



**NATIONAL COMPETENCY STANDARDS
FOR
AUTO BODY TECHNICIAN
(CERTIFICATE 2&3)**

AUTOMOBILE SECTOR



**TECHNICAL & VOCATIONAL EDUCATION AND
TRAINING (TVET) QUALITY COUNCIL
BHUTAN QUALIFICATIONS AND PROFESSIONALS
CERTIFICATION AUTHORITY
THIMPHU, BHUTAN
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FOREWORD

The TVET Quality Council, BQPCA is pleased to present the National Competency Standards (NCS) for **Auto Body Technician** which is developed in consultation with the field experts and trainers. 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 and partnership 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 labour market. 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

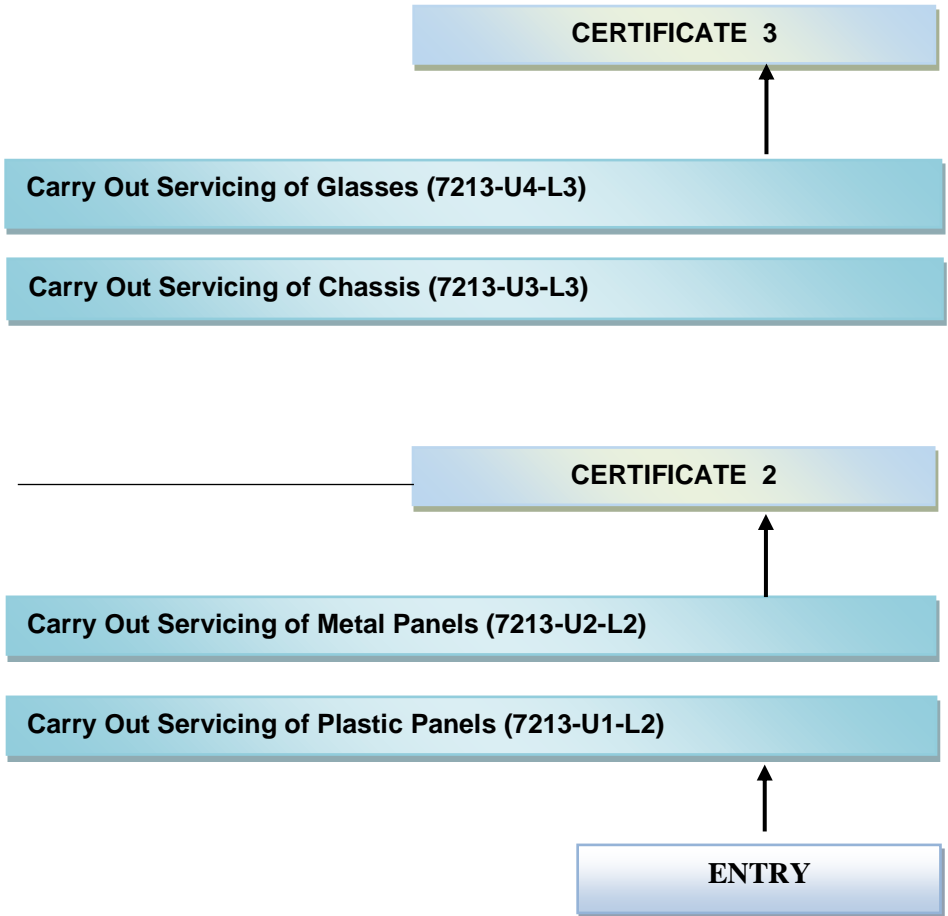
Date of Validation :16th January 2025

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The TVET Quality Council, Bhutan Qualifications and Professionals Certification Authority would like to express our deepest appreciation to the following industry and subject matter experts who have participated in revision and validation of National Competency Standards for Auto Body Technician:

