Presentation	2.1 A new presentation file is created from blank/ library as per requirement. 2.2 <u>Components of the presentation interface</u> are identified 2.3 Slide size is selected as per requirement. 2.4 Slides are inserted with the appropriate layout as required. 2.5 <u>Contents</u> are inserted as per presentation requirements. 2.6 Presentation is saved in a specific directory/ destination as instructed with the appropriate <u>file format</u> . 2.7 Slides are checked with the <u>presentation views</u> .
3. Furnish presentation	3.1 Slides background customization is performed 3.2 <u>Animation</u> are applied 3.3 <u>Transition</u> are applied 3.4 Presentation is checked
4. Apply slide master	4.1 Slide layout is selected from Slide Master 4.2 Slide layout is customized as per requirements. 4.3 <u>Slide master options</u> are applied as required 4.4 Master view is closed
5. Print and Transfer presentation	5.1 Printer is selected and <u>settings</u> are confirmed 5.2 Presentation slides are Printed 5.3 Presentation is transferred using <u>storage media</u> . 5.4 Appropriate print format is selected for presentation. 5.5 Presentation is exported with <u>expected format</u>
Range of Variables	
Variable	Range (may include but not limited to):

1. Necessary Software's	1.1 Presentation Application Software <ul style="list-style-type: none"> 1.1.1 Microsoft PowerPoint 1.1.2 LibreOffice impress 1.1.3 Prezi 1.1.4 Google Slide 1.1.5 Slidebean 1.2 Bangla typing Software <ul style="list-style-type: none"> 1.2.1 Bijoy 1.2.2 Avro
2. Types of presentation	2.1 Business Presentation 2.2 Personal Portfolio 2.3 Infographic Resume 2.4 Education Materials 2.5 Informative presentations
3. Components of presentation interface	3.1 Tab 3.2 Ribbon 3.3 Bar
4. Contents	4.1 Text 4.2 Table 4.3 Illustrations <ul style="list-style-type: none"> 4.3.1 Picture 4.3.2 Shapes 4.3.3 Customize Shape 4.3.4 Text Box 4.3.5 SmartArt 4.3.6 Chart 4.3.7 Screenshot 4.3.8 Icon 4.3.9 3D Model 4.4 Symbols 4.5 Equation 4.6 Hyperlink 4.7 Media <ul style="list-style-type: none"> 4.7.1 Audio 4.7.2 Video 4.7.3 Screen Recording 4.8 Infographic 4.9 Object 4.10 Countdown Timer 4.11 Action Button

5. File format.	5.1 .pptx 5.2 .pptm 5.3 .ppt 5.4 .pdf 5.5 .xps 5.6 .mp4 5.7 .wmv 5.8 .jpg 5.9 .gif 5.10 .png 5.11 .tiff
6. Presentation views.	6.1. From beginning 6.2. From Current slide 6.3. Custom Slide show 6.4. Slide sorter
7. Animation	7.1 Entrance 7.2 Emphasis 7.3 Exit 7.4 Motion Paths
8. Transition	8.1 Subtle 8.2 Exciting 8.3 Dynamic Content
9. Slide master options	9.1. Master layout 9.2. Title 9.3. Placeholder 9.4. Background style 9.5. Slide Size 9.6. Color Scheme 9.7. Font style
10. Settings	10.1 Collated 10.2 Print layout 10.3 Handouts 10.4 Page Orientation 10.5 Paper Size 10.6 Margins 10.7 Page Per sheet 10.8 Color 10.9 Header & footer
11. Storage Media	11.1 USB Pen drive 11.2 Portable Hard drive 11.3 Optical Disk

