



**NATIONAL COMPETENCY STANDARDS  
FOR  
COMPUTER APPLICATION ASSISTANT  
(NC2 & NC3)**

**Department of Occupational Standards  
Ministry of Labour and Human Resources  
Thimphu Bhutan  
(September 2017)**



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First Publication 2010  
First Revision 2014  
Second Revision 2017

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## **FOREWORD**

The Department of Occupational Standards of the Ministry of Labour and Human Resources is pleased to present National Competency Standards (NCSs) for Computer Application Assistant. The standards represent the fruits of hard work and invaluable experiences gained by the department since its establishment in the latter half of 2003. The main aim of developing NCS is to set up a well-defined nationally recognized Vocational Qualifications System that will help set a benchmark for the Technical Vocational Education and Training (TVET) System in our country aligned to international best practices.

NCS is one of the base pillars in the Bhutan Vocational Qualifications Framework (BVQF) and is the first step in its implementation. The NCS are developed and revised to ensure that employees or vocational graduates possess and acquire the desired competencies required by industries and employers. In order to ensure this close match in supply and demand of competencies, NCS have been developed and revised in close consultation and partnership with industry experts and validated by the Technical Advisory Committees of the concerned economic sectors.

A vocational education and training system based on NCS shall ensure that delivered training is of a high quality and relevant to the needs of the labour market. As a result, future TVET graduates will be better equipped to meet the need and expectations of industries and employers. This positive impact on the employability of TVET graduates will enhance the reputation of vocational education and training and make it attractive to school leavers.

I gratefully acknowledge collaboration and the valuable contributions made by experts from industries during the consultation and validation processes of the standards. I look forward for continued engagement and participation of the industry and employers in the development of a quality assured demand driven TVET system and to build competent and productive national workforce that will contribute to the continued socio-economic progress of our country.

Director  
Department of Occupational Standards  
Ministry of Labour and Human Resource

## Acknowledgement

### NATIONAL COMPETENCY STANDARDS FOR COMPUTER APPLICATION ASSISTANT

**Validation date** : 25/08/2017

**Endorsement date:** 16/10/2017

**Date of Review** : 25/08/2020 (Max. 3 years)

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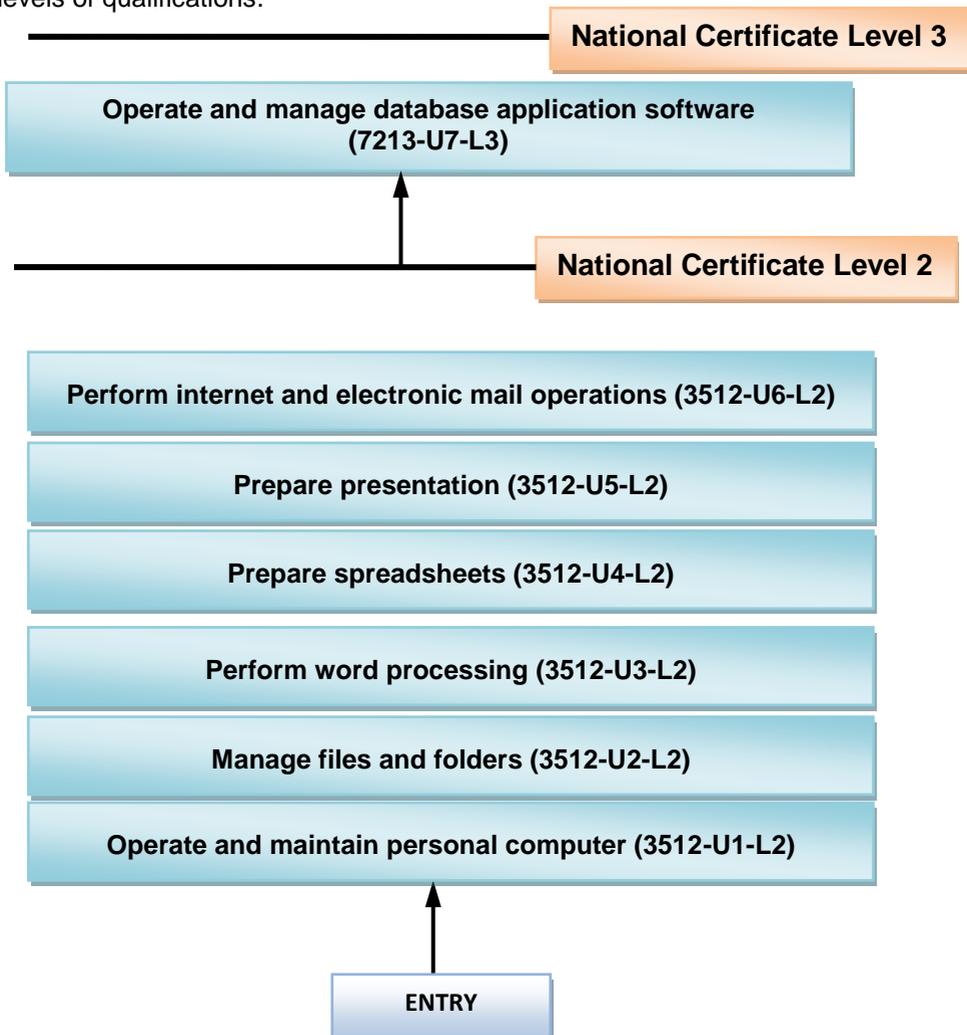
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## Packaging of Qualifications for Computer Application Assistant

