



**NATIONAL COMPETENCY STANDARDS
FOR
SOLAR POWER TECHNOLOGIST
(DIPLOMA)**

**TVET QUALITY COUNCIL
BHUTAN QUALIFICATIONS AND PROFESSIONAL
CERTIFICATION AUTHORITY
THIMPHU, BHUTAN
JULY 2024**

Publication
First Publication July 2024
© TVET Quality Council, BQPCA

FOREWORD

The TVET Quality Council, BQPCA is pleased to present the National Competency Standards (NCS) for Solar Power Technologist, Diploma. The main objective of developing National Competency Standards is to set up a well-defined nationally recognized TVET Qualifications that will help in setting a benchmark for the TVET Qualifications in our country aligned to the international best practices.

The standards are developed to ensure that the TVET trainees possess the desired Skills, Knowledge and Attitude required by the industries. In order to ensure the relevancy of the competencies, the standards are developed in close consultation with industry experts and trainers from training institutes.

A training system based on National Competency Standards shall ensure that the training is relevant to the needs of the industries. As a result, future TVET trainees will be better skilled to meet the needs and expectations of industries and employers. Such a positive impact on the employability of TVET graduates will enhance the reputation of the TVET system and make it attractive to the youths.

While acknowledging the existing level of cooperation and collaboration, the Council earnestly requests employers and training providers to extend the fullest support and cooperation in development and implementation of the National Competency Standards. The ultimate objective is to build a competent and productive national workforce that will contribute to the socio-economic development of our country.

We gratefully acknowledge the valuable contributions made by experts from industries and trainers during the consultation and validation processes of the NCS development. We further look forward to improved industry engagement and active participation of trainers in the development of a quality-assured demand driven TVET system.

Director
BQPCA

ACKNOWLEDGEMENT

Development date: 07 Feb 2024

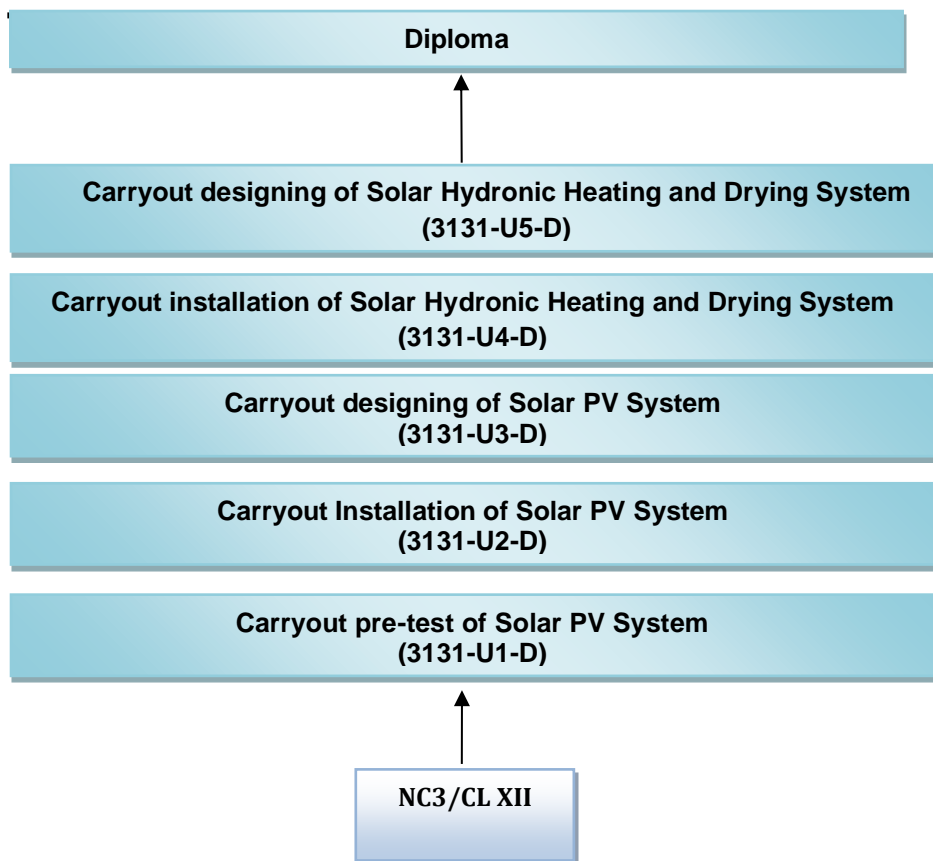
Experts involved in development			
Sl.No	Name	Designation	Agency
1	Ganesh Prasad Giri	Sr. Manager	Bhutan Telecom
2	Karma Wangchuk	Engineer	JB Solar Solutions
3	Ngawang Gyeltshen	Engineer	JB Solar Solutions
4	Karma Chogyel	Lecturer	JWPTI
5	Rinchen Dorji	Sr. Instructor	TTIR
6	Kelzang Lhamo	Lecturer	TTIK
7	Benita Bhujel	Lecturer	TTIK
8	Karma Loday	Specialist	BQPCA