12. Expected format	12.1 Pdf 12.2 Video 12.3 Handouts 12.4 Package for CD
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, and recent and meet all requirements of the current version of the Unit of Competency.	
2. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 created professional presentations. 1.2 customized and applied slide transitions, animations, and layouts. 1.3 used slide master effectively for a consistent design. 1.4 printed and exported presentations in various formats.
3. Underpinning knowledge	2.1 Different presentation types: Business, personal portfolios, infographic resumes, educational materials, and informative presentations. 2.2 Recognize and use various file extensions such as .pptx, .pdf, .mp4, etc. 2.3 Use of presentation views like Slide Sorter, Custom Slide Show, and From Beginning. 2.4 Transitions and Animations 2.5 Use of transitions (Subtle, Exciting) and animations (Entrance, Exit, Motion Paths). 2.6 Workplace Practices: 2.7 Maintain a clean and orderly environment and adhere to safety protocols. 2.8 Differentiate between "Save" and "Save As" and know how to configure printer settings.
4. Underpinning skills	3.1 Creating and Designing Presentations: 3.2 Developing visually appealing and professional presentations from scratch or templates. 3.3 Applying Transitions and Animations: 3.4 Using creative transitions and animations effectively to enhance visual communication. 3.5 Utilizing Software Features 3.6 Navigate the interface of tools like PowerPoint, Google Slides, or Prezi. 3.7 Showcasing presentations in a structured and engaging manner using appropriate views. 3.8 Exporting presentations in multiple formats and transferring files using storage devices.

5. Required attitudes	<p>4.1 Commitment to Occupational Safety and Health for prioritizing safety protocols and maintaining equipment responsibly.</p> <p>4.2 Willingness to Learn</p> <p>4.3 Show eagerness to adopt new tools, techniques, and practices in presentation preparation.</p> <p>4.4 Respect for workplace dynamics to communicate effectively with peers, subordinates, and seniors.</p> <p>4.5 Practice eco-friendly habits in material usage and waste management.</p> <p>4.6 Attention to detail to ensure high-quality output by reviewing and revising work.</p> <p>4.7 Collaboration within teams and assist in group tasks when necessary.</p>
6. Resource implication	<p>The following resources must be provided:</p> <p>5.1 Workplace (actual or simulated).</p> <p>5.2 Tools, equipment and physical facilities appropriate to perform activities.</p> <p>5.3 Materials consumable to perform activities.</p>
7. Methods of assessment	<p>Methods of assessment may include but not limited to:</p> <p>6.1 Written test</p> <p>6.2 Demonstration</p> <p>6.3 Oral questioning</p>
8. Context of assessment	<p>7.1 Competency assessment must be done in a NSDA accredited center.</p> <p>7.2 Assessment should be done by a NSDA certified/nominated assessor</p>
<p>Accreditation Requirements</p> <p>Training Providers must be accredited by the 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 BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

Unit Code and Title	OU-ICT-CO-05-L3-V2: Use and Manage Digital Resources
Unit Descriptor	This unit covers the knowledge, skills, and attitudes required to manage digital resources and technical support. It specifically includes the task of using cloud storage for resource-sharing, using an Online form to collect data, and conducting meetings using Online Platforms.
Nominal Hours	20 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Use cloud storage for resource sharing	1.1 Identified and selected <u>cloud storage platforms</u> that meet organizational needs to share resources 1.2 Created and configured user accounts on the chosen cloud platform. 1.3 Appropriate settings are applied including access permissions, folder structure, and sharing options. 1.4 Resources are uploaded to the cloud storage platform efficiently and accurately. 1.5 Sharing options are configured and implemented to ensure that resources are accessible to the intended users. 1.6 Set and managed access <u>permissions</u> to maintain data security and privacy.
2. Create an Online form to collect data	2.1 <u>Online Form</u> is identified and selected that meets organizational needs to share resources 2.2 Form is designed with the required field applying <u>validation rules</u> for collecting data 2.3 An online storage arrangement is set for storing the collected data. 2.4 Form is tested to ensure the functionality of the created form 2.5 Shared the form link to the stakeholder using <u>different media</u> for collecting data
3. Use an Online Platform to schedule and conduct meetings	3.1 A suitable <u>online meeting platform</u> is selected for the meeting requirements. 3.2 Platform is set up, and all necessary <u>platform facilities</u> are ensured to be functional. 3.3 Meetings are scheduled, and the <u>online calendar</u> is managed, considering time zones and participants. 3.4 Invitation is distributed including necessary attachments or pre-reading materials. 3.5 The meeting is facilitated effectively, ensuring engagement and adherence to the agenda.
Range of Variables	
Variable	Range (may include but not limited to):

