

BUILDING DRAWINGS

UNIT CODE: CON/CU/CET/CR/06/6/A

Relationship to Occupational Standards

This unit addresses the unit of competency: Produce building drawings

Duration of Unit: 200 hours

Unit Description

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

Summary of Learning Outcomes

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

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Interpret 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/written
2. Prepare structural and civil drawings	<ul style="list-style-type: none">• Structural elements• Codes of practice• Bar bending schedule• Structural drawings• Civil elements• Culverts• Retaining walls• Pavements• Storm water drain systems	<ul style="list-style-type: none">• Practical assignment/project• Oral• Written

	<ul style="list-style-type: none"> • Septic tanks • Codes of practice • Civil drawings 	
3. Interpret 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 • Written
4. 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 • Oral • Projects/practical assignment
5. Interpret 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 • Projects/practical assignments • Written

Suggested Methods of Instruction

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

Recommended Resources

- measuring and drawing tools
- computers/internet
- printers/plotting device
- Codes of practice
- mechanical conventions,

- workstation
- CAD & GIS Software
- Dust coat
- First aid kits

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