

PROPOSAL TITLE

STUDENT NAME

REGISTRATION NUMBER

A Proposal Submitted in Partial Fulfillment for Award of the Degree of Master of
Science in Statistics in the School of Pure and Applied Sciences, Kirinyaga University.

August, 2026

Declaration

“I declare that this research proposal is my original work and has not been presented in any other university.”

STUDENT NAME

REGISTRATION NUMBER

Signed Date

“This research proposal has been submitted for examination with our approval as university supervisors.”

Signed Date

Name

Signed Date

Name

Abstract

Abbreviations and Acronyms

AI	Artificial Intelligence
BPS	Board of Postgraduate Studies
ICT	Information and Communication Technology
KU	Kirinyaga University

List of Notations

α Significance level

β Regression coefficient

μ Population mean

σ Population standard deviation

Σ Covariance matrix

Table of Contents

Declaration	ii
Abstract	iii
Abbreviations and Acronyms	iv
List of Notations	v
List of Tables	vii
List of Figures	viii
1 Introduction	1
1.1 Background Information	1
1.2 Statement of the Problem	1
1.3 Purpose of the Study	1
1.4 Objective(s) of the Study	1
1.4.1 Main Objective	1
1.4.2 Specific Objectives	1
1.5 Hypotheses	2
1.6 Justification of the Study	2
1.7 Limitations of the Study	2
1.8 Delimitation of the Study	2
1.9 Assumptions of the Study	2
1.10 Operational Definition of Terms	2
1.11 Basic Concepts	2
2 Literature Review	3
2.1 Introduction	3
2.2 Research Design	3
2.3 Target Population	3
2.4 Sampling Methods	3

2.5 Instrumentation	3
2.6 Methods of Data Collection	3
2.7 Operational Definition of Variables	3
2.8 Methods of Data Analysis	3
3 Research Methodology	4
3.1 Introduction	4
3.2 Research Design	4
3.3 Target Population	4
3.4 Sampling Methods	4
3.5 Instrumentation	4
3.6 Methods of Data Collection	4
3.7 Operational Definition of Variables	4
3.8 Methods of Data Analysis	4
Work Plan	5
Budget	6
A Research Instruments	8

List of Tables

List of Figures

CHAPTER ONE

Introduction

This proposal is outlined as follows: Chapter One is an introductory chapter. Chapter Two is on Literature Review. The methodology that will be used is in Chapter Three.

This is exactly how you start a new paragraph, i.e. skip a line and start a new paragraph.

1.1 Background Information

1.2 Statement of the Problem

1.3 Purpose of the Study

1.4 Objective(s) of the Study

1.4.1 Main Objective

The main objective of this study will be to ...

1.4.2 Specific Objectives

The specific objectives of this study will be:

- i.
- ii. iii.

1.5 Hypotheses

1.6 Justification of the Study

1.7 Limitations of the Study

1.8 Delimitation of the Study

1.9 Assumptions of the Study

1.10 Operational Definition of Terms

Analytic Solution Solution where the answer is in form of an equation.

Arbitrage Buying and selling simultaneously a security at two different prices and markets.

PDE Partial Differential Equation

Wiener Process Basic stochastic process obtained when finer and finer limits of random walks are taken.

1.11 Basic Concepts

CHAPTER TWO

Literature Review

2.1 Introduction

This chapter describes a review of the available literature related to this research proposal.

2.2 Research Design

2.3 Target Population

2.4 Sampling Methods

2.5 Instrumentation

2.6 Methods of Data Collection

2.7 Operational Definition of Variables

2.8 Methods of Data Analysis

CHAPTER THREE

Research Methodology

3.1 Introduction

This chapter describes the statistical techniques to be used and explains ...

3.2 Research Design

3.3 Target Population

3.4 Sampling Methods

3.5 Instrumentation

3.6 Methods of Data Collection

3.7 Operational Definition of Variables

3.8 Methods of Data Analysis

Martcheva ([2015](#))

References

Martcheva, M. (2015). *An Introduction to Mathematical Epidemiology*. Springer US.

<https://doi.org/10.1007/978-1-4899-7612-3>

Work Plan

Activity	Year 2025								Year 2026			
	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Topic, Objective Identification												
Formulation of Literature Review												
Proposal Writing and documentation												
Proposal submission and defense												
Data collection and Analysis												
Results, Discussions and project writing												
Project defense and Publication												
Project submission												

Budget

Item	2022/2023 (KSh)	2023/2024 (KSh)	2024/2025 (KSh)
1. Tuition, Registration and Subsistence			
Tuition	100,656.25	100,656.25	100,656.25
Registration	937.50	937.50	937.50
Identity Card	218.75	218.75	218.75
Library	10,000.00	10,000.00	10,000.00
Examination	1,000.00	1,000.00	1,000.00
Computer Fee	10,000.00	10,000.00	10,000.00
Administration Fee	312.50	312.50	312.50
2. Equipment and Software			
Laptop	78,125.00		
External Hard Disk	15,625.00		
Computer Memory Upgrade		10,937.50	
Python Gurobi Licence			15,625.00
Antivirus	3,125.00		
3. Consumables			
Stationery and Supplies	37,500.00	37,500.00	37,500.00
Printing and Photocopying Services			
Mobile Internet Subscription	31,250.00	31,250.00	31,250.00
4. Publication			168,750.00

Three Articles			
5. Field Work			
Data Collection			175,000.00

Continued on next page

Item	2022/2023 (KSh)	2023/2024 (KSh)	2024/2025 (KSh)
6. Travel and Conferences			
Travel Abroad		250,000.00	250,000.00
Allowances			
Conferences and Workshops		62,500.00	62,500.00
TOTAL	288,750.00	515,312.50	863,750.00
GRAND TOTAL	1,667,812.50		

APPENDIX A

Research Instruments

Insert questionnaire or interview schedule.