



PROJECT PROPOSAL SEMINAL
**PROJECT TOPIC: ELECTRIFICATION OF ELECTRONIC AND
POWER LAB.**

PRESENTED BY:

ND/23/EEE/FT/0005	ND/23/EEE/FT/0044
ND/23/EEE/FT/0008	ND/23/EEE/FT/0049
ND/23/EEE/FT/0013	ND/23/EEE/FT/0051
ND/23/EEE/FT/0029	ND/23/EEE/FT/0053
ND/23/EEE/FT/0032	ND/23/EEE/FT/0055
ND/23/EEE/FT/0038	ND/23/EEE/FT/0058
ND/23/EEE/FT/0041	

SUPERVISED BY:
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PRESENTED TO:

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING
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PRESENTATION OUTLINE

- INTRODUCTION
- STATEMENT OF THE PROJECT
- AIM OF THE PROJECT
- OBJECTIVE OF THE PROJECT
- METHODOLOGY

1. INTRODUCTION

The importance of practical education in Electrical and Electronic Engineering cannot be overstated. Laboratories are critical spaces where students apply theoretical knowledge to real-world scenarios, develop technical skills, and innovate solutions.

The Electronic and Power Laboratory at Kwara State Polytechnic plays a central role in this educational process. However, the lab's current electrical infrastructure is insufficient to support the growing demands of modern academic and research activities. Issues such as outdated wiring, inconsistent power supply, and safety concerns have hindered its optimal use.

This project aims to address these challenges by designing and implementing a modern electrification system tailored to the needs of the lab. The ultimate goal is to create a safe, efficient, and reliable environment for practical learning and experimentation.

2. STATEMENT OF THE PROBLEM

The lab's existing electrical system is outdated, insufficient, and unable to handle the current demands of modern equipment. This has led to frequent power failures, safety risks, and interruptions in practical sessions. Addressing this challenge requires a comprehensive electrification project to modernize the lab's electrical infrastructure.

3. AIM OF THE PROJECT

The aim of this project is to design and implement the electrification of the Electronic and Power Lab. This lab serves as a key environment for teaching, research, and experimentation in the fields of electronics, electrical engineering, and power systems. The electrification will enhance the capabilities of the lab, enabling students and researchers to conduct experiments, simulations, and practical training on modern electrical equipment and systems.

4. OBJECTIVES OF THE PROJECT

- **Provide reliable and sufficient electrical power to support the various devices and equipment in the Electronic and Power Lab.**
- **Install necessary electrical infrastructure, including power distribution panels, circuit breakers, transformers, and grounding systems, to ensure safety and efficiency.**
- **Improve lab safety with the installation of appropriate monitoring systems, emergency cut-off switches, and regular safety measures.**
- **To improve the efficiency and functionality of the lab by integrating modern power distribution systems.**

5. METHODOLOGY

Method: Survey and Data Collection: Analyze the current state of the lab's electrical system and gather the required technical data.

Design and Planning: Prepare an electrical layout and select appropriate materials and equipment.

Installation: Execute the electrification plan by installing cables, switchboards, lighting, and other components.

Testing: Test the system for performance, durability, and safety compliance.

Documentation: Provide a detailed report on the work completed, including schematics and test results.

Materials and Equipment Needed:

Electrical cables and conduits

Distribution boards and circuit breakers

Switches and sockets

Lighting fixtures (LED bulbs, fluorescent tubes)

Electrical tools (screwdrivers, pliers, testers, etc.)

