UNIVERSAL ENGINEERING COLLEGE

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACTIVITY BASED LEARNING

EET402: ELECTRICAL SYSTEM DESIGN AND ESTIMATION

Semester:	**VIII**	**Programme period:**	**2019-2023**
Faculty :	**Latha Thomas**	**Academic Year :**	**2022-2023**

Activity title	:	Hands-on Training: Electrification of House
Location	:	Vadakkumkara
Date	:	11/04/2023
Participants	:	S8 EEE

Purpose of the Activity

The Hands-on Training on Electrification of House activity was designed to give students practical experience in electrical system design and installation. The purpose of this activity was to help students apply the theoretical knowledge they had gained in the classroom to a real-world project. By working on the electrification of a house, students were able to learn how to plan, design, and implement an electrical system, including wiring, installing switches, outlets, and ensuring safety protocols are met. This hands-on training helped the students gain confidence in their practical skills, preparing them for future work in electrical engineering.

Activity Description

For this activity, students were tasked with electrifying a house near the college. They began by designing the electrical layout for the house, determining the placement of switches, outlets, and lighting systems. The students were involved in the full process, from planning the electrical circuit to the actual installation of wires and electrical components.

In the initial phase, students focused on:

- Designing the Electrical System: Calculating the power requirements and planning the layout of the system.

- Selecting Materials: Choosing appropriate wiring, switches, outlets, and other electrical components.

In the next phase, students worked on the physical installation of the system, which involved:

- Wiring the House: Installing the electrical wires according to the plan, ensuring all connections were correct and met safety regulations.
- Installing Electrical Fixtures: Positioning and wiring switches, outlets, and light fixtures throughout the house.
- Testing the System: Once the installation was complete, students tested the system to make sure it worked as intended and resolved any issues they encountered.

Conclusion

The Hands-on Training on Electrification of House was a highly beneficial experience for students in EET 402. By working on an actual house electrification project, students were able to apply their theoretical knowledge to a real-world setting. This experience helped them develop key skills in electrical system design, wiring, and troubleshooting, all while learning the importance of safety standards in electrical installations. The activity not only enhanced their technical capabilities but also gave them the confidence to tackle future electrical system design projects.

Name and signature of faculty **Name and signature of HOD**