Validation Date: 06 July 2024

Date of Review: 05 July 2029

Experts involved in validation			
Sl.No	Name	Designation	Agency
1	Jigme Wangchuk	Instructor	TTI-Rangjung
2	Shatu	Instructor	TTI-Rangjung
3	Rinchen Dorji	Sr. Instructor	TTI-Rangjung
4	Nima Tshering Bal	Asst. Instructor	TTI-Khuruthang
5	Dawa Zam	Executive Engineer	Department of Energy, MoENR
6	Karma Chogyel	Trainer Power	JWPTI Dekiling
7	Kunzang Dorji	Pvt	UAD Trading
8	Rinchen Dorji	Sr. Instructor	TTI-Rangjung
9	Karma Loday	Specialist	BQPCA

PACKAGING OF QUALIFICATIONS



Overview of the National Competency Standards

UNIT TITLE	ELEMENTS OF COMPETENCE
1. Carryout pre-test of Solar PV System	<ol style="list-style-type: none"> 1. Perform testing of solar PV panel 2. Verify characteristic of PV panel 3. Verify characteristics of battery 4. Perform testing of PV components
2. Carryout Installation of Solar PV System	<ol style="list-style-type: none"> 1. Perform installation of Stand-alone PV system 2. Perform installation of grid tied PV system 3. Perform installation of hybrid PV system 4. Perform maintenance of Solar PV system
3. Carryout designing of Solar PV System	<ol style="list-style-type: none"> 1. Perform PV system parameter analysis 2. Perform stand-alone PV system designing 3. Perform grid-tied PV system designing
4. Carryout installation of Solar Hydronic Heating and Drying System	<ol style="list-style-type: none"> 1. Perform basic plumbing 2. Perform installation of thermosyphon/passive solar water heating system 3. Perform installation of pump driven/active solar water heating system 4. Perform installation of Hydronic system 5. Perform installation of hybrid solar dryer
5. Carryout designing of Solar Hydronic Heating and Drying System	<ol style="list-style-type: none"> 1. Perform designing of solar water heating system 2. Perform designing of Hydronic system 3. Perform designing of hybrid solar dryer

UNIT TITLE	Carryout Pre-Test of Solar PV System
DESCRIPTOR	This unit covers the competencies required to perform testing of solar PV panel, verify characteristic of PV panel, verify characteristics of battery and perform testing of PV components
CODE	3131-U1-D
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Perform testing of solar PV panel	1.1 Use PPEs as per the job requirements following standard procedure. 1.2 Select and use tools and equipment as per the job requirements following standard procedure 1.3 Measure PV Panel output under different conditions following standard procedure
2. Verify characteristic of PV panel	2.1 Verify characteristics of series connected PV Panel following standard procedure 2.2 Verify characteristics of parallel connected PV Panel following standard procedure 2.3 Verify characteristics of series-parallel combined PV Panel following standard procedure
3. Verify characteristics of battery	3.1 Measure battery output following standard procedure 3.2 Verify characteristics of series connected battery following standard procedure 3.3 Verify characteristics of parallel connected battery following standard procedure 3.4 Verify characteristics of series-parallel combined battery following standard procedure 3.5 Verify charging & discharging characteristics of battery following standard procedure

4. Perform testing of PV components	4.1 Test charging function of solar controller following standard procedure 4.2 Test discharging function of solar controller following standard procedure 4.3 Test inverter (off grid type) following standard procedure
-------------------------------------	---

RANGE STATEMENT

PPEs may include but not limited to:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Safety shoes • Workshop dress | <ul style="list-style-type: none"> • Safety harness • Safety goggles |
|--|--|

Tools and equipment may include but not limited to:

- | | |
|---|--|
| <ul style="list-style-type: none"> • PV panel • Multimeter • Inverter • Ampere-hour meter • Inclinator • Hydrometer | <ul style="list-style-type: none"> • Pliers • Screwdriver • Spanner • Crimping tool • Battery |
|---|--|