Industry Experts Involved in Validation of NCS for Auto Body Technician			
SN	Name	Designation	Organization
1	Kuenzang Wangchuk	Panel Beater	BMW Workshop
2	Jigme	Panel Beater	Namsey Auto Workshop
3	Karma Dorji	Panel Beater	Karma Tenzin Auto Workshop
4	Ugyen Jimba	Panel beater	Ugyen Jimba Auto Workshop
5	Tshering Tobgay	Panel Beater	Kitab Auto Workshop
6	Kencho Dorji	Panel Beater	Kinga Auto Workshop
7	Tshering Norbu	Trainer	TTI, Thimphu
Industry Experts Engaged During the Revision of NCS for Auto Body Technician			
SN	Name	Designation	Organization
1	Presheet Biswa	Proprietor	Rajesh Workshop
2	Sonam Gyeltshen	Manager	Zimdra
3	Lungten Drubjur	Mechanic	Chimi Workshop
4	Ngawang Lobzang	Supervisor	Norzin Auto-Workshop
5	Indra Bdr. Rai	Mechanic	Ugyen Dungkar Workshop
6	Karma Dorji	Denter	Karma Tenzin Auto Workshop
7	Jigme	Denter	Namsey Workshop
8	Tashi Wangmo	Manager	K.T Auto Workshop
9	Phurba Dorji	Supervisor	Kamal Auto Workshop
10	Bishal Pradhan	Supervisor	Kancha Auto Workshop
Facilitator from the TVET Quality Council, BQPCA			
Prem Kumar Bhattarai		Program Officer	TVET QC, BQPCA

PACKAGING OF QUALIFICATIONS



OVERVIEW OF THE NCS FOR AUTO BODY TECHNICIAN

Unit Title	Element of Competence
1. Carryout Servicing of Plastic Panels	1.1 Perform Auto Body Damage Assessment 1.2 Perform Removal of Plastic Panels 1.3 Perform Servicing of Plastic Panels
2. Carryout Servicing of Metal Panels	2.1 Perform Auto Body Damage Assessment 2.2 Perform Removal of Metal Panels 2.3 Perform Servicing of Metal Panels
3. Carryout Servicing of Chassis	3.1 Perform Auto Body Damage Assessment 3.2 Perform the Removal of Body parts and Aggregates from the Chassis 3.3 Perform Servicing of Chassis
4. Carryout Servicing of Glasses	4.1 Perform Auto Body Damage Assessment 4.2 Perform Removal of the Components Associated with Glasses 4.3 Install the Glasses

UNIT TITLE	Carry Out Servicing of Plastic Panels
DESCRIPTOR	This unit covers the competencies required to remove the parts and perform servicing of plastic panels following standard procedure
CODE	7213- U1- L2
CREDIT	10
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Perform Auto Body Damage Assessment	1.1 Identify PPE requirement following standard procedure 1.2 Identify tools and equipment requirement following standard procedure 1.3 Inspect Vehicle structure and exterior to determine course of action following standard procedure 1.4 Provide detailed estimation and costing for servicing of plastic panels following standard procedure
2. Perform Removal of Panels	2.1 Use required PPE following standard procedure 2.2 Prepare for panel removal following standard procedure

	<p>2.3 Remove plastic panels as per the job requirement following standard procedure</p> <p>2.4 Store the removed parts following standard procedure</p>
3. Perform Servicing of Plastic Panel	<p>3.1 Use tools and equipment as per the job requirement following standard procedure</p> <p>3.2 Repair metal panels as per the job requirement following standard procedures</p> <p>3.3 Replace metal panels as per the job requirement following standard procedure</p> <p>3.4 Conduct post-service works as per the job requirement following standard procedure</p>

RANGE STATEMENT

Personal protective equipment (PPE) may include but not limited to:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Goggles • Helmet • Safety boots • Ear plugs or ear muffs • Dust masks | <ul style="list-style-type: none"> • Gloves • Workshop dress • Apron • Reflector Vest |
|---|---|

Materials may include but not limited to:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Wires • Refrigerant | <ul style="list-style-type: none"> • Tubes |
|--|---|

Tools and equipment may include but not limited to

<ul style="list-style-type: none"> • Hand tool Set • Gas welding set • MIG and TIG welding set • Sheet Cutter 	<ul style="list-style-type: none"> • SST • Arc Welding set • Grinder
Parts may include but not limited to:	
<ul style="list-style-type: none"> • Bumper • Grills 	<ul style="list-style-type: none"> • Holders • Brackets
Critical Aspects	
<ul style="list-style-type: none"> • Demonstrate competencies to follow occupational health and safety procedures • Demonstrate competencies to perform servicing of plastic panels as per the job requirement following standard procedure 	