The National Competency Standards for Computer Application Assistant comprises of seven units of competencies which are clustered into following levels of qualifications.



## Overview of the National Competency Standards

UNIT TITLE	ELEMENTS OF COMPETENCE
1. Operate and maintain Personal Computer	1.1 Boot and shutdown Computer 1.2 Perform system operation
2. Manage files and folders	2.1 Create files and folders 2.2 Manage files and folders
3. Perform Word Processing	3.1 Open word processing software 3.2 Create word document
4. Prepare Spreadsheets	4.1 Open spreadsheet application software 4.2 Create spreadsheet
5. Prepare presentation	5.1 Open presentation software 5.2 Create presentation
6. Perform Internet and electronic mail operations	6.1 Perform web browser operation 6.2 Manage email accounts
7. Operate and manage database application software	7.1 Operate the database application software 7.2 Manage database

<b>Unit Title</b> :	Operate and maintain Personal Computer
<b>Descriptor</b> :	This unit covers the competencies required to boot and shutdown computer and perform window operation.
<b>Code</b> :	3512-U1-L2
<b>ELEMENTS OF COMPETENCE</b>	<b>PERFORMANCE CRITERIA</b>
1. Boot and shutdown computer	<p>1.1 Boot up computer in sequence as per job requirement following standard procedure.</p> <p>1.2 Shut down computer in sequence as per job requirement following standard procedures</p> <p>1.3 Restart computer where necessary following standard procedures.</p>
2. Perform system operation	<p>2.1 Create and <b>manage</b> user accounts as per the job requirement following standard procedures</p> <p>2.2 Identify <b>system specification</b> as per job requirement following standard procedures</p> <p>2.3 Customize <b>desktop setting</b> as per job requirement following standard procedures.</p> <p>2.4 Customize desktop icons as per job requirement following standard procedures</p> <p>2.5 Change keyboard language as per job requirement following standard procedures.</p> <p>2.6 Format <b>storage devices</b> as per job requirement following standard procedures.</p> <p>2.7 Install and uninstall <b>utility software</b> as per the standard procedures.</p> <p>2.8 Scan system as per job requirement following standard procedures.</p>

	<p>2.9 Update <b>utility software</b> as per job requirement following standard procedures</p> <p>2.10 Update operating system as per the job requirement following standard procedures</p> <p>2.11 Back- up and Restore system following standard procedures</p>
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<b>RANGE STATEMENT</b>	
<b>Manage may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Log off</li> <li>• Delete</li> </ul>	<ul style="list-style-type: none"> <li>• Change user</li> <li>• Log in</li> </ul>
<b>System specification may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Operating system</li> <li>• System types</li> <li>• Editions</li> </ul>	<ul style="list-style-type: none"> <li>• RAM capacity</li> <li>• Processor speed</li> </ul>
<b>Desktop Setting may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Resolution</li> <li>• Date and time setting</li> <li>• Task bar setting</li> </ul>	<ul style="list-style-type: none"> <li>• Wall papers</li> <li>• Icons</li> <li>• Screen savers</li> </ul>
<b>Storage Devices may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Hard disk</li> <li>• USB drives</li> </ul>	<ul style="list-style-type: none"> <li>• CD disc</li> </ul>
<b>Utility software may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Drivers</li> <li>• Win zip</li> </ul>	<ul style="list-style-type: none"> <li>• Win RAR</li> <li>• Anti-Virus</li> <li>•</li> </ul>
<b>Critical Aspects :</b>	
<ul style="list-style-type: none"> <li>• Demonstrate compliance with safety regulations applicable to work site</li> </ul>	

operations

- Installing and updating of utility soft ware as per job requirement following standard procedures
- Back-up and restore system following standard procedures

