

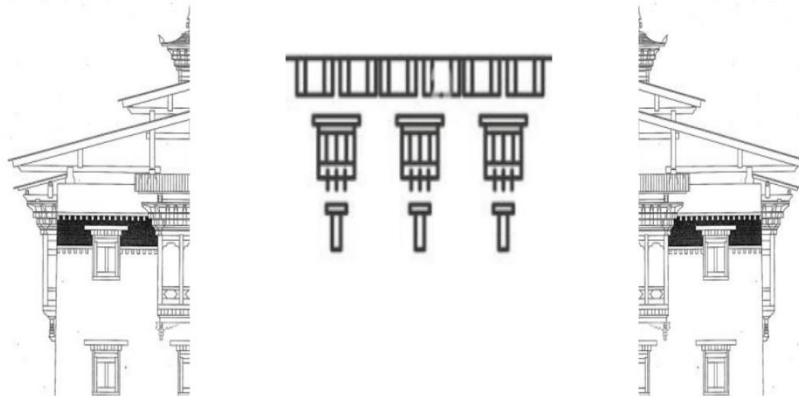


COMPETENCY BASED CURRICULUM
Construction Carpentry BQF Certificate-3

CONSTRUCTION CARPENTRY



BQFC 3



**Department of Workforce Planning and Skills
Development**
Ministry of Education and Skills Development



Course Curriculum

Construction Carpentry BQF Certificate-3

Technical Trainers Training and Resource Center
Department of Workforce Planning and Skills Development
Ministry of Education and Skills Development
Thimphu

Published by Technical Trainers Training and Resource Center (TTTRC)
Department of Workforce Planning and Skills Development
Ministry of Education and Skills Development
Royal Government of Bhutan
Thimphu, Bhutan

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Department of Workforce Planning and Skills Development

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First Edition: 2016

Revised: 2024

ISBN: 978-99936-766-7-6

FOREWORD

Bhutan has seen a gradual increase in the requirement of skilled workers in recent years due to growth of industries. However, supply of skilled workforce that are responsive to the needs of the industry has not been able to keep in pace with the industry demand. Since the skilled workers are crucial ingredient for socio-economic development of the country, it is important to have adequate number of trained and certified workers. With growing industries, the “Construction Carpenter” are not only the most significant occupation but also have high demand in the labour market. In an effort to meet the skilled human resources requirement in the area of power sector, it is imperative to deliver training based on Competency Based Training system in Construction carpentry BQF Certificate-3 to ensure quality and adequate number of work force in this sector.

To this end, the Department of Workforce Planning and Skills Development (DWPSD) is pleased to present revised Competency Based Curriculum for Construction Carpentry BQF Certificate-3 course developed based on national competency standard. Since it is an outcome of a more participatory process of curriculum development, it is expected to provide training delivery with reformed approaches having its content being directly related to labour market needs, focusing on imparting of skills and assessment based on industry work standards. We believe that the Competency Based Curriculum will help in bridging the skill gap between industry’s needs and training institutes thereby enhance the employability of the technical graduates.

The Department acknowledges the valuable contributions made by institutes, officials, and experts from relevant industries who were involved in the design and development of this curriculum. As it is a dynamic document which may require revision based on the needs of the changing labour market, the Department look forward to receiving valuable feedbacks from the institutes and the industries to further improve and refine the curriculum

The Department hope that this document will help advance Competency Based Learning in most of the TVET Institutions.



(Norbu Wangchuk)

Director

Department of Workforce Planning and Skills Development

ACKNOWLEDGEMENT

Technical Trainers Training and Resource Center, Department of Workforce Planning and Skills Development under MoESD would like to express our appreciation to the following subject experts and facilitators who have participated in the development and revision of curriculum for Construction carpentry BQF Certificate-3:

Experts involved in the development of Construction carpentry BQF C3 curriculum:

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3. Mr. Ugyen Kelzang, Instructor, TTI-Chumey
4. Ms. Lham Bhuti, Instructor, TTI-Dekiling
5. Mr. Lekey Dhendup, Instructor, TTI-Dekiling
6. Mr. Sonam Norbu, Instructor, TTI-Dekiling
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8. Mr. Dorji Tshewang, Technician, Bayling Higher Secondary School
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2. Mr. Ugyen Kelzang, Trainer, TTI-Rangjung
3. Mr. Sonam Norbu, Trainer, TTTRC/JWPTI
4. Mr. Yeshi Dorji, Manager, Druk Menjong Wood Industry
5. Mr. Karma, CEO, wood World, Thimphu
6. Mr. Ugyen Dorji, CEO, Ugyen Upholstery, Thimphu
7. Mr. Kinley Dorji, CEO, Key Phuensum Furniture, Punakha
8. Mr. Pema Wangdi, Freelancer, Paro

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1. Mr. Tshewang Damchey, Freelance Carpenter (Chair Person)
2. Mr. Kinley Dorji, CEO, Key Phuensum Furniture, Punakha
3. Mr. Tashi Tshering, Sr. Instructor, TTI-Rangjung
4. Mr. Lekey Dhendup, Instructor, TTI-Chumey
5. Mr. Dorji Wangchuk, Trainer, JWPTI
6. Mr. Karma Loday, Specialist, BQPCA