Different conditions may include but not limited to:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Weather condition • Orientation | <ul style="list-style-type: none"> • Inclination/ tilt |
|--|---|

Critical Aspects:

- Demonstration of occupational health and safety practices at workplace
- Measure battery output following standard procedure

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> • Ethics and Integrity • OHS regulations • Principle of operation of PV panel • Construction and Types of PV panel • Efficiency of panel output • Factor affecting the PV panel output • Characteristics of PV panels in series, parallel & combined • Battery capacity and types • Working principle of lead acid and lithium-ion battery • Characteristics of battery in series, parallel and combined • Battery management system • Fast Charging and High-C-Rate Charging • Safety considerations of battery • Applications of Lithium-ion Batteries • Charged controller basics • Types of controllers • MPPT and PWM Charging Algorithm • Battery protection system of controller • Working principle and types of inverters 	<ul style="list-style-type: none"> • Team work • Communication • Negotiation • Creativity • Problem solving • Time management

UNIT TITLE	Carryout Installation of Solar PV system
DESCRIPTOR	This unit covers the competencies required to perform installation of stand-alone PV system, perform installation of grid tied PV system, perform installation of hybrid PV system, perform installation of PV protection system and perform maintenance of Solar PV system
CODE	3131-U2-D
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Perform installation of Stand-alone PV system	1.1 Use PPEs as per the job requirements following standard procedure. 1.2 Select and use tools and equipment as per the job requirements following standard procedure 1.3 Prepare site following standard procedure 1.4 Install Mounting structures and PV Panel following standard procedure 1.5 Perform wiring of PV Panel following standard procedure 1.6 Install DC distribution board following standard procedure 1.7 Install components following standard procedure 1.8 Install AC distribution board following standard procedure 1.9 Commission stand-alone PV system following standard procedure
2. Perform installation of grid tied PV system	2.1 Prepare site following standard procedure 2.2 Install Mounting structures and PV Panel following standard procedure 2.3 Perform wiring of PV Panel following standard

	<p>procedure</p> <p>2.4 Install DC distribution board following standard procedure</p> <p>2.5 Install inverter and energy meter following standard procedure</p> <p>2.6 Install AC distribution board following standard procedure</p> <p>2.7 Commission grid tied PV system following standard procedure</p>
3. Perform installation of hybrid PV system	<p>3.1 Prepare site following standard procedure</p> <p>3.2 Install Mounting structures and PV Panel following standard procedure</p> <p>3.3 Perform wiring of PV Panel following standard procedure</p> <p>3.4 Install DC distribution board following standard procedure</p> <p>3.5 Install components following standard procedure</p> <p>3.6 Install AC distribution board following standard procedure</p> <p>3.7 Install energy meter (Bi-directional) following standard procedure</p> <p>3.8 Commission hybrid PV system following standard procedure</p>
4. Perform maintenance of Solar PV system	<p>4.1 Perform inspection of solar PV system following standard procedure</p> <p>4.2 Service PV module following standard procedure</p> <p>4.3 Service battery following standard procedure</p> <p>4.4 Service Inverter/Controller following standard procedure</p> <p>4.5 Service protective devices following standard procedure</p>

RANGE STATEMENT	
Components may include but not limited to:	
<ul style="list-style-type: none"> • Controller • Battery 	<ul style="list-style-type: none"> • Inverter • Bi-directional Energy meter
Tools and equipment may include but not limited to:	
<ul style="list-style-type: none"> • Pyranometer • Solar path finder • Earth resistance tester 	<ul style="list-style-type: none"> • Drilling machine • MC4 wrench
Critical Aspects:	
<ul style="list-style-type: none"> • Demonstration of occupational health and safety practices at workplace • Perform wiring of PV Panel following standard procedure • Commission PV system following standard procedure 	

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> • Ethics and Integrity • OHS regulations • Related Bhutan Electricity Rules • Environmental factors affecting PV module performance • Hybrid solar PV system • Stand-alone solar PV system • Grid tied solar PV system • Solar PV protection system • Maintenance of solar PV system 	<ul style="list-style-type: none"> • Team work • Communication • Negotiation • Creativity • Problem solving • Time management