<b>UNDERPINNING KNOWLEDGE</b>	<b>UNDERPINNING SKILLS</b>
<ul style="list-style-type: none"><li>• Ethics and integrity</li><li>• Computer and its peripherals</li><li>• Components of computer</li><li>• Storage devices</li><li>• Types of OS software</li><li>• Utility software</li><li>• Installation and un installation procedures</li><li>• OS interface</li><li>• Health and safety (ergonomics)</li><li>• Information security (Computer Viruses).</li><li>• Antivirus</li><li>• Computer operation procedures</li></ul>	<ul style="list-style-type: none"><li>• Team work</li><li>• Communication skills</li><li>• Problem solving</li><li>• Typing skills</li><li>• Interpretation of user manuals and help functions.</li><li>• Connection of computer</li></ul>

<b>Unit Title :</b>	Manage Files and Folders
<b>Descriptor :</b>	This unit covers the competencies required to create and manage files and folders.
<b>Code :</b>	3512-U2-L2
<b>ELEMENTS OF COMPETENCE</b>	<b>PERFORMANCE CRITERIA</b>
1. Create files and folders	1.1 Create directories / folders and sub –folders as per the job requirement following standard procedures. 1.2 Set and navigate files, folders attributes as per job requirement following standard procedures
2. Manage Files and Folders	2.1 Sort files and folders as per job requirement following standard procedures. 2.2 Search for the files and folders as per job requirement following standard procedures. 2.3 Compress / extract files as per job requirement following standard procedures.

### RANGE STATEMENT

**Manage files and folders may include but not limited to:**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Opening</li> <li>• Deleting</li> <li>• Copy</li> <li>• Encryptions</li> <li>• Decryptions</li> </ul> | <ul style="list-style-type: none"> <li>• Rename</li> <li>• Hide</li> <li>• Zipp</li> </ul> |
|---|--|

**Critical aspect :**

- Demonstrate compliance with safety regulations applicable to work site

operations

- Create and manage files and folders as per the job requirement following standard procedures
- Compress / extract files as per job requirement following standard procedures.

<b>UNDERPINNING KNOWLEDGE</b>	<b>UNDERPINNING SKILLS</b>
<ul style="list-style-type: none"><li>• Ethics and Integrity</li><li>• File management</li><li>• Types of files</li><li>• File permission</li><li>• Attributes</li><li>• Copyright and Law</li></ul>	<ul style="list-style-type: none"><li>• Communication</li><li>• Team work</li><li>• Problem solving</li><li>• Coordination</li></ul>

<b>Unit Title:</b>	Perform Word Processing
<b>Descriptor :</b>	This unit covers the competencies required to open word processing software and creating word document
<b>Code:</b>	3512-U4-L2
<b>ELEMENTS OF COMPETENCE</b>	<b>PERFORMANCE CRITERIA</b>
1. Open word processing software	<p><b>1.1</b> Boot up the personal computer as per job requirement following standard procedure</p> <p><b>1.2</b> Open word processing software following standard procedures</p> <p><b>1.3</b> Assign file name and save as per the job requirement following standard procedures.</p>
2. Create word document	<p><b>2.1</b> Edit and <i>format</i> the word documents as per the job requirement following standard procedures</p> <p><b>2.2</b> Insert and format images/charts/objects as per the job requirement following standard procedures</p> <p><b>2.3</b> Format paragraph and documents as per the job requirement following standard procedures</p> <p><b>2.4</b> Create hyperlink where necessary as per the job requirement following standard procedure</p> <p><b>2.5</b> Perform mail merging as per the job requirement following standard procedures</p> <p><b>2.6</b> Configure the printer where necessary as per the job requirement following standard procedures</p> <p><b>2.7</b> Save the word document in required format as per the job requirement.</p> <p><b>2.8</b> Print the word documents as per the job requirement</p>

	following standard procedures
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<b>RANGE STATEMENT</b>	
<b>Format may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Text setting</li> <li>• paragraph</li> <li>• Colors</li> <li>• Font size</li> <li>• Page set up</li> <li>• Design</li> </ul>	<ul style="list-style-type: none"> <li>• Header &amp; footer</li> <li>• Text</li> <li>• layouts</li> </ul>
<b>Page set up may include but not limited :</b>	
<ul style="list-style-type: none"> <li>• Margins</li> <li>• Layouts</li> <li>• Page orientation</li> </ul>	<ul style="list-style-type: none"> <li>• Size</li> <li>• Page number</li> </ul>
<b>Critical aspect:</b>	
<ul style="list-style-type: none"> <li>• Demonstrate compliance with safety regulations applicable to work site operations</li> <li>• Set up the page as per the job requirement following standard procedure</li> <li>• Edit and format the documents as per the job requirement following standard procedures</li> </ul>	

