



**BUSITEMA
UNIVERSITY**
Pursuing excellence

FACULTY OF ENGINEERING

DEPARTMENT OF COMPUTER ENGINEERING

COURSE TITLE: DIPLOMA IN ELECTRONICS AND ELECTRICAL
ENGINEERING

PROJECT TITLE: PLANT MOISTURE MONITORING SYSTEM

BY

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DECLARATION

I BWIRE RICHARD do declare that this project report was written by me and is referred for academic purposes, it`s an original report that has never been submitted to any institution of learning.

NAME.....

DATE.....

Signature:

DEDICATION

I Bwire Richard would like to dedicate this report to my beloved parents MR. WANDERA JOSEPH and MR. TAABU ELUID. I also thank them for the support they showed to me both financially and mentally towards the completion of this entire course plus also all the work accompanied with the report including making the project.

ACKNOWLEDGEMENT

Special appreciation is expressed to the almighty God for having given me life, knowledge, strength, and determination for coming up with such a great idea of the project and putting it into use by implementing its and guiding me through this final report.

I also thank my parents for supporting me through my academic careers, brothers and relatives for always encouraging and finally the lecturers who provided us with the relative practical engineering skills and knowledge and at the end of it all present this report.

APPROVAL

This is to certify that this project of plant moisture monitoring system has been carried out under the supervision of our lecturers who were allocated to us as a group of two and it's now ready for submission to the supervisor.

I do certify that the information in this report belongs to me and I do understand it.

PROJECT SUPERVISOR

NAME:

.....
.....

SIGNATURE:DATE:

.....

CO SUPERVISOR

NAME:

.....
.....

ABSTRACT

This report contains information well researched about the project of plant moisture monitoring system and got the necessary information to enable us come up with its working circuit.

Chapter one

Contains the historical background of the institute (university) from which our project was done from and also the vision, mission and the administrative structure of the institute/university, problem statement and the solutions, aim, objectives, significance and justification

Chapter two

Contains the circuit operations, implementation of the project, methodology, rating of the materials used, materials & tools used, final bill of quantities for the final project, safety precautions.

Chapter three

Contains the skills obtained, challenges & recommendations plus the conclusions, references and appendices

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Historical background of the institute

Problem statement

Solutions to the problems

Aim of the project

Objectives of the project

Significance and justification

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Circuit operation and diagram

Implementation of the project

Methodology

Rating of equipments

Materials and tools

Bill of quantities

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LIST OF ABBREVIATIONS

MCB	Miniature circuit breaker
LED	light emitting diode
KW	kilo watts
PCB	Printed Circuit Board
IC	Integrated Circuit
R	Resistor
C	Capacitor

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Chapter one

1.1 Introduction

1.1.0 HISTORICAL BACKGROUND OF BUSITEMA UNIVERSITY

Busitema University is a public University established by statutory instrument No.22, 2007 enacted by parliament on 10th May 2007. The university is a multicampus model with six campuses namely: Busitema, Nagongera, Mbale, Namasagali, Pallisa and Arapai

The Main campus is located at Busitema, formerly the National college of Agricultural Mechanization which is along Jinja-Tororo high way, 25km south west of Tororo or 183km East of Kampala

Nagongera campus is located along Tororo-Busolwe access road and about 15km west of Tororo.

Namasagali campus is based in Kamuli District at the former Namasagali University.

Arapai Campus is based at the present Arapai National Agriculture College Soroti on Moroto road.

Pallisa Campus is based in Pallisa Town council.

Mbale campus is based at school of hygiene, Mbale and school of clinical officers, Mbale Kampala.

1.1.1 Mission, vision and strategic objectives

1.2.1: Vision of the University.

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2.6.5 References

- ❑ Our supervisors
- ❑ Electrical hand book
- ❑ Operational manuals
- ❑ ASTM D2216: Standard Test Methods for laboratory determination of water(moisture) content of soil.
- ❑ <https://alfalducDavis.edu>
- ❑ <https://www.electronicforu.com>
- ❑ <https://www.ijert.org>