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3. Mr. Naku Dorji, Trainer, JWPTI
4. Ms. Karma Dema, Program Officer, TTTRC

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COMPETENCY PROFILE
Occupation: Construction Carpenter
Level: BQF Certificate-3

Competency Area	Sub- Competency Area	Competencies →					
A. Carryout construction of Bhutanese architectural element	A1: Perform construction of primary architectural element	A1.01 Make Mago (Door)	A1.02 Make Kachen	A1.03 Make Drey Zhu Lhangna	A1.04 Make Jadhang Tazi	A1.05 Make Norbu Tog	
	A2: Perform construction of Secondary architectural elements (Cornices)	A2.01 Make Dung	A2.02 Make Pem	A2.03 Make Choetse	A2.04 Make Bogh	A2.05 Make Phana/ Ngangpa	A2.06 Make Norbu Horzhu
		A2.07 Make Norbu Bagam					
	A3: Prepare corner cornices and joints	A3.01 Make corner joint for Dhung	A3.02 Make corner joint for Pem	A3.03 Make corner Bogh	A3.04 Make corner Phana/ Ngangpa	A3.05 Make corner Tshechu Khanyim	A3.06 Fix corner cornices
B. Carryout construction of roof with wooden roof truss	B1 Construct wooden roof truss	B1.01 Estimate materials Cost	B1.02 Prepare roof truss components	B1.03 Assemble roof truss components	B1.04 Fix components	B1.05 Make Eave Board	
	B.2 Fix roof covering and ridges	B2.01 Estimate materials	B2.02 Fix roofing sheet	B2.03 Fix Ridging			
	B3. Construct traditional roof truss	B3.01 Make Dhingri	B3.02 Make Dhingri Gha/ Lhiuchung	B3.03 Make Lungzey	B3.04 Make Shari/ Shathung (King/ Queen post)	B3.05 Make Gungchen/ Gungchung	B3.06 Prepare Tsim/ Dangchung
		B3.07 Assemble roof truss components					

COURSE INFORMATION

COURSE TITLE	Construction Carpentry
LEVEL	BQF Certificate (NC) Level 3
COURSE OBJECTIVE	Upon completion of this training program, the trainees will be able to: • Carryout construction of Bhutanese Architectural elements; and • Carryout construction of roof with wooden roof truss
COURSE DESCRIPTION	This course is designed to provide trainees with the knowledge, skills and attitudes required to be competent in being Construction carpenter. This course will prepare the trainees to exhibit professionalism, teamwork, adaptability, and safety practices as per the requirement of workplace. To obtain certification of this course, all learning outcomes prescribed must be achieved.
COURSE DURATION	843 Hours (423 institute duration + 420 OJT) 264 Hours (194 Soft skills duration + 70 Hrs Assessment)
TRAINER AND TRAINEE RATIO	1:12 (Practical) 1:20 (Theory)
ENTRY REQUIREMENT	Completed Construction Carpentry C2
TVET TRAINER REQUIREMENTS	• Must have a minimum qualification of Diploma in relevant trade or Construction Carpentry BQF Certificate 3 with minimum five years of field experience • Must have undergone Training of Trainers-Technical Instruction and Pedagogy; • Must be registered with TVET Quality Council as a Trainer • Must have at least 5 years of industry experience if institute hires a guest lecturer.

COURSE OUTLINE

Sl. No	Subject /Module	Duration (Hours)	Content Competencies (Mapped)
1.	Core modules	423	CC
2.	OJT	420	CC
3.	Applied Dzongkha	42	SS
4.	ICT	48	SS
5.	Applied Mathematics	53	SS
6.	Technical English	51	SS
7.	Assessment	70	
	Total Course Duration	1107	

Note: (*) This curriculum contains core modules which cover main competencies of Construction carpentry BQF Certificate-3 and OJT component. There are separate curricula for subjects/modules for delivery of soft skills, professional development & values and environmental concern & safety. In order to achieve the qualification of Construction carpentry BQF C3, the subjects and modules listed must be accomplished as per the credit hours provided.

Content Competencies:

CC-Core Competencies

SS-Soft Skills

PD-Professional Development and Values

ES-Environmental concern and Safety

COURSE STRUCTURE FOR CORE COMPETENCIES

Training Modality	Module Title	Learning outcomes	Nominal Duration (Hour)
1. Institute Training	A. Carryout construction of Bhutanese architectural element	A1. Perform construction of primary architectural element A2. Perform construction of secondary architectural elements A3. Prepare corner cornices and joints	276
	B. Carryout construction of roof with wooden roof truss	B1. Construct wooden roof truss B2. Fix roof covering and ridges B3. Construct traditional roof truss	147
2. On the Job Training	A. Carryout construction of Bhutanese architectural element	A1. Perform construction of primary architectural element A2. Perform construction of secondary architectural elements A3. Prepare corner cornices and joints	420
	B Carryout construction of roof with wooden roof truss	B1. Construct wooden roof truss B2. Fix roof covering and ridges B3. Construct traditional roof truss	
Total CC Duration:			843