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> <li>• Ethics and integrity</li> <li>• Word processing software</li> <li>• Editing and formatting</li> <li>• Page set up and layouts</li> <li>• Key board functions</li> <li>• Short cut keys</li> <li>• Saving and printing procedures</li> <li>• Economic use of materials</li> </ul>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Problem solving</li> <li>• Team work</li> <li>• Typing skills</li> <li>• Innovation</li> <li>• Critical thinking</li> </ul>

<b>Unit Title:</b>	Prepare Spreadsheets
<b>Descriptor:</b>	This unit covers the competencies required to open spreadsheet software and creating spreadsheet document.
<b>Code:</b>	3512-U3-L2
<b>ELEMENTS OF COMPETENCE</b>	<b>PERFORMANCE CRITERIA</b>
1. Open spreadsheet software	<p><b>1.1</b> Open the spreadsheet application as per the job requirement following standard procedures</p> <p><b>1.2</b> Assign workbook name and save as per the standard procedures.</p> <p><b>1.3</b> Perform basic spreadsheet settings as per the job requirement following standard procedures.</p>
2. Create spreadsheet	<p><b>2.1</b> Create workbook as per the job requirement following standard procedures</p> <p><b>2.2</b> Edit and <b>format</b> the spreadsheet as per the job requirement following standard procedures</p> <p><b>2.3</b> Insert and format images/charts/objects as per the job requirement following standard procedures</p> <p><b>2.4</b> Perform <b>computations</b> as per the job requirement following standard procedures</p> <p><b>2.5</b> Perform data validation as per the job requirement following standard procedures.</p> <p><b>2.6</b> Create hyperlink where necessary as per the job requirement following standard procedure</p> <p><b>2.7</b> Save the spreadsheet in required format as per the job</p>

	<p>requirement.</p> <p><b>2.8</b> Print the spreadsheet as per the job requirement following standard procedure</p>
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<b>RANGE STATEMENT</b>	
<b>Format in spreadsheet may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Page set up</li> <li>• Freeze/un freeze rows and columns</li> <li>• Insert/delete rows and columns</li> <li>• Merge/unmerge cell</li> </ul>	<ul style="list-style-type: none"> <li>• Number format</li> <li>• Width and height rows and columns</li> <li>• Sort and filter</li> </ul>
<b>Format may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Text setting</li> <li>• Colors</li> <li>• Font size</li> <li>• Page set up</li> <li>• Design</li> </ul>	<ul style="list-style-type: none"> <li>• Worksheets</li> <li>• Header &amp; footer</li> <li>• Text wrapping</li> <li>• Conditional formatting</li> </ul>
<b>Computations may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Mathematical functions</li> <li>• Statistical functions</li> </ul>	<ul style="list-style-type: none"> <li>• Logical functions</li> </ul>
<b>Page set up may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Margins</li> <li>• Layouts</li> <li>• Page orientation</li> </ul>	<ul style="list-style-type: none"> <li>• Page number</li> <li>• Page Size</li> </ul>
<b>Critical Aspect</b>	
<ul style="list-style-type: none"> <li>• Demonstrate compliance with safety regulations applicable to work</li> </ul>	

site operations

- Perform computations as per the job requirement following standard procedures.
- Set up the worksheet as per the job requirement following standard procedure
- Edit and format the worksheets as per the job requirement following standard procedures

<b>UNDERPINNING KNOWLEDGE</b>	<b>UNDERPINNING SKILLS</b>
<ul style="list-style-type: none"><li>• Types of spreadsheets</li><li>• Editing and formatting procedures</li><li>• Page set up and layouts</li><li>• Basic applied mathematics</li><li>• Short cut keys</li><li>• Cell referencing procedures</li></ul>	<ul style="list-style-type: none"><li>• Communication</li><li>• Problem solving</li><li>• Team work</li><li>• Typing skills</li><li>• Economic use of materials</li></ul>

