



REPUBLIC OF KENYA

COMPETENCY BASED CURRICULUM

FOR

CARPENTRY AND JOINERY

LEVEL 5

PROGRAMME CODE:0722 554B



TVET CDACC

**P.O BOX 15745-00100
NAIROBI**

FURNITURE ITEMS

UNIT CODE:CON/CU/CAJ/CR/03/5/B

Relationship to Occupational Standards

This unit addresses the unit of competency: Construct furniture items

Duration of Unit: 100 hours

Unit Description

This unit describes the competences required to construct furniture items. It involves interpreting working drawing, preparing construction materials, marking out product profile, cutting out product profile and performing fixing of the joints. It also includes performing finishing processes, examining quality of the finished product and performing workplace housekeeping.

Summary of Learning Outcomes

1. Interpret working drawing
2. Prepare Construction materials
3. Marking out product profile
4. Cut out product profile
5. Perform fixing of the joints
6. Perform finishing processes
7. examining quality of the finished product
8. performing workplace housekeeping.

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Interpret working drawing	<ul style="list-style-type: none">• Elevation• Sections• Dimensions• Scale• Symbols	<ul style="list-style-type: none">• Practical assignment• Oral Questioning• Written Tests
2. Prepare Construction materials	<ul style="list-style-type: none">• Interpretation of working drawing• Preparation of a cutting list• Types of construction materials<ul style="list-style-type: none">• Timber• Ply wood• Nails and screws	<ul style="list-style-type: none">• Practical assignment• Oral Questioning• Written Tests

	<ul style="list-style-type: none"> • Wood glue • Sand paper • Block board • MDF • Veneer • formica • Uses and specifications of materials, tools and equipment • Safety Practices <ul style="list-style-type: none"> • PPE • Handling of tools, materials and equipment • Good housekeeping 	
3. Mark out product profile	<ul style="list-style-type: none"> • Marking out tools <ul style="list-style-type: none"> • Tape measure • Try square • Marking gauge • Workshop rod • Compass • Bevel square • Bradawl • Cutting gauge • Marking out procedures <ul style="list-style-type: none"> • Mark mortise • Mark tenons • Mark grooves • Mark rebate • Mark chamfer • Mark curves and circles 	<ul style="list-style-type: none"> • Practical assignment • Oral Questioning • Written Tests
4. Cut out product profile	<ul style="list-style-type: none"> • Types of cutting out tools <ul style="list-style-type: none"> • Saws • Chisels • Mallet • Planes • Drills • Spoke shave • Wood file • Cutting procedure 	<ul style="list-style-type: none"> • Practical assignment • Oral Questioning • Written Tests

	<ul style="list-style-type: none"> • Cut out mortises • Cut out tenons • Cut out the grooves • Cut out trenches • Cut out rebates • Cut out chamfers 	
5. Perform fitting of the joints	<ul style="list-style-type: none"> • Types of fitting tools <ul style="list-style-type: none"> • Hammers • Screw drivers • Wood glue • Nails • Screws • Clamps • Dowels • Mallet • Types of joints <ul style="list-style-type: none"> • Mortise and tenon • Tongue and grooves • Scribes joints • Rebate • Mitre • Procedure of fitting joints <ul style="list-style-type: none"> • Apply glue to tenons and mortises • Fit tenons to mortises • Fit battens to grooves • Fit stiles • Clamp the window • Fix the joints • Cut and fix the braces 	<ul style="list-style-type: none"> • Written Tests • Oral Questioning • practical assignment
6. Perform finishing processes	<ul style="list-style-type: none"> • Types of finishing processes <ul style="list-style-type: none"> • Wipe excessive glue • Apply filler to any dent • Sanding apply coat of varnish • Fixing ironmongery /hardware <ul style="list-style-type: none"> • Drawer locks 	<ul style="list-style-type: none"> • Oral Questioning • practical assignments • Written Tests

	<ul style="list-style-type: none"> • Hinges • Pullers • Handles • catches 	
7. Examine quality of the finished product	<ul style="list-style-type: none"> • Fitness and joint quality • Final appearance • Function ability of the furniture 	<ul style="list-style-type: none"> • Oral Questioning • practical assignments • Written Tests
8. Perform workplace Housekeeping	<ul style="list-style-type: none"> • Housekeeping procedures <ul style="list-style-type: none"> • Gather off cuts • Gather shavings/ saw dust • Clean the floor • Return tools to the store 	<ul style="list-style-type: none"> • Oral Questioning • practical assignments • Written Tests

Suggested Methods of Instruction

- Demonstration by trainer
- Practical work by trainee
- Demonstration videos
- Group discussions

Recommended Resources

Tools and equipment

- Reference materials
- Occupational Safety and health manuals
- Jack plane
- Saws
- Chisels
- Hammers
- Tape measure
- Mallet
- Screw drivers
- Drills
- Square
- Marking gauge
- Steel rule
- Sash and T clamps

- Bench hold fast
- Mitre box
- Brace
- pincers

Materials and supplies

- Sand paper
- Timber
- Manufactured boards
- Wood glue
- Formica
- Nuts and bolts
- Nails and screws

Personal protective equipment (PPEs)

- Overalls
- Safety boots
- First aid kits
- Safety goggles
- Helmets
- Gloves
- Dust coats
- Ear muffs