ASSESSMENT AND CERTIFICATION SYSTEM

ASSESSMENT	Formative assessment for every module and learning outcome will be conducted through assignments, project works, continuous assessment, demonstration of practical skills/observations, oral questioning and written test. Summative assessment after completion of each national certificate level will be conducted by TVET Quality Council, Bhutan Qualifications and professional certification authority, MoESD as per the National Competency Standards and Guidelines for National Assessment and Certification System, provided the course is accredited with TVET Quality Council, Bhutan Qualifications and professional certification authority, MoESD.
CERTIFICATION	On successful completion of every module, the institute will award a certificate of achievement to the trainees. The TVET Quality Council, Bhutan Qualifications and professional certification authority, MoESD will award a National Certificate to the trainees upon the successful completion of NC level assessment.
COURSE DELIVERY	1. Modular 2. Demonstration 3. Lecture 4. Industrial training/attachment 5. Project work 6. Problem-based learning 7. Project-based learning
RESOURCES	Materials Pen, pencil, notebook, civil drawing, timber, chalk line, pencil, work piece, mason thread, wire nails, coconut rope, ply wood, BSR, BOQ format, paint, paint brush and chalk line Tools Plane, measuring tape, try square, marking gauge, hand saw, work bench, hammer/mallet, chisel, knife, template, template, Segchu (Local carving chisel), jack plane, chisel, claw hammer, scaffolding, tool bag, calculator and water level Equipment Jigsaw, circular saw, planer, band saw, spindle molder, power chain, wood turning lathe machine, thicknesser, sander, chain saw, jigsaw, bandsaw, router, ladder, reciprocating saw, compressor, spray gun and drilling machine PPE Safety shoes, safety gloves, safety helmet, safety goggles, ear muff, dust mask, work dress, safety belt and hair net Learning Materials • Competency Based Learning Materials (CBLM) • Reference books • Hand-outs • Audio visuals

Infrastructure and training facilities

- ***Theory classroom size:*** Minimum of 1.5 m² per trainee;
- ***Practical Workshop size:*** Minimum of 3 m² per trainee. Variables must be considered depending upon type of skills being taught and the number of trainees participating at a time.

MODULE INFORMATION:
CONSTRUCTION CARPENTRY BQF CERTIFICATE-3

MODULE 1
ON
CONSTRUCTING BHUTANESE ARCHITECTURAL ELEMENTS

MODULE INFORMATION

Occupation	Construction Carpenter
Competency Area	Carryout construction of Bhutanese architectural elements
Module Title	Carrying out construction of Bhutanese architectural elements
Module Code	7115- L3-M1
Module Description	This module is structured to provide learners with the knowledge, skills and right attitude required to perform construction of primary & secondary architectural elements and prepare corner cornices & joints.
Nominal Duration	276 Hours
Certificate Level	BQF Certificate Level 3
Pre-requisite	Completed Construction Carpentry BQF Certificate 2
Learning Outcome	1. Perform construction of primary architectural elements 2. Perform construction of primary architectural elements 3. Prepare corner cornices and joints

Module Title	Carrying out construction of Bhutanese architectural elements		
Module Code	7715- L3-M1		
Learning Outcome 1	Perform construction of primary architectural elements		
Duration	Theory: 15 hours	Practical: 123 hours	Total: 138 hours
Assessment Criteria	• Mago (Door) is made as per job requirement following standard • Kachen is made as per job requirement following standard procedure • Drey Zhu lhangha is made as per job requirement following standard procedure • Jadhang Tazi is made as per job requirement following standard procedure • Norbu tog is made as per job requirement following standard procedure		
Content	A1.00 Introductory Knowledge • Definition of cornice • Origin of the cornices • Types of cornices • Significance of cornices • Recommended sizes for cornice members A1.01 Making Mago (Main Door) Knowledge • Definition of Mago • Specification of Mago • Components of Mago • Types of joints Skills • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A1.02 Making Kachen Knowledge • Significance of kachen • Types of Kachen • Parts of Kachen • Proportion of Kachen Skills • Wood working machine operating skills		

	• Using portable router • Using try square • Using measuring instrument • Basic wood carving skills • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A1.03 Making Drey Zhu Lhangna <i>Knowledge</i> • Definition of Drey zhu Lhangna • Significance of Drey Zhu Lhangna • Purpose of Drey zhu Lhangna • Proportion of Drey zhu Lhangna • Parts of Drey zhu Lhangna • Application of Drey zhu Lhangna <i>Skills</i> • Wood working machine operating skills • Using try square • Using measuring instrument • Basic wood carving skills • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation • Ensuring to use designated ports A1.04 Making Jadhong Tazi <i>Knowledge</i> • Definition of Jadhong Tazi • Significance of jadhong Tazi • Purpose of Jadhong Tazi • Components of Jadhong Tazi • Application of Jadhong Tazi
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	<i>Skills</i> • Wood working machine operating skills • Using try square • Using measuring instrument • Basic wood carving skills • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A1.05 Making Norbu Tog <i>Knowledge</i> • Definition of Norbu Tog • Significance of Norbu Tog • Purpose of Norbu Tog • Components of Norbu Tog • Application of Norbu Tog • Different profile of Norbu Tog <i>Skills</i> • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation
Learning Conditions	Learning Materials • Competency Based Learning Materials (CBLM) • Hand-outs • Audio Visuals • Reference books • Manuals