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> • Ethics and Integrity • Occupational Health and Safety regulations • Basic first Aid • Estimation and costing • Relevant environment rules and regulation • Properties of materials • Service Manual • 5S 	<ul style="list-style-type: none"> • Team Work • Communication • Problem Solving • Interpersonal Relationship • Creativity • Innovation • Time Management

UNIT TITLE	Carry Out Servicing of Metal Panels
DESCRIPTOR	This unit covers the competencies required to remove the parts and perform servicing of metal panels following standard procedure
CODE	30
CREDIT	7213-U2-L2
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Perform Auto Body Assessment	<p>1.1 Identify PPE requirement following standard procedure</p> <p>1.2 Identify tools and equipment requirement following standard procedure</p> <p>1.3 Inspect Vehicle structure and exterior to determine course of action following standard procedure</p> <p>1.4 Provide detailed estimation and the costing for servicing of plastic panels following standard procedure</p>

2. Perform Removal of Panels	<p>2.1 Use required PPE following standard procedure</p> <p>2.2 Prepare for panel removal following standard procedure</p> <p>2.3 Remove metal panels as per the job requirement following standard procedure</p> <p>2.4 Store the removed parts following standard procedure</p>
3. Perform Servicing of Metal Panel	<p>3.1 Use required tools and equipment as per the standard procedure</p> <p>3.2 Repair metal panels following standard procedure</p> <p>3.3 Replace metal panels as per the job requirement following standard procedure</p> <p>3.4 Ensure structural integrity following standard procedure</p> <p>3.5 Perform post-repair activities as per the job requirement following standard procedure</p>

RANGE STATEMENT	
Personal protective equipment (PPE) may include but not limited to:	
<ul style="list-style-type: none"> • Gas welding set • Arc welding machine set • Hammers 	<ul style="list-style-type: none"> • Puller (electrical/vacuum) • Tongs • Chain Puller

Tools and equipment may include but not limited to:	
<ul style="list-style-type: none"> • Gas welding set • Arc welding machine set • Hammers • Puller (electrical/vacuum) • Tongs • Chain Puller 	<ul style="list-style-type: none"> • Denting File • Dolly set • Grinder • Lever
Metal Panels may include but not limited to:	
<ul style="list-style-type: none"> • Door • Fender • Roof • Tail Gate 	<ul style="list-style-type: none"> • Apron • Hood Panel • Bumper
Repair may include but not limited to:	
<ul style="list-style-type: none"> • Welding • Cutting • Filing 	<ul style="list-style-type: none"> • Grinding • Stretching
Critical Aspect	
<ul style="list-style-type: none"> • Demonstrating compliance with safety regulation applicable to work site operation • Demonstrate competencies to perform servicing of metal panels following standard procedure 	

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> • Ethics and Integrity Occupational Health and safety regulations • Basic First Aid • Estimation and costing 	<ul style="list-style-type: none"> • Team Work • Communication • Problem Solving • Interpersonal Relationship • Creativity

<ul style="list-style-type: none">• Types of Panel beating tools and equipment• Fire safety• Types of welding• Basic sheet metal works	<ul style="list-style-type: none">• Time Management• Innovation
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UNIT TITLE	Carry Out Servicing of Chassis
DESCRIPTOR	This unit covers the competencies required to remove the parts and perform servicing of chassis following standard procedure
CODE	7213-U3-L3
CREDIT	32
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Perform Auto Body Assessment	1.1 Identify PPE requirement following standard procedure 1.2 Identify tools and equipment requirement following standard procedure 1.3 Inspect vehicle chassis and exterior to determine course of action following standard procedure 1.4 Provide detailed estimation and the costing of repair of plastic panels following standard procedure
2. Perform the Removal of Parts and Aggregates from the Chassis	2.1 Use required tools and equipment following standard procedure 2.2 Remove parts and aggregates from the chassis following standard procedure 2.3 Store the removed parts and aggregates following standard procedure