UNIT TITLE	Carryout Designing of Solar PV system
DESCRIPTOR	This unit covers the competencies required to perform parameter analysis, perform stand-alone designing and perform grid-tied PV system designing
CODE	3131-U3-D
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Perform PV system parameter analysis	1.1 Use PPEs as per the job requirements following standard procedure. 1.2 Select and use tools and equipment as per the job requirements following standard procedure 1.3 Measure irradiance following standard procedure 1.4 Perform shading analysis following standard procedure 1.5 Perform tilt optimization following standard procedure 1.6 Interpret meteorological data following standard procedure
2. Perform stand-alone PV system designing	2.1 Calculate maximum demanded load following standard procedure 2.2 Perform sizing of components following standard procedure 2.3 Draw Single Line Diagram following standard procedure 2.4 Prepare BOQ following standard procedure
3. Perform grid-tied PV system designing	3.1 Calculate maximum demanded load following standard procedure 3.2 Perform sizing of components following standard procedure 3.3 Draw Single Line Diagram following standard procedure 3.4 Prepare BOQ following standard procedure

RANGE STATEMENT	
Tools and equipment may include but not limited to:	
<ul style="list-style-type: none"> • Barometer • Thermometer • Simulation software 	<ul style="list-style-type: none"> • Solar radio meter • Weather station
Meteorological data may include but not limited to:	
<ul style="list-style-type: none"> • Solar insolation • Solar irradiance • Ambient temperature • Snow fall 	<ul style="list-style-type: none"> • Humidity • Rainfall • Wind velocity
Components may include but not limited to:	
<ul style="list-style-type: none"> • Inverter • Panel 	<ul style="list-style-type: none"> • Battery • Controller
Critical Aspects:	
<ul style="list-style-type: none"> • Demonstration of occupational health and safety practices at workplace • Interpret meteorological data following standard procedure • Calculate maximum demanded load following standard procedure • Perform sizing of components following standard procedure • Prepare BOQ following standard procedure 	

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> • Ethics and Integrity • OHS regulations • Meteorological data • Load calculation • Sizing of solar PV system components 	<ul style="list-style-type: none"> • Team work • Communication • Negotiation • Creativity • Problem solving • Time management

UNIT TITLE	Carryout Installation of Solar Hydronic Heating and Drying System
DESCRIPTOR	This unit covers the competencies required to perform basic plumbing, installation of thermosyphon/passive solar water heating system, pump driven/active solar water heating system, Hydronic system and hybrid solar dryer
CODE	3131-U4-D
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Perform basic plumbing	1.1 Use PPEs as per the job requirements following standard procedure. 1.2 Select and use tools and equipment as per the job requirements following standard procedure 1.3 Perform CPVC pipe jointing following standard procedure 1.4 Perform PPR pipe jointing following standard procedure 1.5 Perform PEX pipe jointing following standard procedure 1.6 Perform CSS pipe joint following standard procedure
2. Perform installation of thermosyphon/passive solar water heating system	2.1 Prepare site following standard procedure 2.2 Install components following standard procedure 2.3 Perform primary and secondary plumbing circuit lines following standard procedure 2.4 Install safety accessories and auxiliary heaters following standard procedure 2.5 Perform system charging following standard procedure
3. Perform installation of pump	3.1 Prepare site following standard procedure

driven/active solar water heating system	<p>3.2 Install components following standard procedure</p> <p>3.3 Perform primary and secondary plumbing circuit lines following standard procedure</p> <p>3.4 Install safety accessories and auxiliary heaters following standard procedure</p> <p>3.5 Install pump station following standard procedure</p> <p>3.6 Install solar controller following standard procedure</p> <p>3.7 Perform system charging following standard procedure</p>
4. Perform installation of Hydronic system	<p>4.1 Interpret drawing following standard procedure</p> <p>4.2 Install heat pump and its controller following standard procedure</p> <p>4.3 Lay pipes following standard procedure</p> <p>4.4 Install manifold, radiator, thermostat and wiring center following standard procedure</p> <p>4.5 Commission hydronic system following standard procedure</p>
5. Perform installation of hybrid solar dryer	<p>5.1 Prepare site following standard procedure</p> <p>5.2 Install mounting structures following standard procedure</p> <p>5.3 Install solar PV panel, solar air collector, controller drying chamber and battery following standard procedure</p> <p>5.4 Commission hybrid solar dryer following standard procedure</p>

RANGE STATEMENT

Components may include but not limited to:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Solar collector • PV panel | <ul style="list-style-type: none"> • Hot water storage tank • Cold water storage tank |
|---|---|