1. Cloud storage platforms	1.1 Dropbox 1.2 MEGA 1.3 OneDrive 1.4 Google Drive
2. Permissions	2.1 View 2.2 Edit 2.3 Download
3. Online Form	3.1 Google form 3.2 Microsoft form 3.3 Type form 3.4 Paper form 3.5 Wufoo
4. Validation rules	4.1 Phone number 4.2 Email address 4.3 Postal Code 4.4 US Zip Code 4.5 Course Number 4.6 3 or 4 digits 4.7 Number of characters 4.8 Number of Words 4.9 Capitalize First Name 4.10 File type 4.11 Number of attachments 4.12 File size
5. Different media	5.1 WhatsApps 5.2 Telegram 5.3 Email
6. Online meeting platform	6.1 Zoom 6.2 Meet 6.3 Bip 6.4 Team
7. Platform facilities	8.1 Meeting Schedule 8.2 Guest management 8.3 Session Recording 8.4 Screen Sharing 8.5 Messaging 8.6 File sharing
8. Online calendar	8.1 Google Calendar 8.2 Microsoft Outlook calendar 8.3 Yahoo Calendar
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent, and recent and meet all requirements of the current version of the Unit of Competency.	










1. Critical Aspects of Competency	<p>Assessment required evidence that the candidate:</p> <p>1.1 used Virtual Platform</p> <p>1.2 Identified Technical Fault</p> <p>1.3 Fixed Technical Faults</p>
2. Underpinning knowledge	<p>2.1 Trends of using the Internet.</p> <p>2.2 Common internet terms and its utilization.</p> <p>2.3 Know-how on the internet, www.</p> <p>2.4 Utilization process of website</p> <p>2.5 Relevant web address.</p> <p>2.6 Know-how on URL.</p> <p>2.7 Types of web browsers and its use.</p> <p>2.8 History cleaning process.</p> <p>2.9 Usages of Email.</p> <p>2.10 Email account creation process.</p> <p>2.11 Features of email and their usages.</p> <p>2.12 Usages of:</p> <p>2.12.1. incognito mode</p> <p>2.12.2. synchronization</p> <p>2.12.3. autofill</p> <p>2.12.4. default browser</p> <p>2.12.5. reset and clean-up</p> <p>2.12.6. addons</p> <p>2.13 Utilization process of search engines.</p> <p>2.14 Function of Google services.</p> <p>2.15 Procedure for using this Google service.</p> <p>2.16 Use of social media.</p> <p>2.17 Web-based services process.</p> <p>2.18 Folder manipulation process.</p> <p>2.19 Netiquette</p> <p>2.20 Email Etiquettes</p> <p>2.21 Email Security</p>
3. Underpinning skills	<p>3.1 Performing Schedule management</p> <p>3.2 Sharing resources through cloud storage.</p> <p>3.3 Collecting Data using the online form</p> <p>3.4 Identifying, recording, and reporting Problems to the authority</p>
4. Required attitudes	<p>4.1 Commitment to occupational safety and health.</p> <p>4.2 Promptness in carrying out activities.</p> <p>4.3 Sincere and honest to duties.</p> <p>4.4 Eagerness to learn the document preparation process.</p> <p>4.5 Tidiness and timeliness.</p> <p>4.6 Environmental concerns.</p> <p>4.7 Respect for the rights of peers, subordinates and seniors at the workplace.</p> <p>4.8 Communication with peers, subordinates and seniors in the workplace.</p> <p>4.9 Keeps a clean and orderly workplace and equipment</p>

5. Resource implications	<p>The following resources must be provided:</p> <p>5.1 Workplace (actual or simulated);</p> <p>5.2 Relevant tools, equipment, software and facilities needed to perform the activities; and</p> <p>5.3 Required learning materials.</p>
6. Methods of assessment	<p>Methods of assessment may include but not limited to:</p> <p>6.1 Written test;</p> <p>6.2 Demonstration;</p> <p>6.3 Oral questioning;</p>
7. Context of assessment	<p>7.1 Competency assessment must be done in NSDA accredited center.</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor</p>
<p>Accreditation Requirements</p> <p>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 BNQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

Development of Competency Standard

The Competency Standards for National Skills Certificate in Computer Operation, Level-3 is developed by NSDA on 4-7 April 2022.



