



THE REPUBLIC OF KENYA

COMPETENCY BASED CURRICULUM

FOR

BUILDING TECHNOLOGY

KNQF LEVEL 6

ISCED PROGRAM CODE: 0732 554B



TVET CDACC

P.O BOX 15745-00100

NAIROBI

BUILDING DRAWINGS

UNIT CODE:CON/CU/BUT/CR/01/6/B

Relationship to Occupational Standards

This unit addresses the unit of competency: Produce Building Drawings

Duration of Unit: 100 hours

Unit Description

This unit describes the competence required to produce building drawings. It involves designing architectural drawings and plumbing layouts, preparing structural, electrical and mechanical drawings.

Summary of Learning Outcomes

1. Design architectural drawings
2. Prepare structural drawings
3. Prepare electrical drawings
4. Design plumbing layout
5. Prepare mechanical drawings

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Design architectural drawings	<ul style="list-style-type: none">• Drawing tools and equipment• Site investigation/surveying• Construction dimensions• Project plan and design• Architectural drawings• Building codes	<ul style="list-style-type: none">• Practical assignment/project• Oral Questioning• Written Tests
2. Prepare structural drawings	<ul style="list-style-type: none">• Structural elements• Codes of practice• Bar bending schedule• Structural drawings	<ul style="list-style-type: none">• Practical assignment/project• Oral Questioning• Written Tests
3. Prepare civil drawings	<ul style="list-style-type: none">• Civil elements• Culverts• Retaining walls• Pavements• Storm water drain systems• Septic tanks	<ul style="list-style-type: none">• Practical assignment/project• Oral Questioning• Written Tests

	<ul style="list-style-type: none"> • Codes of practice • Civil drawings 	
4. Prepare electrical drawings	<ul style="list-style-type: none"> • Electricity and electronics • Electrical codes of practice • Architectural layout • Electrical connection layout • Electrical drawings 	<ul style="list-style-type: none"> • Practical assignment/project • Oral Questioning • Written Tests
5. Design plumbing layout	<ul style="list-style-type: none"> • Pipe sizes • Pipe types • Pipe fittings • Pipe installation • Consumption requirements • Plumbing layout 	<ul style="list-style-type: none"> • Written Tests • Oral Questioning • Projects/practical assignment
6. Prepare mechanical drawings	<ul style="list-style-type: none"> • Dimensions (mechanical) • Mechanical systems • Mechanical components • Sketching mechanical components • Drafting mechanical components • Mechanical component dimensions 	<ul style="list-style-type: none"> • Oral Questioning • Projects/practical assignments • Written Tests

Suggested Methods of Instruction:

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

Recommended Resources

Tools and equipment

- measuring and drawing tools
- computers/internet
- printers/plotting device

Materials and supplies

- Codes of practice
- mechanical conventions,

Personal protective equipment (PPEs)

- dust coat
- First aid kits
- goggles