3. Perform servicing of Chassis	<p>3.1 Use PPE as per the hob requirement following standard procedure</p> <p>3.2 Use tools and equipment as per the job requirement following standard procedure</p> <p>3.3 Repair chassis per the job requirement following standard procedure</p> <p>3.4 Replace chassis as per the job requirement following standard procedure</p> <p>3.5 Align the components to complete repair as per the job requirement following standard procedure</p> <p>3.6 Reassemble the chassis with body parts and aggregates following standard procedure</p>
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RANGE STATEMENT	
Personal Protective Equipment (PPE) may include but not limited to:	
<ul style="list-style-type: none"> • Screw driver set • Multi meter • Pliers • Allen key set 	<ul style="list-style-type: none"> • Vacuum pump • Pressure gauge • Tube bender
Tools and equipment may include but not limited to:	
<ul style="list-style-type: none"> • Hand tool set • Gas welding set • Arc welding set • Collision repair kits 	<ul style="list-style-type: none"> • Chassis alignment equipment • Measuring tape • Pipe jack

Repair may include but not limited to:	
<ul style="list-style-type: none"> • Weld • Stretch • Press 	<ul style="list-style-type: none"> • Grind • Cut

Critical Aspect
<ul style="list-style-type: none"> • Demonstrate competencies to follow occupational health and safety procedure • Demonstrate competencies to repair and replace chassis as per the job requirement following standard procedure

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> • Ethics and integrity • Occupational Health and safety regulations • Basic first aid • Estimation and costing • Chassis alignment • Types of welding • 5S 	<ul style="list-style-type: none"> • Team Work • Communication • Problem Solving • Interpersonal Relationship • Creativity • Time Management • Innovation

UNIT TITLE	Carry Out Servicing of Glasses
DESCRIPTOR	This unit covers the competencies required to remove the glass parts and service glass parts following standard procedure
CODE	7213-U4-L3
CREDIT	8
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Perform Auto Body Assessment	<p>1.1 Identify PPE requirement following standard procedure</p> <p>1.2 Identify tools and equipment requirement following standard procedure</p> <p>1.3 Inspect vehicle chassis and exterior to determine course of action following standard procedure</p> <p>1.4 Provide detailed estimation and the costing of repair of plastic panels following standard procedure</p>
2. Perform Removal of Components Associated with Glasses	<p>2.1 Liaise with relevant team members for removal of vehicle body part form chassis</p> <p>2.2 Use required tools and equipment following standard procedure</p>

	<p>2.3 Remove the <i>components associated with glass</i> as per the job requirement following standard procedure</p> <p>2.4 Store the components following standard procedure</p>
3. Perform Servicing of Glasses	<p>3.1 Use PPE as per the job requirement following standard procedure</p> <p>3.2 Use tools and equipment as per the job requirement following standard procedure</p> <p>3.3 Install the glasses as per the job requirement following standard procedure</p> <p>3.4 Check for alignment and leakage as per the job requirement following standard procedure</p>

RANGE STATEMENT	
Personal Protective Equipment (PPE) may include but not limited to:	
<ul style="list-style-type: none"> • Goggles • Helmet • Safety Boots • Ear plug/Muff 	<ul style="list-style-type: none"> • Dust Mask • Apron • Gloves • Workshop Dress
Tools and equipment may include but not limited to:	
<ul style="list-style-type: none"> • Hand tool set • Gas welding set • Arc welding set 	<ul style="list-style-type: none"> • Chassis alignment equipment • Measuring tape

<ul style="list-style-type: none"> Collision repair kits 	<ul style="list-style-type: none"> Pipe jack
Team members may include but not limited to:	
<ul style="list-style-type: none"> Auto Painter Auto Technician 	<ul style="list-style-type: none"> Accessories sales
Glasses may include but not limited to:	
<ul style="list-style-type: none"> Windshield Glass Door Glass Rear windshield glass Rear view mirror 	<ul style="list-style-type: none"> Quarter Glass Sunroof glass Rear body glass
Components associated with glass may include but not limited to:	
<ul style="list-style-type: none"> Door pad Regulator Channel Cowl top 	<ul style="list-style-type: none"> Weather Strip Molding Windshield Rubber Wiper arms
Critical Aspect	
<ul style="list-style-type: none"> Demonstrate competencies to follow occupational health and safety procedure Demonstrate competencies to remove and install the glasses as per the job requirement following standard procedure Demonstrate competencies to check for alignment and leakage as per the job requirement following standard procedure 	