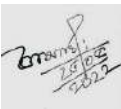




List of Members

S/N	Name and Address	Position in the committee	Signature and Date
1.	Alif Rudaba, Member (Planning & Skills Standard) Joint Secretary, National Skills Development Authority (NSDA)	Chairperson	
2.	Md. Abdul Hye Siddiqui, Senior Instructor (Computer), BMET, Email: siddiqui.ttc@gmail.com , Mobile: 01819725610.	Member	
3.	Md. Zuwel Parves, Manager (ICT), Jagorani Chakra Foundation, Mobile: +8801737278906, zuwel.parves906@gmail.com	Member	
4.	Partha Kumar, Senior software developer, Apollo Software Solution partho.me@live.com , Mob: 01712727393	Member	
5.	MD Faruk, IT Officer, Prime Minister's Office, BEPZA. Cell: 01849-153713, E-mail: samifaruk60@gmail.com	Member	
6.	Mir Rashedul Islam, Assistant Manager, bitsBirds Solutions, Email: rashedul.ict@gmail.com , Mobile: 01920576687	Member	
7.	Md. Shah Alam Majumder, Specialist (Course Accreditation), Bangladesh Technical Education Board, Email: ehlam1999@gmail.com , Mobile: 01815424855	Member	
8.	Ashutosh Sarker, Trainer, BASIS Institute of Technology and Management, Email: Ashutosh.sarker@yahoo.com , Mobile: 01676545237	Member	
9.	Md. Saif Uddin, Process Expert, National Skills Development Authority, Email: engrbd.saif@gmail.com , Mobile: 01723004419.	Member	
10.	Mahbub Huda, Consultant, Specialist, NSDA, Email: huda73@gmail.com , Mobile: 01735490491.	Member	

Validation of Competency Standard

The Competency Standards for National Skills Certificate in Computer Operation, Level-3 is validated by NSDA on 23 May 2022.

Members of the SCVC

S/N	Name and Address	Position in the committee	Signature and Date
1.	Shafquat Haider, Chairman, ICT ISC, ciproco@bol-online.com , shafquat.haider@gmail.com, Mobile No. 01711532597	Chairperson	
2.	Md. Abdul Hye Siddiqui, Senior Instructor (Computer), BMET, Email: siddiqui.ttc@gmail.com , Mobile: 01819725610.	Member	
3.	Zahed Ahmed Chowdhury, Chief Instructor & Head of the Department, Computer Science & Technology, Dhaka Polytechnic Institute. Email: zahed.sylhet@gmail.com .	Member	
4.	Khondoker Ali Asgor Pavel, Chief Executive Officer, bitBirds Solutions & PencilBox Training Institute, Email: email@aliasgorpavel.com.	Member	
5.	Mohammad Amranul Hoque Khandaker, Head of TVET Institute, UCEP Jatrabari TVET Institute, Email: mranul.khandaker@ucepbd.org, Mobile: 01814 236444	Member	
6.	Md. Saif Uddin, Process Expert, National Skills Development Authority, Email: engrbd.saif@gmail.com , Mobile: 01723004419.	Member	
7.	Mahbub Huda, Consultant, Specialist, NSDA, Email: huda73@gmail.com , Mobile: 01735490491.	Member	

Review and Validation of Competency Standard

The Competency Standards for National Skills Certificate in Computer Operation, Level- 3 is reviewed and validated by NSDA on 21 October 2024.

