

WORKSHOP TECHNOLOGY PRACTICES

UNIT CODE: 0732 541 24A

TVET CDACC UNIT CODE: CON/CU/BUT/CC/08/6/MA

UNIT DURATION: 72 Hours

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **Apply workshop technology practices**

Unit Description

This unit describes the competencies required by a building technician in Applying Workshop Technology Practices. It entails carrying out masonry, Plumbing, Carpentry and Mechanical tasks.

Summary of Learning Outcomes

S/no	Learning outcomes	Duration (hours)
1	Carry out masonry tasks	22
2	Carry out plumbing tasks	18
3	Carry out carpentry tasks	18
4	Carry out mechanical tasks	14

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcomes	Content	Suggested Assessment Methods
1 Carry out masonry tasks	1.1 Safety requirements in the workshop	Practical assessment

Learning Outcomes	Content	Suggested Assessment Methods
	environment 1.1.1 Types 1.1.2 Uses 1.2 Masonry hand tools 1.2.1 Types 1.2.2 Uses 1.3 Masonry machine tools 1.3.1 Types 1.3.2 Uses 1.4 Maintenance of Masonry tools 1.4.1 Methods	• Projects • Third party report • Written assessment • Oral assessment • Portfolio of evidence
2 Carry out plumbing tasks	2.1 Plumbing workshop Safety 2.1.1 Procedures 2.2 Plumbing hand tools 2.2.1 Types 2.2.2 Uses 2.3 Plumbing machine tools 2.3.1 Types 2.3.2 Uses 2.4 Maintenance of plumbing	• Practical assessment • Projects • Third party report • Written assessment • Oral assessment • Portfolio of evidence

Learning Outcomes	Content	Suggested Assessment Methods
	tools	
3 Carry out carpentry tasks	3.1 Carpentry Workshop Safety 3.1.1 Types 3.1.2 Uses 3.2 Carpentry hand tools 3.2.1 Types 3.2.2 Uses 3.3 Carpentry machine tools 3.3.1 Types 3.3.2 Uses 3.4 Maintenance of carpentry tools 3.4.1 Methods	• Practical assessment • Projects • Third party report • Written assessment • Oral assessment • Portfolio of evidence • Projects
4 Carry out mechanical tasks	4.1 Mechanical workshop Safety 4.1.1 Types 4.1.2 Uses 4.2 Mechanical hand tools 4.2.1 Types 4.2.2 Uses 4.3 Components of diesel and petrol engine	• Practical assessment • Projects • Third party report • Written assessment • Oral assessment • Portfolio of evidence

Learning Outcomes	Content	Suggested Assessment Methods
	4.3.1 Types 4.4 Operations of Diesel and petrol engines 4.5 Maintenance of Simple engine 4.6 Water pumps 4.6.1 Types 4.6.2 Uses 4.6.3 Maintenance	

Suggested Methods of Instruction

- Demonstration
- Practical work
- videos
- Projects
- Site visits
- group discussions

Recommended Resources for 25 trainees

S/No.	Category/Item	Description/Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	Learning Materials			
1.	Textbooks	Recommended	8 pcs	1:3

		publisher		
2	1 roll Flip Chart	Roll	1	1:25
3	White board	For trainer's use	1	-
B	Learning Facilities & infrastructure			
1	Lecture/theory room	72 Square Meter	1	1:25
2	Computer Lab	96 Square Meter	1	1:25
C	Consumable materials			
1.	Ink	Assorted Colours for trainer's use	500ml per term.	-
2	White board Marker	Refillable type	10 pcs per term	-
D	Tools and Equipment			
1.	Projector	Appropriate	1	1:25
2.	Masons trowel	Appropriate	25 pcs	1:1
3.	Wood float	Appropriate	25 pcs	1:1
4.	Cold chisels	Appropriate	25 pcs	1:1
5.	Masons square	Appropriate	25 pcs	1:1
6.	Spade	Appropriate	25 pcs	1:1
7.	Shovel	Appropriate	25 pcs	1:1

8.	Plumb bob	Appropriate	25 pcs	1:1
9.	Anvil	Appropriate	5	1:5
10.	Hand grinder	Appropriate	5	1:5
11.	Portable power drill	Appropriate	5	1:5
12.	Welding machine	Appropriate	5	1:5
13.	Bending machine	Appropriate	5	1:5
14.	Sheet metal holding machine	Appropriate	5	1:5
15.	Pipe wrench	Appropriate	25 pcs	1:1
16.	Pliers	Assorted	25 pcs	1:1
17.	Saws	Assorted	25 pcs	1:1
18.	Planes	Assorted	25 pcs	1:1
19.	Hammer	Assorted	25 pcs	1:1
20.	Hand drill	Appropriate	5	1:5
21.	Carpenters square	Appropriate	5	1:5
22.	Marking gauge	Appropriate	5	1:5
23.	Screw drivers	Assorted		
24.	Concrete mixer	Appropriate	5	1:5
25.	Computer	Desktop	13 pcs	1:2
26.	Block cutter	Appropriate	1	1:25

27.	Vibrator	Appropriate	1	1:25
28.	Pneumatic hammer	Appropriate	1	1:25
29.	Compactors	Appropriate	1	1:25
30.	Circular saw	Appropriate	1	1:25
31.	Thickneser	Appropriate	1	1:25
32.	Portable sander	Appropriate	1	1:25
33.	Close cut saw	Appropriate	1	1:25
34.	Portable drill machine	Appropriate	1	1:25
35.	Bench shears	Appropriate	1	1:25
36.	PPEs	Trainer Use (dust coat)	1 pc	-
37.	Pen	Trainee	1 pc	1:1