<b>Unit Title :</b>	Prepare presentation
<b>Descriptor :</b>	This unit covers the competencies required to open presentation software and create presentation.
<b>Code:</b>	3512-U5-L2
<b>ELEMENTS OF COMPETENCE</b>	<b>PERFORMANCE CRITERIA</b>
1. Open presentation software	<p><b>1.1</b> Open the presentation application program (PPT)as per the job requirement following standard procedures</p> <p><b>1.2</b> Assign file and save as per the job requirement following standard procedures</p> <p><b>1.3</b> Perform presentation settings as per the job requirement following standard procedures.</p>
2. Create presentation	<p><b>2.1</b> Create presentation as per the required design following standard procedures</p> <p><b>2.2</b> Edit and <b>format</b> the presentation as per the job requirement following standard procedures</p> <p><b>2.3</b> Insert and format images/charts/objects/slides where necessary as per the job requirement following standard procedures</p> <p><b>2.4</b> Add effects and animations as per the job requirement following standard procedures.</p> <p><b>2.5</b> Create <b>link</b> where necessary as per the job requirement following standard procedure</p> <p><b>2.6</b> Save the presentation in required format as per the job requirement.</p> <p><b>2.7</b> Print the presentations as per the job requirement</p>

	following standard procedures
<b>Range Statement</b>	
<b>Presentation software may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Google slides</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft power point</li> </ul>
<b>Format may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Text setting</li> <li>• paragraph</li> <li>• Colors</li> <li>• Font size</li> <li>• Page set up</li> <li>• Design</li> </ul>	<ul style="list-style-type: none"> <li>• Header &amp; footer</li> <li>• Animations</li> <li>• Transition</li> <li>• Text box</li> <li>• Slide layouts</li> </ul>
<b>Link may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Linking slides</li> </ul>	<ul style="list-style-type: none"> <li>• Hyperlink</li> </ul>
<b>Page set up may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Margins</li> <li>• Layouts</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Page orientation</li> <li>• Size</li> </ul>
<b>Critical Aspects</b>	
<ul style="list-style-type: none"> <li>• Demonstrate compliance with safety regulations applicable to work site operations</li> <li>• Set up presentation as per the job requirement following standard procedure</li> <li>• Edit and format the slides as per the job requirement following standard procedures</li> </ul>	

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> <li>• Power point</li> <li>• Google slides</li> <li>• Editing and formatting</li> <li>• Page set up and layouts</li> <li>• Animations and transitions</li> <li>• Key board functions</li> <li>• Short cut keys</li> <li>• Saving and printing</li> <li>• procedures</li> </ul>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Problem solving</li> <li>• Team work</li> <li>• Typing skills</li> <li>• Innovation and creativity</li> </ul>

<b>Unit Title:</b>	Perform internet and electronic mail operations
<b>Descriptor :</b>	This unit covers the competencies required to perform web browser operation and manage email accounts
<b>Code:</b>	3512-U6-L2
<b>ELEMENTS OF COMPETENCE</b>	<b>PERFORMANCE CRITERIA</b>
1. Perform web browser Operation	1.1 Open (and close) a web browsing application following standard procedures. 1.2 Set home page following standard procedures. 1.3 Configure web browser applications as per job requirement 1.4 Carry out a search for specific information using search engine as per the job requirement. 1.5 Browse net to look for information entering the web address/URL in correct sequence as per job requirement. 1.6 Download files as per the job requirement following standard procedures. 1.7 Add bookmarks as per the job requirement following standard procedures. 1.8 Clear browsing history as per the job requirement.
2. Manage Email Accounts	2.1 Open (and close) an email application following standard procedures 2.2 Create and configure user accounts following standard procedures 2.3 Access email and manage account following standard procedures.

	<p>2.4 Display / hide built-in <b>toolbars</b> following standard procedures</p> <p>2.5 Compose/reply <b>email</b> with all necessary information as per the job requirement.</p> <p>2.6 Open and save attachment to a location as per job requirement following standard procedure</p>
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<b>RANGE STATEMENT</b>	
<b>Toolbars may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Buttons</li> <li>• Menus</li> </ul>	<ul style="list-style-type: none"> <li>• A combination of both</li> <li>• Search bar</li> </ul>
<b>Emails may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Attachment</li> <li>• Blind Carbon Copy</li> </ul>	<ul style="list-style-type: none"> <li>• Copy</li> <li>• Forward</li> <li>• Carbon Copy</li> </ul>

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> <li>• Basic understand the terms: HTTP, URL, hyperlink, ISP, FTP.</li> <li>• Occupational health and Safety regulations</li> <li>• Internet and Intranet</li> <li>• Internet security</li> <li>• Types of browser</li> <li>• Types of Search engine</li> <li>• Types of email accounts</li> <li>• Computer operation</li> <li>• Ergonomics</li> <li>• Cyber Crime</li> <li>• Information communication and media Act</li> </ul>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Team work</li> <li>• Problem solving</li> <li>• Typing</li> </ul>