	Learning Facilities and infrastructure • Classroom with adequate facilities • Information Technology (IT) lab • Library Materials • Pen, pencil, notebook, timber, chalk line, pencil, work piece and wire nail Tools • Plane, measuring tape, try square, marking gauge, hand saw, work bench, hammer/mallet, chisel, knife, template, axe and Segchu (Local carving chisel) Equipment • Jigsaw, circular saw, planer machine, band saw, spindle molder, power chain, wood turning lathe machine and router PPE • Safety shoes, safety gloves, safety helmet, safety goggles, ear muff, dust mask, work dress and hair net
Underpinning skills	• Team work • Communication • Negotiation • Creativity • Problem solving • Time management
Instructional Methodologies	The trainer shall use <i>inter alia</i>, the following instructional methods: • Lecture • Interactive discussion • Demonstration • Industrial visit/training • Guided practice • Group practice with project-based learning • Individual practice with problem-based learning
Method of Assessment	The trainer shall use <i>inter alia</i>, the following assessment methods: • Practical observation • Oral/viva-voce • Written test • Assignment • Project work • Rubrics

Module Title	Carrying out construction of Bhutanese architectural element		
Module Code	7115- L3-M1		
Learning Outcome 2	Perform construction of secondary architectural elements (cornices)		
Duration	Theory: 14 hours	Practical: 70 hours	Total: 84 hours
Assessment Criteria	• Dung is made as per job requirement following standard procedure • Pem is made as per job requirement following standard procedure • Choetshe is made as per job requirement following standard procedure • Bogh is made as per job requirement following standard procedure • Phana/Ngangpa is made as per job requirement following standard procedure • Norbu Horzhu is made as per job requirement following standard procedure • Norbu Bagam is made as per job requirement following standard procedure		
Content	A2.01 Making Dung Knowledge • Significance of Dung • Application of Dung • Proportion of Dung Skills • Wood working machine operating skills • Using try square • Using measuring instrument • Using router • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A2.02 Making Pem Knowledge • Significance of Pem • Application of Pem • Proportion of Pem Skills • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills		

	<i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A2.03 Making Choetse <i>Knowledge</i> • Proportion of Choetse • Purpose/Significance of Choetse • Selection of chisels • Application of Choetse <i>Skills</i> • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A2.04 Making Bogh <i>Knowledge</i> • Purpose/Significance of Bogh • Proportion of Bogh • Application of single and double layer Bogh <i>Skills</i> • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability
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	• Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation • Ensuring the IP addresses are assigned properly A2.05 Making Phana/Ngangpa Knowledge • Difference between Ngangpa and Phana • Proportion of Phana/Ngangpa • Purpose/significance and application of Phana/ Ngangpa Skills • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A2.06 Making Norbu Horzhu Knowledge • Purpose/Significance of Norbu Horzhu • Proportion of Norbu Horzhu Skills • Basic wood carving skills • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation
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	A2.07 Making Norbu Bagam Knowledge • Definition of Norbu Bagam • Purpose/Significance of Norbu Bagam • Proportion of Norbu Bagam Skills • Using chisel • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation
Learning Conditions	Learning Materials • Competency Based Learning Materials (CBLM) • Hand-outs • Audio Visuals • Reference books • Manuals Learning Facilities and infrastructure • Classroom with adequate facilities • Information Technology (IT) lab • Library Materials • Pen, paper and Timber Tools • Plane, chisel, template, measuring tape, try square, hand saw, marking gauge, work bench, template, knife and mallet Equipment • Circular saw, planer, thicknesser, spindle molder, sander, chain saw, jigsaw and band saw PPE • Safety shoes, safety gloves, safety helmet, safety goggles, ear muff, dust mask, work dress and hair net
Underpinning skills	• Team work • Communication • Negotiation • Creativity

	• Problem solving Time management
Instructional Methodologies	The trainer shall use <i>inter alia</i> , the following instructional methods: • Lecture • Interactive discussion • Demonstration • Industrial visit/training • Guided practice • Group practice with project-based learning • Individual practice with problem-based learning
Method of Assessment	The trainer shall use <i>inter alia</i> , the following assessment methods: • Practical observation • Oral/viva-voce • Written test • Assignment • Project work • Rubrics

Module Title	Carrying out construction of Bhutanese architectural element		
Module Code	7115- L3-M1		
Learning Outcome 3	Prepare cornices and joints		
Duration	Theory: 11 hours	Practical: 43 hours	Total: 54 hours
Assessment Criteria	• Corner joint for Dung is made as per job requirement following standard procedure • Corner joint for Pem is made as per job requirement following standard procedure • Corner Bogh is made as per job requirement following standard procedure • Corner Phana/ Ngangpa is made as per job requirement following standard procedure • Corner Tshechu Khanyim is made as per job requirement following standard procedure • Corner cornices is fixed as per job requirement following standard procedure		
Content	A3.01 Making corner joints for Dung Knowledge • Types of joints • Purpose and application of joints • Importance of alignment • Importance of projections • Importance of marking Skills • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A3.02 Making corner joints for Pem Knowledge • Importance of marking • Importance of alignment • Projection of Pem • Purpose of joints Skills • Wood working machine operating skills • Using try square • Using measuring instrument		

	• Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A3.03 Making corner Bogh <i>Knowledge</i> • Proportion of corner Bogh • Marking of corner Bogh • Importance of marking • Importance of alignment • Importance of Kaa • Proportion of Kaa • Projection of Bogh • Purpose of joints <i>Skills</i> • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A3.05 Making corner phana/Ngangpa <i>Knowledge</i> • Proportion of Phana • Importance of marking • Importance of alignment • Projection of Phana/Ngangpa • Purpose of joints <i>Skills</i> • Wood working machine operating skills • Using try square • Using measuring instrument
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	• Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Being a team player • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A3.05 Making corner Tsechu Khanyim <i>Knowledge</i> • Proportion of tsechu khanyim • Importance of marking • Importance of alignment • Purpose of joints <i>Skills</i> • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation A3.06 Fixing corner cornices <i>Knowledge</i> • Components of cornices • Sequential order of cornices • Layout of cornices <i>Skills</i> • Wood working machine operating skills • Using try square • Using measuring instrument • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity
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	• Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation
Learning Conditions	Learning Materials • Competency Based Learning Materials (CBLM) • Hand-outs • Audio Visuals • Reference books • Manuals Learning Facilities and infrastructure • Classroom with adequate facilities • Information Technology (IT) lab • Library Materials • Pen, pencil, notebook, timber, mason thread, wire nails, coconut rope and ply wood Tools • Jack plane, measuring tape, chisel, hand saw, try square, work bench, mallet, knife, marking gauge, hammer, claw hammer, scaffolding, tool bag and template Equipment • Jigsaw, circular saw, planer machine, band saw, spindle molder, ladder and router PPE • Safety gloves, safety helmet, safety shoes, safety goggles, ear muff, dust mask, work dress, safety belt and hair net
Underpinning skills	• Team work • Communication • Negotiation • Creativity • Problem solving • Time management
Instructional Methodologies	The trainer shall use <i>inter alia</i>, the following instructional methods: • Lecture • Interactive discussion • Demonstration • Industrial visit/training • Guided practice • Group practice with project-based learning • Individual practice with problem-based learning

Method of Assessment	The trainer shall use <i>inter alia</i>, the following assessment methods: • Practical observation • Oral/viva-voce • Written test • Assignment • Project work • Rubrics
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MODULE 2
ON
CONSTRUCTING ROOF WITH WOODEN ROOF TRUSS

MODULE INFORMATION

Occupation	Construction Carpenter
Competency Area	Construct roof with wooden roof truss
Module Title	Constructing roof with wooden roof truss
Module Code	7115-L3-M2
Module Description	This module is structured to provide learners the knowledge, skills and right attitude required to construct wooden roof truss, fix roof covering & ridges and construct traditional roof truss
Nominal Duration	147 Hours
Certificate Level	BQF Certificate 3
Pre-requisite	Completed 7115-L3-M1
Learning Outcome	1. Construct wooden roof truss 2. Fix roof covering and ridges 3. Construct Traditional roof truss

Module Title	Carrying out construction of roof with wooden roof truss		
Module Code	7115-L3-M2		
Learning Outcome 1	Construct wooden roof truss		
Duration	Theory: 25 hours	Practical: 34 hours	Total: 59 hours
Assessment Criteria	- Materials are estimated as per job requirement following standard procedure - Roof truss components are prepared as per job requirement following standard procedure - Roof truss components are assembled as per job requirement following standard procedure - Components are fixed as per job requirement following the standard procedures - Eave board are made as per job requirement following standard procedure		
Content	B1.00 Introductory Knowledge <i>Knowledge</i> - Definition of roof - Function of roof - Types of roofs and its application - Requirement of roof - Pythagoras theorem - Importance of roof gradient/ angle B1.01 Estimating materials <i>Knowledge</i> - Purpose of estimation and costing - Specifications for civil works - Bhutan Schedule of Rates (BSR) - Bill of Quantity (BoQ) - Purpose of LMC (Labour and Material Coefficient) - Unit conversion <i>Skills</i> - Interpreting drawing - Interpreting BSR - Observation skills - Numeracy skills <i>Attitude, safety and environmental concern</i> - Being efficient in using resources - Being vigilant and patient - Having work ethics and integrity - Proper handling of tools, materials and equipment - Having sense of ownership and accountability - Ensuring appropriate use of PPE - Ensuring proper disposal of waste - Ensuring to follow environmental rules and regulations - Ensuring to follow OHS rules and regulation		

	B1.02 Preparing roof truss components Knowledge • Components of roof truss • Roof triangulation • Calculation of truss components Skills • Interpreting drawing • Using woodworking machine operating skills • Observation skills • Numeracy skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B1.03 Assembling roof truss components Knowledge • Importance of fastener • Placing components in sequential order Skills • Interpreting drawing • Using water level • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B1.04 Fixing roof truss components Knowledge • Types of roofs • Types of materials • Types of roof angles • Importance of alignment Skills • Using measuring instruments • Observation skills
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	<i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B1.05 Making Eave Board <i>Knowledge</i> • Purpose of Eave board • Unit conversion • Types of paint <i>Skills</i> • Woodworking machine operating skills • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation
Learning Conditions	Learning Materials • Competency Based Learning Materials (CBLM) • Hand-outs • Audio Visuals • Reference books • Manuals • Reference: Learning Facilities and infrastructure • Classroom with adequate facilities • Information Technology (IT) lab • Library Materials • Pen, pencil, notebook, timber, civil drawings, BSR, BoQ format, wire nail and mason thread Tools • Calculator, mallet, chisel, hand saw, marking gauge, plane, work bench, hammer, try square, measuring tape, water level and racking bar (claw bar)