<ul style="list-style-type: none"> • Drying chamber • Battery 	<ul style="list-style-type: none"> • Manifolds • Heat pump
Tools and equipment may include but not limited to:	
<ul style="list-style-type: none"> • Welding machine • Pliers • Wire stripper • Multimeter 	<ul style="list-style-type: none"> • Plumbing tools • Masonry tools • Infrared thermal camera • Screwdriver set
Critical Aspects:	
<ul style="list-style-type: none"> • Demonstration of occupational health and safety practices at workplace • Perform basic pipe joints • Install safety accessories and auxiliary heaters following standard procedure • Perform pipe layout for hydronic system • Install manifold, thermostat and wiring center following standard procedure • Commission the PV system following standard procedure 	

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> • Ethics and Integrity • OHS regulations • Working principle of solar water heating system • Types of solar water heating system • Working of hydronic system • Methods of laying pipe for hydronic system • Working of hybrid solar dryer 	<ul style="list-style-type: none"> • Team work • Communication • Negotiation • Creativity • Problem solving • Time management

UNIT TITLE	Carryout Designing of Solar Hydronic Heating and Drying System
DESCRIPTOR	This unit covers the competencies required to perform designing of solar water heating system, designing of hydronic system and designing of hybrid solar dryer
CODE	3131-U5-D
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Perform designing of solar water heating system	1.1 Select and use tools and equipment as per the job requirements following standard procedure 1.2 Use PPEs as per the job requirements following standard procedure. 1.3 Determine SWHS parameter analysis following standard procedure 1.4 Perform sizing of hot water storage tank, collector and pump station following standard procedure 1.5 Design pipe layout following standard procedure 1.6 Draw single line diagram following standard procedure 1.7 Prepare BOQ following standard procedure
2. Perform designing of Hydronic system	2.1 Interpret building drawing following standard procedure 2.2 Perform analysis of building and ambient parameters following standard procedure 2.3 Design pipe layout following standard procedure 2.4 Perform sizing of pump and heat pump following standard procedure 2.5 Draw single line diagram following standard procedure 2.6 Prepare BOQ following standard procedure

3. Perform designing of hybrid solar dryer	3.1 Perform analysis of solar dryer parameter following standard procedures 3.2 Perform collector sizing following standard procedure 3.3 Design dryer chamber, mounting and backup power supply following standard procedure 3.4 Prepare drawing following standard procedure 3.5 Prepare BOQ following standard procedure
--	---

RANGE STATEMENT

Tool and equipment may include but not limited to:

- | | |
|------------|-------|
| • Computer | • CAD |
|------------|-------|

Critical Aspects:

- Demonstration of occupational health and safety practices at workplace
- Determine SWHS parameter analysis following standard procedure
- Perform component sizing
- Design pipe layout following standard procedure
- Prepare BOQ following standard procedure

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> • Ethics and Integrity • OHS regulations • Estimation and costing • Types of heat insulating materials • Importance of cross ventilation 	<ul style="list-style-type: none"> • Team work • Communication • Negotiation • Creativity • Problem solving • Time management

<ul style="list-style-type: none"> • Calculation of heat requirement (BTU) • Sizing of solar water heating system • Sizing of hydronic system • Sizing of solar dryer • Basic management and supervision of project • Procurement rules and regulations 	
---	--

ANNEXURE

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.

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 the 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.

Bhutan Qualifications Framework (BQF)

Bhutan Qualifications Framework is an integrated national framework that outlines all types of qualification in Bhutan. As an established and nationally accepted instrument, the BQF has been benchmarked against international practices in terms of standards. The BQF aims to recognize all forms of learning systems, including formal, non-formal, and informal learning. It acknowledges technological advancements and recognizes contemporary modes of delivery. It covers a broad range of education systems including the TVET education.

Implementation of TVET Qualifications



* RPL = Recognition of Prior Learning

TVET Qualifications Levels

TVET Qualifications has seven levels as per the BQF. The levels are:

Bhutan Qualifications Framework 2023

Table 2: Qualification Types and Levels Based on Education Sector.

