

Approved by AICTE, New Delhi Permanently Affiliated to JNTUK Recognized by UGC 2(f) & 12(B) Accrediations NAAC A+ NBA (EEE, Civil, ME, ECE & CSE) ISO 9001 : 2015 Certified

Format: 9014/0

## A REPORT ON 5-DAY HANDS-ON WORKSHOP ON

"IoT for Smart Systems: From Devices To Applications"

Organized by : Department of Electronics & Communication Engineering

Association with : Skilltroniks Technologies Pvt Ltd & CSC Academy

Name of the Resource Person(s) : 1. Mr. M. Vamsi Krishna, M. Tech.(ECE)

2. Ms. Lakshmi, B. Tech. (ECE)

Designation : 1. General Manager, Skilltroniks Technologies Pvt. Ltd

2. IoT Trainer, Skilltroniks Technologies Pvt. Ltd

**Venue** : **VI- 203** 

Date(s) : From 22.09,2025 to 26.09.2025

Time : 09.30 AM to 4.30 PM

Name of the Coordinator(s) : 1. Mrs. G. Suneetha, Associate Professor (ECE) &

2. Ms. G. Bindu Pavani, Assistant Professor (ECE)

3. Mrs. P. Bhuvana Sri, Assistant Professor (ECE)

No. of participants 57

Conducted for :

| Branch                        | Year | Semester | No of Students Attended |
|-------------------------------|------|----------|-------------------------|
| ECE                           | III  | I        | 46                      |
| ECE                           | II   | I        | 11                      |
| Total No of Students Attended |      |          | 57                      |

#### **Profile of the Resource Person**

Meka Vamsi Krishna is a seasoned STEM Mentor, Robotics & AI-ML Innovator & LEGO & VEX Coach Embedded systems & IoT specialist with over 7 years of experience in academic and industrial project development. He holds an Bachelor of Technology, in Electronics and Communication Engineering .After completion of Bachelor of Technology he started his Career as General manager in Skilltronics Technologie Pvt. Ltd . His strong reputation stems from delivering high-quality simulations, guiding research publications, and providing end-to-end project solutions with precision and reliability.

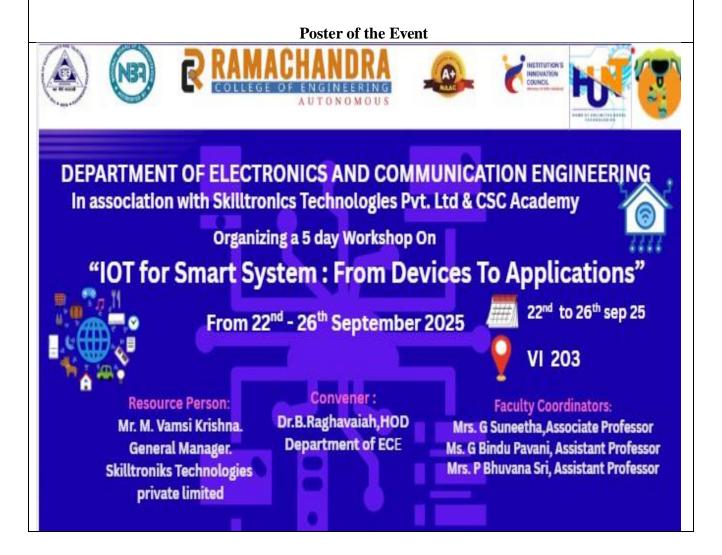
### Report in brief by Organizer / Coordinator / Convener

This report provides a comprehensive overview of the 5-day hands-on workshop on "IoT for smart systems: From devices to applications" conducted from 22-09-2025 to 26-09-2025 at department of ECE, Ramachandra college of Engineering (A), Eluru. The primary objective of this 5-day workshop is to provide participants with a solid foundation in IoT concepts while equipping them with practical skills to implement on various hardware platforms and associated software to implement various use-

cases of high demand.

The workshop aims to bridge theoretical understanding and hands-on application by introducing IoT fundamentals, centric learning that helps him/her to understand the insights of the IoT technology and real-world applications. The participant will work on various hardware platforms and associated software, Cloud computing and eventually apply them to implement various use-cases of high demand. The interactive activities designed for our participants to develop a competitive spirit and quest for solving real-world challenges.

This five-day workshop offers a comprehensive introduction to IoT and its practical implementation using ESP32. On Day 1, participants explore the fundamentals of IoT, including its definition, Applications, Classification, Communication Technologies. Day 2 focuses on ESP32 board layout and architecture, introduction to Arduino IDE, introduction to Blynk Cloud Platform. Day 3 dives into soil moisture sensor principle and operation, interface soil drop sensor with ESP32 and data uploading to cloud. On Day 4, the focus shifts to thingspeak cloud platform, introduction to actuators & classification, relay principle and operation. Finally, Day 5 dives interfacing water pump with ESP32, implementation of water quality monitoring system using IoT. The workshop concludes with a Automation challenge, enabling participants to apply their knowledge in developing an end-to-end IoT projects, thereby equipping them with both conceptual understanding and technical expertise for future academic or professional pursuits in ESP32 board and Arduino IDE.



## **Few Glimpses of the event:**









# 4. Feedback from Participants

"The workshop on "IoT for Smart Systems: From Devices to Applications" was very informative and well organized. It gave us a clear understanding of IoT fundamentals, devices, protocols, and their real-world applications. The sessions were interactive, and the hands-on demonstrations made

learning more practical. It helped us gain new ideas for projects and research. Overall, it was a very useful and motivating experience.." .....D. Padmini. III ECE A "The workshop "IoT for Smart Systems: From Devices to Applications" was a valuable and insightful experience. It gave us exposure to the latest trends in IoT technology, starting from devicelevel design to end-user applications. The way the sessions connected theory with practical demonstrations made the concepts easy to understand and apply." .... K. Ashok vinav kumar III ECE B "The workshop enhanced our technical knowledge, practical skills, and awareness of emerging technologies. We are thankful to the organizers and resource persons for conducting such a beneficial and interactive session. We look forward to attending more workshops of this kind in the future." .....K. Sandhya, II ECE C 5. Remarks from the Resource Person "The students showed a great interest in learning IoT and demonstrated commendable problemsolving skills during the lab sessions and project work. Their ability to collaborate and adapt to new tools reflects strong potential for future academic and industry contributions." "I believe that this workshop has equipped the participants with the necessary skills to embark on exciting projects and contribute to the growing field of technology." "We encourage the participants to continue exploring IoT and ESP32 beyond this workshop. The knowledge gained here should serve as a strong foundation for academic projects, internships, and professional careers in Embedded fields. "I would like to thank the management and organizers for inviting me to be part of this workshop and for providing a supportive and conducive learning environment."

...... Mr. M . Vamsi Krishna.

dordinator(s)

HOD

Dean-Academics

Principal