<b>Unit Title:</b>	Operate and Manage database application software
<b>Descriptor :</b>	This unit covers the competencies required to manage access database application following standard procedures
<b>Code:</b>	3512-U7-L3
<b>ELEMENTS OF COMPETENCE</b>	<b>PERFORMANCE CRITERIA</b>
1. Operate the database application software	<p>1.1 Open the <b>database management system software</b> as per the job requirement following standard procedures</p> <p>1.2 Create and save database as per the job requirement following standard procedure</p> <p>1.3 Determine the <b>type of database</b> (relational data base management system, data base management system ) as per the job requirement following standard procedures.</p>
2. Manage database	<p>2.1 Create tables and assign primary keys as per the job requirement following standard procedures</p> <p>2.2 Establish relations among tables as per the job requirement following standard procedures</p> <p>2.3 Edit and design database objects as per the job requirement following standard procedures</p> <p>2.4 Create <b>Query</b> as per the job requirement.</p> <p>2.5 Save <b>objects</b> of database following standard procedures.</p> <p>2.6 Prepare <b>form</b> and report as per the job requirement.</p> <p>2.7 Print the reports/queries/forms as per the job</p>

	requirement following standard procedures
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<b>RANGE STATEMENT</b>	
<b>Application Software may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Microsoft Access</li> </ul>	
<b>Database objects may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Table</li> <li>• Queries</li> <li>• Form</li> </ul>	<ul style="list-style-type: none"> <li>• Report</li> <li>• Macro</li> </ul>
<b>Calculations may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Arithmetic formula</li> </ul>	<ul style="list-style-type: none"> <li>• Functions</li> </ul>
<b>Query may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Parameters</li> <li>• Action query</li> <li>• Select query</li> </ul>	<ul style="list-style-type: none"> <li>• Computing</li> <li>• Find duplicate query</li> </ul>
<b>Form may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Design</li> </ul>	<ul style="list-style-type: none"> <li>• Interface</li> </ul>
<b>Page may include but not limited to:</b>	
<ul style="list-style-type: none"> <li>• Margins</li> <li>• Page orientation</li> </ul>	<ul style="list-style-type: none"> <li>• Layouts</li> <li>• Size</li> </ul>
<b>Critical Aspect:</b>	
<ul style="list-style-type: none"> <li>• Create tables and establish relations among tables as per the</li> </ul>	

standard procedures

- Perform computations as per the job requirement following standard procedures.

<b>UNDERPINNING KNOWLEDGE</b>	<b>UNDERPINNING SKILLS</b>
<ul style="list-style-type: none"><li>• Ethics and Integrity</li><li>• Concept of database/RDBMS</li><li>• Concept of primary key and foreign key</li><li>• Types of database software</li><li>• Data types</li><li>• Basic statistics</li><li>• Copyright and law</li></ul>	<ul style="list-style-type: none"><li>• Communication</li><li>• Problem solving</li><li>• Team work</li><li>• Typing skills</li><li>• Innovation and Creativity</li></ul>



## **Annexure**

### **1.1 National Competency Standards (NCS)**

The National Competency Standards specify the skill, knowledge and attitudes applied to a particular occupation. Standards also specify the standards or criteria of performance of a competent worker and the various contexts in which work may take place. Standards provide explicit advice to assessors regarding the skill and knowledge to be demonstrated by candidates seeking formal recognition either following training or through work experience.

### **1.2 Purpose of National Competency Standards**

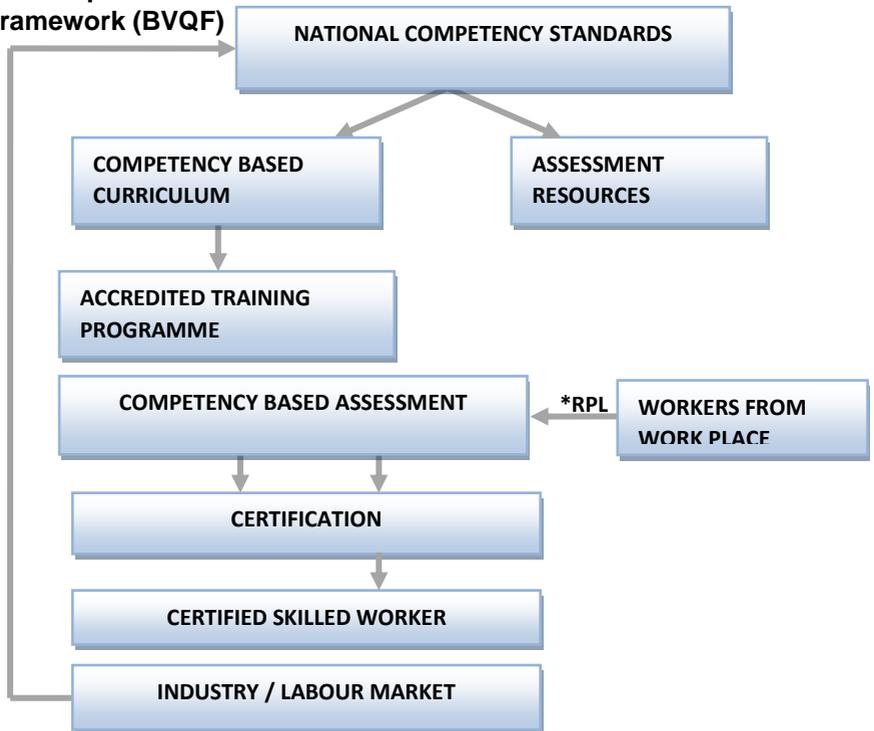
National Competency Standards serve a number of purposes including:

