



REPUBLIC OF KENYA

COMPETENCY BASED MODULAR CURRICULUM

FOR

AGRICULTURAL ENGINEERING

KNQF LEVEL 6

(CYCLE 3)

PROGRAMME ISCED CODE: 0716 554 A



TVET CDACC
P.O. BOX 15745-00100
NAIROBI

RESEARCH PROJECT

UNIT CODE: 0716 541 24A

TVET CDACC UNIT CODE: ENG/CU/AGR/CC/07/6/MA

UNIT DURATION: 100 Hours

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Apply research project.

Unit Description

This unit specifies the competencies required by an Agricultural Engineering Technologist Level 6 to apply research project. It includes competencies for preparing research proposal, performing field experiment and preparing research project report.

Summary of Learning Outcomes

S/No.	Learning Outcomes	Duration (Hours)
1.	Prepare project proposal	40
2.	Perform field experiment	40
3.	Prepare project report	20
TOTAL		100

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Prepare project proposal	1.1 Types of research projects e.g. 1.1.1 Qualitative 1.1.2 Survey 1.1.3 Experiment 1.1.4 Correlation 1.2 Factors to consider in selecting a project 1.3 Importance of project proposals 1.4 Format of project proposal	<ul style="list-style-type: none">• Practical• Project• Portfolio of evidence• Third party report• Written tests• Oral questioning

	1.5 Process of defending a project proposal	
2. Perform field experiment	2.1 Experimental layout 2.2 Process of data collection 2.3 Instrument of collecting data e.g. 2.3.1 Structured questionnaires 2.3.2 Survey 2.3.3 Interview schedules 2.4 Design and drawing of experimental project 2.5 Procedure of carrying out a type of project 2.6 Data analysis techniques 2.7 Process Interpreting and Drawing conclusion from research	<ul style="list-style-type: none"> • Practical • Project • Portfolio of evidence • Third party report • Written tests • Oral questioning
3. Prepare project report	3.1 Project report writing 3.1.1 Format and elements 3.2 Project presentation 3.2.1 Order of presentation 3.2.2 Flow of ideas 3.2.3 Communication styles 3.2.4 Appropriate product and display methods	<ul style="list-style-type: none"> • Practical • Project • Portfolio of evidence • Third party report • Written tests • Oral questioning

Suggested Methods of Delivery

- Demonstration
- Projects

- Group discussion
- Direct instructions

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	Learning Materials			
	Projector		1	1:25
	Scientific calculators		25	1:25
	Computer with internet and Statistical analysis software		1	1:25
B	Learning Facilities & infrastructure			
	Classroom	40 M ²	1	1:25
C	Consumable materials			
	Stationery	Assorted	1 rim of printing papers 1 packet of pens 1packet of maker pens	1:25