List of Members

S/N	Name and Address	Position in the committee	Signature and Date
1.	Shafquat Haider, Chairman, ICT ISC, ciproco@bol-online.com , shafquat.haider@gmail.com, Mobile No. 01711532597	Chairperson	
2.	Birendra Nath Adhikary, Chief Executive Officer, Information and communication technology, Industry Skills Council. Email: ictisc.bd@gmail.com, Mobile: 01730444782	Member	
3.	Md. Shariful Islam, System Analyst ICT Division, Email: Shariful@ictd.gov.bd, Mobile: 01721716053	Member	
4.	Abu Said Md. Rezoun Coordinator (Questionnaire Formulation & Distribution), Bangladesh Computer Council, Email: abusaid.rezoun@bcc.gov.bd, Mobile: 01788210077	Member	
5.	Dr. Rezvi Shahariar, Assistant Professor, IIT, University of Dhaka. Email: rezvi@du.ac.bd, Mobile: 01990295352	Member	
6.	Engr. Ruhul Amin, Ex Vice-Principal, Chapainawabganj Polytechnic Institute. Email: drengrruhulamin@gmail.com, Mobile: 01556327345	Member	
7.	Md. Abdul Hye Siddiqui, Senior Instructor (Computer), BMET, Email: siddiqui.ttc@gmail.com, Mobile: 01819725610.	Member	
8.	Khondoker Ali Asgor Pavel, Co-chairman, HR Development & IT Training, Standing Committee, BASIS. Chief Executive Officer, bitBirds Solutions & PencilBox Training Institute, Email: email@aliasgorpavel.com. Mobile: 01711873008	Member	
9.	A.K.M. Mostofa Kamal Habib System Analyst, National Skills Development Authority, E-mail: sa@nsda.gov.bd, Mobile: 01840066277	Member	
10.	Md. Mofajjel Hossain, Process Expert, NSDA, Email: nsda.mofajjel@gmail.com , Mobile: 01722875539.		
11.	Md. Saif Uddin, Assessment Expert, National Skills Development Authority, Email: engrbd.saif@gmail.com, Mobile: 01723004419	Member	

Workshop Minutes

Government of the People's Republic of Bangladesh
Chief Adviser's Office
National Skills Development Authority
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.

Minutes of the Competency Standard Review and Validation Workshop on “Computer Operation, Level 3” Occupation.

Chairman	: Shafquat Haider, Chairperson
Date	: 21 October 2024
Time	: 9:00am - 5:00 pm
Place	: ISC Conference Room, NSDA, Biniyog Bhaban, Agargaon, Dhaka-1207

The Chairman welcomed all those present and started the work of the workshop. During the day-long workshop, the competency standard of Computer Operation, Level 3 occupation was reviewed and finalized in detail. The activities related to the finalized standard through review and validation workshop are presented below:

Serial No.	Content of validation	Whether it was appropriate		What actions have been taken if not appropriate?
		Yes	No.	
1.	Name and level of occupation	yes		The proposed occupation Computer Operation is split up into two occupations namely Computer Operation, Level 2 and Computer Operation, Level 3.
2.	Nominal Hour	Yes		290 hours.
3.	Unit of Competency		No	From the proposed Occupation 1 new unit added. <ul style="list-style-type: none">Manage Digital Resources and Technical Support. Deleted 2 occupation units <ul style="list-style-type: none">Use Internet and Access Resources.Perform Basic Maintenance and Troubleshooting.
4.	Element		No.	Proper refinement of required elements has been achieved by keeping consistent elements.
5.	Performance Criteria		No.	Necessary refinement of performance criteria has been achieved.
6.	Variables		No.	Appropriate addition, modification and refinement of variables has been done keeping in view the performance criteria.

7.	Critical Aspect of Competence		No.	Appropriate changes have been made in the critical aspect of competency as per the change of units.
8.	Underpinning knowledge		No.	Necessary addition, changings and refinements have been made.
9.	Underpinning Skills		No.	Necessary added, changes and refinements have been made.
10.	Attitude	Yes		
11.	Resources	Yes		
12.	Assessment methods	Yes		
13.	Others			<ul style="list-style-type: none"> ▪ The nominal hours of the units of competencies have been readjusted for content consideration. ▪ Overall, the occupation has been included in Level-3 according to BNQF 1-6.

Through the above activities, the Competency Standard has been reviewed, finalized and validated as “**Computer Operation, Level 3**”.

Chairman
Committee on Standard and
Curriculum Validation,
Chairman - ICT ISC