- Providing advice to curriculum developers about the competencies to be included in curriculum.
- Providing specifications to assessment resource developers about the competencies within an occupation to be demonstrated by candidates.
- Providing advice to industry/employers about job functions, which in turn can be used for the development of job descriptions, performance appraisal systems and work flow analysis.

### 1.3 Bhutan Vocational Qualifications Framework (BVQF)

Bhutan Vocational Qualifications Framework is an agreed system of Assessing, Certifying and Monitoring nationally recognized qualifications for all learning in the TVET sector against national competency standards, in training institutions, in the workplace, in schools or anywhere where learning takes place.

### 1.4 Components of the Bhutan Vocational Qualifications Framework (BVQF)



\* RPL = Recognition of Prior Learning

### 1.5 BVQF Levels

The Bhutan Vocational Qualifications Framework has three levels classified based on the competency of the skilled workers. The three levels are:

- National Certificate Level 3 (NC III)
- National Certificate Level 2 (NC II)
- National Certificate Level 1 (NC I)

### BVQF Level Descriptors

The qualification levels are decided based on level descriptors. The detail of the qualification level descriptor is as follows:

#### National Certificate Level 1

Carry out processes that:	Learning demand:	Responsibilities which are applied:
<ul style="list-style-type: none"> <li>• Are narrow in range.</li> <li>• Are established and familiar.</li> <li>• Offer a clear choice of routine responses.</li> <li>• Involve some prioritizing of tasks from known solutions.</li> </ul>	<ul style="list-style-type: none"> <li>• Basic operational knowledge and skill.</li> <li>• Utilization of basic available information.</li> <li>• Known solutions to familiar problems.</li> <li>• Little generation of new ideas.</li> </ul>	<ul style="list-style-type: none"> <li>• In directed activity.</li> <li>• Under general supervision and quality control.</li> <li>• With some responsibility for quantity and quality.</li> <li>• With no responsibility for guiding others.</li> </ul>

## National Certificate Level 2

Carry out processes that:	Learning demand:	Responsibilities which are applied:
<ul style="list-style-type: none"> <li>• Require a range of well-developed skills.</li> <li>• Offer a significant choice of procedures requiring prioritization.</li> <li>• Are employed within a range of familiar context.</li> </ul>	<ul style="list-style-type: none"> <li>• Some relevant theoretical knowledge.</li> <li>• Interpretation of available information.</li> <li>• Discretion and judgments.</li> <li>• A range of known responses to familiar problems</li> </ul>	<ul style="list-style-type: none"> <li>• In directed activity with some autonomy.</li> <li>• Under general supervision and quality checking.</li> <li>• With significant responsibility for the quantity and quality of output.</li> <li>• With some possible responsibility for the output of others.</li> </ul>

## National Certificate Level 3

Carry out processes that:	Learning demand:	Responsibilities which are applied:
<ul style="list-style-type: none"> <li>• Requires a wide range of technical or scholastic skills.</li> <li>• Offer a considerable choice of</li> </ul>	<ul style="list-style-type: none"> <li>• A broad knowledge base which incorporates some theoretical concepts.</li> <li>• Analytical</li> </ul>	<ul style="list-style-type: none"> <li>• In self-directed activity.</li> <li>• Under broad guidance and evaluation.</li> <li>• With complete responsibility for quantity and</li> </ul>

<p>procedures requiring prioritization to achieve optimum outcomes.</p> <ul style="list-style-type: none"> <li>• Are employed in a variety of familiar and unfamiliar contexts.</li> </ul>	<p>interpretation of information.</p> <ul style="list-style-type: none"> <li>• Informed judgment.</li> <li>• A range of sometimes innovative responses to concrete but often unfamiliar problems.</li> </ul>	<p>quality of output.</p> <ul style="list-style-type: none"> <li>• With possible responsibility for the output of others.</li> </ul>
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## 1.6 PURPOSE

This qualification is designed for people interested in a career as a Computer Application Assistant at the Certificate level. It comprises of seven units that cover the essential knowledge and skills required for people working as a computer application assistant.