	Equipment • Circular saw, jigsaw, planer, reciprocating saw and power chain PPE • Safety Gloves, safety helmet, safety shoes, safety goggles, earmuff, dust mask, safety belt, work dress and hair net
Underpinning skills	• Team work • Communication • Negotiation • Creativity • Problem solving • Time management
Instructional Methodologies	The trainer shall use <i>inter alia</i>, the following instructional methods: • Lecture • Interactive discussion • Demonstration • Industrial visits/training • Guided practice • Group practice with project-based learning • Individual practice with problem-based learning
Method of Assessment	The trainer shall use <i>inter alia</i>, the following assessment methods: • Practical observation • Oral/viva-voce • Written test • Assignment • Project work • Rubrics

Module Title	Carrying out construction of roof with wooden wooden roof truss		
Module Code	7115-L3-M2		
Learning Outcome 2	Fix roof covering and ridges		
Duration	Theory: 15 hours	Practical: 13 hours	Total: 28 hours
Assessment Criteria	- Materials are estimated as per job requirement following standard procedure - Roofing sheet is fixed as per job requirement following standard procedure - Ridging is fixed as per job requirement following standard procedure		
Content	B2.01 Estimating material cost Knowledge - Purpose of estimation and costing - Specifications for civil works - Bhutan Schedule of Rates (BSR) - Bill of Quantity (BoQ) - Purpose of LMC - Unit conversion Skills - Interpreting drawing - Interpreting BSR - Observation skills - Numeracy skills Attitude, safety and environmental concern - Being efficient in using resources - Being vigilant and patient - Having work ethics and integrity - Proper handling of tools, materials and equipment - Having sense of ownership and accountability - Ensuring appropriate use of PPE - Ensuring proper disposal of waste - Ensuring to follow environmental rules and regulations - Ensuring to follow OHS rules and regulation B2.02 Fixing roofing sheet Knowledge - Types of roofs covering materials - Types and importance of washers - Type of roofing screw/hook - Methods of sheet fixing and alignment - Roofing color code Skills - Interpreting drawing - Observation skills - Numeracy skills Attitude, safety and environmental concern - Being efficient in using resources - Being vigilant and patient - Having work ethics and integrity		

	• Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B2.03 Fixing Ridging Knowledge • Purpose of ridging • Importance of alignment • Sizes of ridging Skills • Using of Bradawl/poker/ drill • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation
Learning Conditions	Learning Materials • Competency Based Learning Materials (CBLM) • Hand-outs • Audio Visuals • Reference books • Manuals Learning Facilities and infrastructure • Classroom with adequate facilities • Information Technology (IT) lab • Library • Workshop Materials • Pen, pencil, notebook, timber, chalk line, pencil, paint, mason thread, paint brush and wire nail Tools • Plane, marking gauge, hand saw, work bench, hammer/mallet, chisel, knife, tool bag, measuring tape, try square and template Equipment • Jig saw, circular saw, planer, spindle molder, chain saw, compressor and spray gun

	PPE • Safety Gloves, safety helmet, safety shoes, safety goggles, sunglasses, ear muff, dust mask, safety belt, work dress and hair net
Underpinning skills	• Team work • Communication • Negotiation • Creativity • Problem solving • Time management
Instructional Methodologies	The trainer shall use <i>inter alia</i>, the following instructional methods: • Lecture • Interactive discussion • Demonstration • Industrial visits/training • Guided practice • Group practice with project-based learning • Individual practice with problem-based learning
Method of Assessment	The trainer shall use <i>inter alia</i>, the following assessment methods: • Practical observation • Oral/viva-voce • Written test • Assignment • Project work • Rubrics

Module Title	Carrying out construction of roof with wooden wooden roof truss		
Module Code	7115-L3-M2		
Learning Outcome 3	Constructing traditional roof truss		
Duration	Theory: 10 hours	Practical: 50 hours	Total: 60 hours
Assessment Criteria	• Dangri is made as per the job requirement following standard procedure • Dhingri Gha/ Lhiuchung is made as per the job requirement following standard procedure • Lungzey is made as per job requirement following standard procedure. • Shari/ Shathung is made as per the job requirement following standard procedure • Gungchen/Gungchung is made as per job requirement following standard procedure • Tsim/Dangchung are prepared as per job requirement following standard practice • Roof truss components are assembled as per the job requirement standard procedure		
Content	B3.01 Making Dhingri Knowledge • Types of roofs • Components of roof • Purpose of Dhingri • Significance of Dhingri Skills • Woodworking machine operating skills • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B3.02 Making Dhingri Gha/Lhiuchung Knowledge • Significance of Dhingri Gha/Lhiuchung • Purpose of Dhingri Gha/Lhiuchung Skills • Woodworking machine operating skills • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment		

	• Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B3.03 Making Lungzey Knowledge • Significance of lungzey • Purpose of Lungzey Skills • Woodworking machine operating skills • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B3.04 Making Shari/Shathung Knowledge • Significance of shari/shathung • Purpose of Shari/ Shathung Skills • Woodworking machine operating skills • Observation skills Attitude, safety and environmental concern • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B3.05 Making Gungchen/Gungchung Knowledge • Significance of Gungchen/gungchung • Purpose of Gungchen/gungchung Skills • Woodworking machine operating skills • Observation skills
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	<i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B3.06 Preparing Tshim and Dangchung <i>Knowledge</i> • Significance of Tshim and Dangchung • Function of Tshim and dangchung <i>Skills</i> • Woodworking machine operating skills • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation B3.07 Assembling roof truss components <i>Knowledge</i> • Components of roof truss • Roof truss layout <i>Skills</i> • Interpreting drawing • Observation skills <i>Attitude, safety and environmental concern</i> • Being efficient in using resources • Being vigilant and patient • Having work ethics and integrity • Proper handling of tools, materials and equipment • Having sense of ownership and accountability • Ensuring appropriate use of PPE • Ensuring proper disposal of waste • Ensuring to follow environmental rules and regulations • Ensuring to follow OHS rules and regulation
Learning Conditions	Learning Materials • Competency Based Learning Materials (CBLM) • Hand-outs

	• Audio Visuals • Reference books • Manuals Learning Facilities and infrastructure • Classroom with adequate facilities • Information Technology (IT) lab • Library Materials • Pen, pencil, book, timber, chalk line, mason thread and wire nail Tools • Hand saw, Hammer/mallet, Chisel, tool bag, measuring tape, try square and Knife Equipment • Circular saw, chain saw, planer, jigsaw, drilling machine and power chain PPE • Safety Gloves, safety helmet, safety shoes, safety goggles, sunglasses, ear muff, dust mask, safety belt, work dress and hair net
Underpinning skills	• Team work • Communication • Negotiation • Creativity • Problem solving • Time management
Instructional Methodologies	The trainer shall use <i>inter alia</i>, the following instructional methods: • Lecture • Interactive discussion • Demonstration • Industrial visits/training • Guided practice • Group practice with project-based learning • Individual practice with problem-based learning
Method of Assessment	The trainer shall use <i>inter alia</i>, the following assessment methods: • Practical observation • Oral/viva-voce • Written test • Assignment • Project work • Rubrics

COURSE	Construction Carpentry BQF C3
DESCRIPTION	The trainee will be attached with relevant industries for OJT program. During the OJT, the trainees will be exposed to real life working environment where they are expected to develop technical skills and learn positive working attitudes including life skills.
OBJECTIVE	After completion of OJT, learners will be able to • Develop critical thinking, creativity, collaboration and communication skills • Develop information, media and technology literacy • Adopt flexible and productive working attitude • Develop leadership skills • Apply initiatives • Develop social skills • Adopt OHS practices • Carry out construction of Bhutanese architectures • Carry out construction of roof with wooden roof truss
DURATION	420 Hours
CONDITIONS FOR OPERATION OF OJT	• The institute shall select relevant and reliable industry for OJT attachment • The trainee shall be attached in construction carpentry related activity for at least 70% of the total OJT duration • The industry shall maintain daily attendance of the trainee • The trainee shall maintain OJT logbook as per the OJT guideline • The trainee is required to follow company's rule • The collaborating industry shall provide working facilities • The industry shall assess performance of trainees • The industry shall provide feedback in the logbook
EVALUATION	The industry shall evaluate the trainees on the trainee's performance through observation and use of logbook. The evaluation shall be done on the following aspects of trainees: ➤ Core skills ➤ Critical thinking ➤ Creativity ➤ Collaboration ➤ Communication ➤ Information literacy ➤ Media literacy ➤ Conversant to up-to-date technology ➤ Flexibility ➤ Leadership ➤ Initiative ➤ Productivity ➤ Social skills
REPORT	The trainee shall submit comprehensive report on OJT to the Institute

What is Competency-Based Curriculum (CBC)

- ✓ A competency-based curriculum is a framework or guide for the subsequent detailed development of competencies, associated methodologies, training and assessment resources.
- ✓ The CBC specifies the outcomes which are consistent with the requirements of the workplace as agreed through the industry or community consultations.
- ✓ CBC can be developed immediately when competency standards exist.
- ✓ When competency standards do not exist, curriculum developers need to clearly define the learning outcomes to be attained. The standard of performance required must be appropriate to industry and occupational needs through the industry/enterprise or specified client group consultations.

The CBC materials are available in both printed and electronic copies.

