

# KALLAM HARANADHAREDDY INSTITUTE OF TECHNOLOGY (AUTONOMOUS)

(Approved by AICTE, New Delhi; Affiliated to JNTUK, Kakinada) NH-5, Chowdavaram, GUNTUR-522 019 Accredited by NAAC with 'A' grade

PROGRAMS ACCREDITED BY NBA: B.Tech in CE, ME, EEE, ECE & CSE



## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Report on Six-Day Skill Development Training Program on "HOME Automation" The Department of Electrical and Electronics Engineering, Kallam Haranadhareddy Institute of Technology, Chowdavaram, Guntur, organized a Six-Day Skill Development Training Program on "HOME Automation" from 13th June 2022 to 18th June 2022.

**Organized by:** Department of Electrical and Electronics Engineering (EEE)

## **Resource Person:**

Mr. B. Mahidhar

**Designation:** Trainer cum Developer, APSSDC, Tadepalli, Guntur.

## **Coordinators:**

- 1. Dr. P. P. Sharma
- 2. Mr.M.V.N.Murthy

**Topic: Six-Day Workshop on HOME Automation** 

Venue: 1G-07

Date & Duration: 13th June 2022 to 18th June 2022. (Six Days)

Target Audience: IV.B.Tech Students

## **Objectives of the Event:**

- Automate routine household tasks (lighting, temperature, appliances).
- > Provide remote access and control through smartphones or voice assistants.
- > Optimize energy use with smart thermostats, lighting control, and appliance scheduling.
- Reduce electricity bills and carbon footprint.
- Enable smart locks, cameras, alarms, and motion detectors for home security.
- Detect hazards like smoke, fire, gas leaks, or water leaks.
- > Control and monitor home devices from anywhere using apps or the internet.
- Allow users to create personalized schedules and automation routines.

#### **Outcome of the Event:**

Student learning outcomes of the workshop and talks include the ability to:

- ➤ Daily tasks like switching lights, controlling temperature, or operating appliances become automatic and easier.
- > Smart devices optimize electricity and resource usage, lowering utility bills.
- ➤ Homeowners gain real-time monitoring, alerts, and protection through smart locks, cameras, and sensors.
- Ability to manage and monitor home systems anytime, anywhere via mobile apps or voice assistants.
- ➤ Users can set custom schedules, automation routines, and lifestyle-based modes (e.g., sleep, vacation, away).
- ➤ Voice control and automated systems improve accessibility and independent living.
- All devices work together seamlessly (lighting, HVAC, security, appliances) under one control platform.

The schedule of tour and places covered as follows.

S. No.	Date & Day	Topics
1	13/06/2022 (Monday)	Introduction to Home Automation Smart home trends and applications
2	14/006/2022 (Tuesday)	Basic Components of Home Automation Actuators and controllers
3	15/06/2022 (Thursday)	Networking & Communication Protocols IoT connectivity in smart homes
4	16/06/2022 (Thursday)	Smart Devices & Systems IoT in Home Automation
5	17/06/2022 (Friday)	oice & App-Based Control Automation Techniques & Programming
6	18/06/2022 (Saturday)	Power Management & Energy Efficiency Safety & Security in Smart Homes

# **Description / Report on Event:**

Department of Electrical and Electronics Engineering have organized a Six day workshop on "HOME Automation" in APSSDC lab (1G07). It was conducted for the students of IV B. Tech of EEE Branch from **13th June 2022 to 18th June 2022**. A total of 45 students were registered and attended for the event in offline mode. The HOD given the detail explanation of department vision and mission to the students.

**Dr.** L.Shanmukharao, Head of the Department of EEE went onto demonstrate the agenda of workshop. He told how students will be benefited from this workshop on their way to becoming an expert in their field and initiated the event with an inspirational speech.

Mr. B. Mahidhar, Trainer, APSSDC, Vijayawada, Andhra Pradesh, Resource Person of the event congratulated and appreciated the efforts of the students for conducted workshop in the EEE department of KHIT. He told that workshop of benefits specifically targeted for students in order to fill the void and increase the positive experience for students with a token of appreciation from entire EEE department who graced the event with his presence.



Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	9 Od	PO 7	8 Od	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
CO1: Understand the fundamental concepts of IoT, including architecture, components, and communication protocols.	2	ı	-	ı	1	2	2	ı	1	-	-	2	2	3	2
CO2: Develop skills in designing and implementing IoT applications using sensors, microcontrollers, and cloud platforms.		1	1	1	1	2	2	2	2	ı	1	2	2	3	2
CO3: Enhance problem-solving and teamwork abilities by working on real-time IoT projects and applications.	2	1	1	1	1	2	1	1	2	3	ï	2	2	3	2

## **CONCLUSION**

Home automation is a modern technological advancement that transforms traditional houses into smart, efficient, and secure living spaces. By integrating IoT devices, sensors, and intelligent controllers, it provides enhanced convenience, safety, energy savings, and remote accessibility. It not only improves daily life by automating routine tasks but also supports sustainable living through optimized resource management. In essence, home automation represents the future of housing—delivering comfort, security, and efficiency while adapting to the needs of individuals and families.