BQF Level	Community Education	School Education	TVET	Higher Education	Monastic Education
8				Doctoral Degree	<i>Khewang</i> མཁམ་དབང་།
7			Master's Degree Postgraduate Diploma Postgraduate Certificate	Master's Degree Postgraduate Diploma Postgraduate Certificate	<i>Tsugla Gongma</i> གཞུག་ལག་གོང་མ།
6			Applied Degree	Bachelor's Degree Bachelor's Degree (Honours) Graduate Diploma Graduate Certificate	<i>Tsugla Wogma</i> གཞུག་ལག་འོག་མ།
5			Advanced Diploma	Advanced Diploma	
4			Diploma	Diploma	
3		Bhutan Higher Secondary Education Certificate	Certificate 3		<i>Dringrim Gongma</i> འབྲིང་རིམ་གོང་མ།
2		Bhutan Certificate for Secondary Education	Certificate 2		<i>Dringrim Barma</i> འབྲིང་རིམ་བར་མ།
1	ALC		Certificate 1		

Level Descriptors

The TVET Qualification levels are set based on the level descriptors, as defined in the BQF. The detail of the qualification level descriptor is as follow:

	Knowledge	Skills	Values	Application
Level	Knowledge that is:	Demonstrate skills that involve:	Demonstrate values that involve:	Applied in contexts that involve:
4	Broad theoretical, technical and operational	<p>Selecting and applying a range of standard processes relevant to varied and sometimes unpredictable tasks</p> <p>Selecting and applying a range of solutions involving formulation of solutions to resolve complex issues</p> <p>Demonstrating a high level of proficiency in English and Dzongkha</p>	<p>Strong level of awareness of self and others; and an appreciation of belief system, role of social norms, and the importance of relationship building</p> <p>Application of ethical norms and legal rules in decision-making; and comprehending the correlation between values and behaviour</p> <p>Commitment to own profession and quality of work</p>	<p>Stable tasks with predictable changes</p> <p>Broad guidance with some self-direction that requires sound judgement</p> <p>Taking some responsibility for planning and coordination with others</p>

3	<p>Theoretical with some technical and operational processes</p>	<p>Applying a range of standard processes to known but varied tasks</p> <p>Selecting and applying a range of solutions to familiar and unfamiliar problems</p> <p>Communicating effectively and clearly, both oral and written, in both English and Dzongkha</p>	<p>Sound level of self-awareness and beliefs; and ability to apply social norms and build relationships</p> <p>Application of a set of ethical norms</p> <p>Commitment to own field of interest and apply self-management of learning and performance</p>	<p>Stable tasks with some aspects of change</p> <p>General guidance and supervision that require discretion and judgement</p> <p>Adapting to own behaviour to work with others</p>
2	<p>Basic, factual and conceptual</p>	<p>Applying standard processes relevant to carry out known tasks</p> <p>Applying a set of known solutions to solve simple and straightforward issues</p> <p>Using simple and direct exchange of information on familiar</p>	<p>Some level of self-awareness and beliefs, and appreciation of social norms; and significance of relationships</p> <p>Awareness of ethical norms, and openness</p>	<p>Structured and stable tasks</p> <p>General support and Supervision that require some discretion and judgement</p> <p>Collaboration with others to achieve goals</p>

		and routine matters Developing basic proficiency in Dzongkha and English	to different activities Developing own knowledge and skills	
1	Foundational, everyday and general	Applying operational literacy, numeracy skills required to carry out simple tasks Applying simple solutions to solve simple and straightforward everyday issues Communicating using everyday expressions and simple phrases in Dzongkha and English	Basic awareness of self, beliefs, and social norms; and understand the significance of relationships Basic awareness of fundamental ethical norms, basic civil rights, and responsibilities Willingness to understand tasks and motivated to implement them successfully	Highly structured tasks with close support and supervision Minimal Discretion and judgement Readiness to work together and share knowledge with others

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 practices. The Bhutanese coding and classification system is based on the International Standard Classification of Occupations, 2008 (ISCO-08) developed by the International Labour Organization (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.

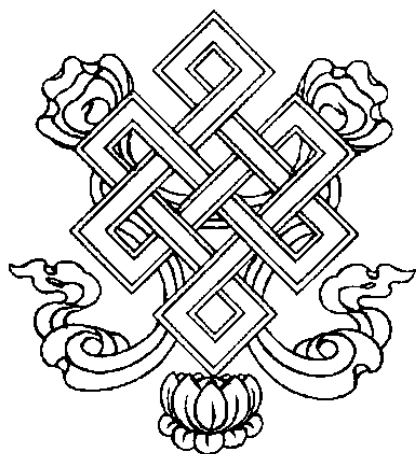
Coding the individual national competency standards

Coding the individual skills standard has a multiple purpose:

- to identify the occupational code
- to identify the units
- to identify the qualification level

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 qualification level. Some standards are so complex that they need to stand alone.



TVET Quality Council
Bhutan Qualifications and Professionals Certification Authority
Thimphu, Bhutan