The pre-requisite for the candidates aspiring to pursue certificate level in computer application assistant should have minimum educational requirement.

It provides industry specific skills and demands a level of performance that will enable new recruits to the industry to be immediately productive.

## **1.7 CODING USED FOR NATIONAL COMPETENCY STANDARDS**

The coding and classification system developed in Bhutan is logical, easy to use, and also aligned with international best practises. The Bhutanese coding and classification system is based on the International Standard Classification of Occupations, 2008 (ISCO-08) developed by the International Labour Organisation (ILO).

The coding of the National competency standards forms the basis of the identification code for the Vocational Education and Training Management Information System (VET – MIS) both in terms of economic sector identification and that of the individual standard.

### **Coding the individual national competency standards**

Coding the individual skills standard has a multiple purpose:

- to identify the level,
- to identify to which module the standard belongs,
- to identify in which order the standard is clustered within that module.

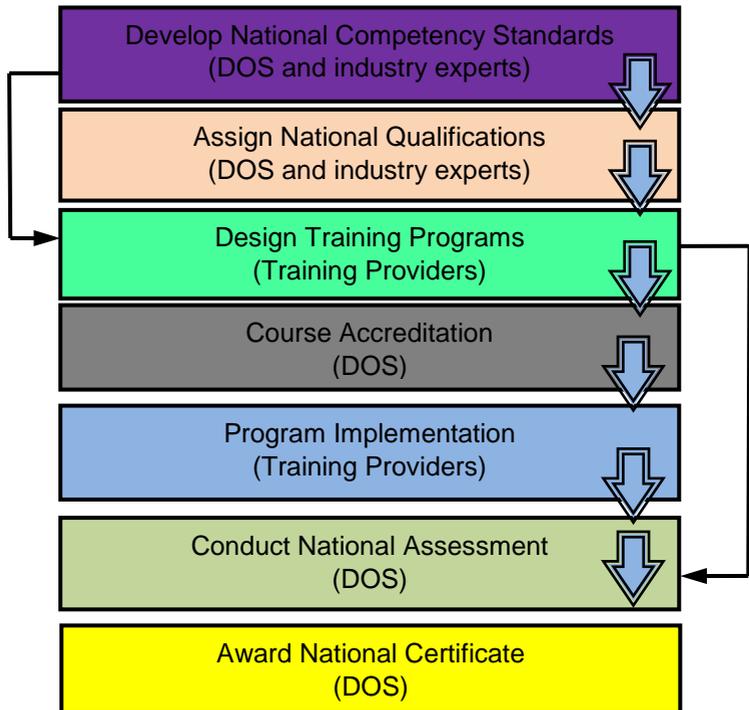
A job can include a number of competencies described in the national competency standards.

However, in order to follow a logical order, only national competency standards related to each other and following a logical sequence in terms of training delivery, from the simple to the complex, are clustered into a module. Some standards are so complex that they need to stand alone.

To illustrate with an example, the ILO assigns the code 7213 to the occupation of Computer Application Assistant and related trades. Therefore, in the Bhutan's context, the occupation computer application assistant has been assigned the code 7213 in the National Coding System. The first unit is

assigned the code U1. Levels are assigned the code L and follow a logical progression from the National Certificate Level 1 (NC I) to the National Certificate Level 3 (NC III). Therefore the National Certificate Level 1 is assigned the code L1.

### Implementation and operational procedures for National Competency Standards (NCS)



#### Key:

MoLHR – Ministry of Labour and Human Resources  
DOS – Department of Occupational Standards

## **1.8 ASSESSMENT GUIDE**

### **Form of assessments**

- Continuous assessment together with collected evidence of performance will be used.
- Evidence of the performance shall be based on practical demonstration.
- Knowledge can be assessed through diagrams, in writing or orally (viva-voce).

### **Assessment context**

- Competency may be assessed in the actual work place or in a simulated workplace setting.

### **Assessment condition**

- The candidate shall have access to all required tools, equipments, materials and documents.
- Candidate must complete the assessment in industry accepted time frame.





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