ANNEXES

Annex I: Time Distribution

Time Distribution
Construction Carpentry BQF Certificate L3

Competency Area	Sub Competency Area	Competencies/ Tasks	T	P	Total
A. Construct Bhutanese architectural element	A1 Perform construction of primary architectural elements	A1.01 Make Mago (Door)	3	27	30
		A1.02 Make Kachen	4	32	36
		A1.03 Make Drey Zhu Lhangna	4	26	30
		A1.04 Make Jadhang Tazi	2	28	30
		A1.05 Make norbu tog	2	10	12
		Sub Total Duration	15	123	138
	A2 Prepare Secondary elements (Cornices)	A2.01 Make Dung	2	10	12
		A2.02 Make Pem	2	10	12
		A2.03 Make Choetse	2	10	12
		A2.04 Make Bogh	2	10	12
		A2.05 Make Phana/ Ngangpa	2	10	12
		A2.06 Make Norbu Horchu	2	10	12
		A2.07 Make Norbu Bagam	2	10	12
		Sub Total Duration	14	70	84
	A3 Prepare corner cornices and joints	A3.01 Make corner joint for Dhung	2	4	6
		A3.02 Make corner joint for Pem	2	4	6
		A3.03 Make corner Bogh	1	5	6
		A3.04 Make corner Phana/ Ngangpa	2	10	12
		A3.05 Make corner Tshechu Khanyim	2	10	12
		A3.06 Fix corner cornices	2	10	12
		Sub Total Duration	11	43	54
	Total Duration (A)		40	236	276
B. Construct roof with wooden roof truss	B1 Construct wooden roof truss	B1.01 Estimate materials Cost	16	2	18
		B1.02 Prepare roof truss components	4	14	18
		B1.03 Assemble roof truss components	2	6	8
		B1.04 Fix components	2	6	8
		B1.05 Make Eave Board	1	6	7
	Sub Total Duration		25	34	59
	B2 Fix roof covering	B2.01 Estimate materials	11	1	12
		B2.02 Fix roofing sheet	2	6	8
		B2.03 Fix Ridging	2	6	8
	Sub Total Duration		15	13	28
	B3. Construct traditional roof truss	B3.01 Make Dhingri	2	10	12
		B3.02 Make Dhingri Gha/ Lhiuchung	2	10	12
		B3.03 Make Lungzey	2	10	12

		B3.04 Make Shari/ Shathung	2	10	12
		B3.05 Make Gungchen and Gungchung	2	10	12
		B3.06 Prepare Tsim/ Dangchung	2	10	12
		B3.07 Assemble roof truss components	2	10	12
	Sub Total Duration		10	50	60
	Total Duration (B)		50	97	147
Grand Total Duration (Hours)			90	333	423

Annex II: Module Recognition

This is to verify that

Mr/Ms.....

has completed module on

.....

Covering following learning outcomes:

1.
2.
3.

Instructor:

Head of the Department:

.....

.....

Signature:

Signature:

Date: / / (dd/mm/yyyy)
.....(dd/mm/yyyy)

Date: / /

Head of the Institute:

Trained Assessor (Institute)/Exam OC:

.....

.....

Signature:

Signature:

Date: / ... / (dd/mm/yyyy)

Date: / /(dd/mm/yyyy)

Annex III: Lesson Plan

Lesson Plan

Course Title:				NC Level:
Module Code:				Duration:
Module Title:				
Learning Outcome:				
Skill/Task/Topic:				
Terminal Performance Objective:				
(Note: Write narrative statement extracted from TPO of Task Sheet)				
Enabling Objectives (Related knowledge):				
By the end of the lesson learners will be able to:				
i) ii) iii)				
What (Content/Activity)	Who (T/L)	How (Methods/ Media)	Duration (Min.)	Questions
Introduction:				
Main body				
Conclusion				
Projects/Problems:				

Instructional Resources Plan				
Skills/Task/Topic:				
No. of Trainees:				
Sl. No.:	Instructional materials/resources	Specifications	Qty.	Remarks
Prepared by :		Signature	Date:	
Revised by:		Signature	Date:	
Approved by:		Signature	Date:	

Task sheet

TS-1/4: Practical Plan

TS-1/4: Practical Plan			
Course Title:		N C Level:	
Module code:		Duration:	
Module Title			
Learning outcome			
Skills/Task Title:		Task no:	
Terminal Performance Objective: <i>Given:</i> <i>Cue:</i> <i>Who:</i> <i>What:</i> <i>Within:</i> <i>How well:</i> - - -			
Enabling Objectives (Related Skills): <i>By the end of a lesson, the learners will be able to:</i> i) ii) iii) iv)			
Activities	Who (T/L)	How (methods/ media)	Duration
Project/Assignment: 			

TS-2/4: Tool and Equipment required:						
Sl no.	Particulars	Specifications	Qty.	Remarks		
Training Materials required:						
Sl no.	Particulars	Specifications	Qty.	Rate	Amount	Remarks
TS-3/4: Performance Guide						
Skill/Task:					Date:	
Directions: Use the following performances criteria to rate the learner. Check YES/NO to indicate whether the learner performed each step as indicated or not?						
Sl. No:	Steps				Yes	No
Note: Critical steps: All * marked steps should be carried out very carefully. For a quality performance guide, all items should be checked "YES"						

TS-4/4: Instruction and Drawing***General Instructions for Trainees***

- i)
- ii)
- iii)
- iv)

Drawing (if any)**Safety Precaution**

- i)
- ii)
- iii)

Prepared by :	Signature	Date:
Revised By:	Signature	Date:
Approved by :	Signature	Date:

Annex V: Course Plan
Institutes letter head and Logo

(Trade)YEAR PLAN- _____ Semester_____ (Year)

Trade: NC Level:			Schedule																																								Total Hours																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Module Code	Module Title	Learning Outcome	Feb.				March				April				May				June				July				Aug.				Sept				Oct.				Nov.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

Prepared by:

Verified & Approved by:

Date:

Monthly/Weekly Plan

Month: Trade: Trainer:

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 01							
Week 02							
Week 03							
Week 04							
Week 05							

Developed by: Approved by:

Date



For more information please contact:

Technical Trainers Training and Resource Center (TTTRC), DWPSD

P.O. Box153; Gelephu

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