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> Ethics and Integrity Occupational Health and safety regulations Basic first aid 	<ul style="list-style-type: none"> Team Work Communication Problem Solving Interpersonal Relationship

<ul style="list-style-type: none"> • Estimation and costing • Types of Glasses and regulator • Relevant rules and regulations • Materials • 5S 	<ul style="list-style-type: none"> • Creativity • Time Management • Innovation
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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 have seven levels as per the BQF as follows:

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> མཁས་དབང་།
7			Master's Degree Postgraduate Diploma Postgraduate Certificate	Master's Degree Postgraduate Diploma Postgraduate Certificate	<i>Tsugla Gongma</i> གཞུག་ལག་ཤོང་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> འགྲིང་རིམ་གོང་མ།
2		Bhutan Certificate for Secondary Education	Certificate 2		<i>Dringrim Barma</i> འགྲིང་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:

Level	<i>Knowledge</i>	<i>Skills</i>	<i>Values</i>	<i>Application</i>
	<i>Knowledge that is:</i>	<i>Demonstrate skills that involve:</i>	<i>Demonstrate values that involve:</i>	<i>Applied in contexts that involve:</i>
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 behavior</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	Theoretical with some technical and operational processes	Applying a range of standard processes to known but varied tasks	Sound level of self-awareness and beliefs; and ability to apply social	Stable tasks with some aspects of change

		<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>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>General guidance and supervision that require discretion and judgement</p> <p>Adapting to own behaviour to work with others</p>
2	Basic, factual and conceptual	<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 and routine matters</p> <p>Developing basic proficiency in Dzongkha and English</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 to different activities</p> <p>Developing own knowledge and skills</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>
1	Foundational, every day and general	<p>Applying operational literacy, numeracy skills required to carry out simple tasks</p>	<p>Basic awareness of self, beliefs, and social norms; and understand the</p>	<p>Highly structured tasks with close support and supervision</p>

		<p>Applying simple solutions to solve simple and straightforward everyday issues</p> <p>Communicating using everyday expressions and simple phrases in Dzongkha and English</p>	<p>significance of relationships</p> <p>Basic awareness of fundamental ethical norms, basic civil rights, and responsibilities</p> <p>Willingness to understand tasks and motivated to implement them successfully</p>	<p>Minimal Discretion and judgement</p> <p>Readiness to work together and share knowledge with others</p>
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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 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.

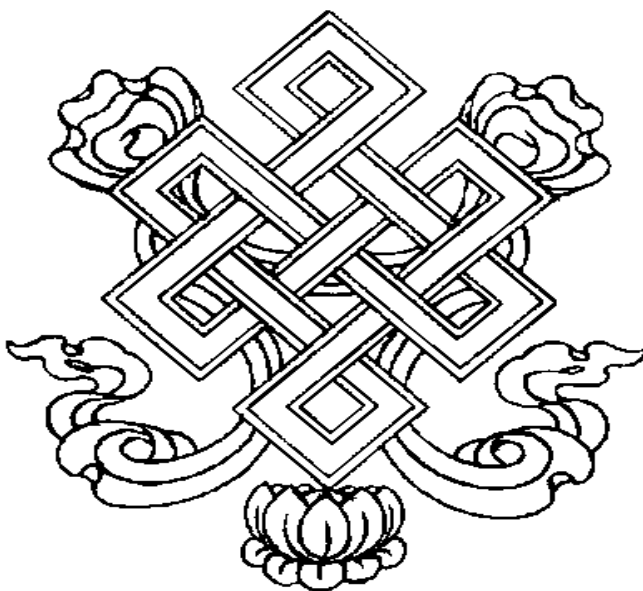
Coding the individual national competency standards

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.



TVET Quality Council
Bhutan Qualifications and Professionals Certification Authority
Chang Gidaphu
P.O. Box 1956, Thimphu
www.bqpca.gov.bt