

FARM STRUCTURES AND ROAD CONSTRUCTION

ISCED UNIT CODE: 0716 551 22A

TVETCDACC UNIT CODE: HO/CU/HP/CR/02/6/MA

Unit duration: 100 Hours

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **Construct farm structures**

Unit Description

This unit specifies the competencies required to construct farm structures. It involves performing farm structures feasibility survey, designing farm structures and constructing farm structures.

Summary of Learning Outcomes

SNO	Learning Outcome	Duration (Hours)
1.	Perform farm structures feasibility survey	15
2.	Design farm structures	25
3.	Construct farm structures and farm roads	35
4.	Maintain farm structures	25
	TOTAL	100

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcomes	Content	Suggested Assessment Methods
1 Perform farm structures feasibility survey	Theory 1.1 Personal Protective Equipment 1.1.1 PPE requirements 1.1.2 Importance of PPE 1.1.3 Categories of PPE 1.1.4 Uses and care 1.2 Tools, equipment and materials	<ul style="list-style-type: none">Written testsReflection papersProjectsInterviews/ Oral questionsIndividual/group

	<p>1.2.1 Hammer</p> <p>1.2.2 Spirit levels</p> <p>1.2.3 Wheelbarrows</p> <p>1.2.4 Concrete mixer</p> <p>1.2.5 Cement</p> <p>1.2.6 Ballast</p> <p>1.3 Conducting feasibility survey</p> <p>1.4 Preparation of feasibility study report</p> <p>Practice</p> <p>1.5 Conduct feasibility survey using various methods</p>	<ul style="list-style-type: none"> • assignments • Practicals
2 Design farm structures	<p>Theory</p> <p>2.1 Designing farm structures.</p> <p>2.1.1 Definition of farm structures.</p> <p>2.1.2 Importance of designing farm structures</p> <p>2.1.3 Factors considered when designing farm structures</p> <p>2.2 Preparation of working drawings.</p> <p>2.3 Preparation of budget.</p> <p>2.4 Construction regulatory bodies</p> <p>2.4.1 NEMA</p> <p>2.4.2 National Construction Authority</p> <p>2.4.3 County governments</p> <p>Practice</p> <p>2.5 Design and draw farm structure working drawings;</p> <p>2.5.1 Crush</p> <p>2.5.2 Zero grazing unit</p> <p>2.5.3 Plunge dip</p> <p>2.5.4 Piggery unit</p>	<ul style="list-style-type: none"> • Written tests • Reflection papers • Projects • Interviews/ Oral questions • Individual/group assignments • Practicals

	<p>2.5.5 Deep litter house</p> <p>2.5.6 Battery cages</p>	
3 Construct farm structures and farm roads	<p>Theory</p> <p>3.1 Construction of farm structures</p> <p> 3.1.1 Importance of farm structures</p> <p> 3.1.2 Factors considered when siting farm structures</p> <p> 3.1.3 Types of farm structures</p> <p> 3.1.3.1 Green house</p> <p> 3.1.3.2 Nursery shed</p> <p> 3.1.3.3 Mushroom house</p> <p> 3.1.3.4 Shade nets</p> <p>Practice</p> <p>3.2 Construct farm structures</p>	<ul style="list-style-type: none"> • Written tests • Reflection papers • Projects • Interviews/ Oral questions • Individual/group assignments • Practicals
4 Maintain farm structures	<p>Theory</p> <p>4.1 Maintenance of farm structures</p> <p> 4.1.1 Importance of maintaining farm structures</p> <p> 4.1.2 Parts of farm structures</p> <p> 4.1.2.1 Poly rose</p> <p> 4.1.2.2 Frames and hatches</p> <p> 4.1.2.3 Insect nets</p> <p> 4.1.2.4 Shade nets</p> <p> 4.1.2.5 Water pipes and fittings</p> <p> 4.1.2.6 Garden fence</p> <p>Practice</p> <p>4.2 Maintain various farm structures</p>	<ul style="list-style-type: none"> • Written tests • Reflection papers • Projects • Interviews/ Oral questions • Individual/group assignments • Practicals

Suggested Methods of Instruction

- Role playing
- Group discussion
- Direct instruction

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- Group discussion
- Direct instruction
- Questionnaires
- Interviews
- Experiment
- Survey
- Observation

Recommended Resources for 25 Trainees

- 25 Hammers
- 25 Spirit levels
- 25 Wheelbarrows
- 25 Concrete mixer
- 25 Cement
- Ballast
- 25 Pipe wrench
- 25 Welding kit
- 25 Craw bars
- Nails
- Mattock
- 25 Saws
- 25 Spades
- 25 Trowel
- Sand
- 25 Iron sheets
- 25 Bricks
- 25 Barbed wires
- 25 Plain wires
- 25 Posts
- 25 Assorted timbers