

## MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC-AUTONOMOUS INSTITUTION)

Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi NAAC Accredited with A+ Grade, NIRF India Rankings 2024 - Band: 201-300 (Engg.) NBA Accredited - B.Tech. (CIVIL, CSE, ECE, EEE, MECH, CST), MBA & MCA

A Report on Two-Days Workshop on

"Automatic Water and Sump Monitoring and Controlling System using ARM Cortex Micro Controller"

**Organized by Department of EEE** 

In association with MITS-IETE Students Forum (ISF) & Department of ECE From 28.04.2025 to 29.04.2025



Report Submitted by: Dr. R. Saravanakumar, Assistant Professor, Department of EEE.

Resource Person Details: Mr. Koushik A (Sr. Embedded Engineer), Mr. Suhel Ll SK (Sr. Embedded Engineer), Mr. Sri Krishna P (Technical Manager), Mcore Tech Academy Pvt. Ltd., Bangalore.

Co-coordinators: Mr. V S Prasanth, Assistant Professor, Dept. of ECE; Mr. Arivarasu R, Assistant Professor, Dept. of ECE.

Total Participants:94 Students Report Received on 09.05.2025 Mode of Conduct: Offline.

The MITS-IETE students Forum (ISF), Madanapalle Institute of Technology and Science, Andhra Pradesh, Madanapalle, in association with the Department of EEE and ECE, MITS, Madanapalle, organized a Three days offline workshop on "Automatic Water and Sump Monitoring and Controlling System using ARM Cortex Micro Controller" on 28.04.25 to 29.04.25. About 94 participants participated in this program, making the event a success.



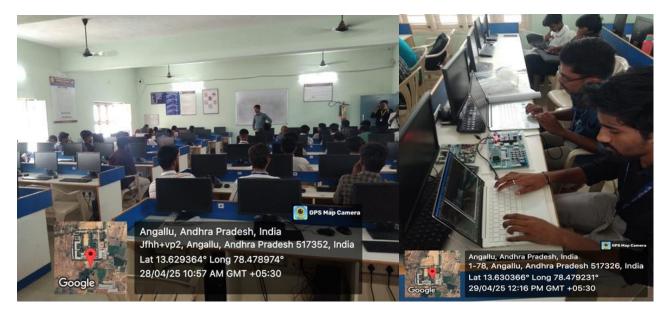
## A summary of the Workshop is as follows:

Dr P Ramanathan Vice Principal, Academics, Dr. A V Pavan Kumar, Professor & Head, Dept. of EEE, Dr Rajasekaran S Professor & Head, ECE and Dr. R. Saravana Kumar, Coordinator, MITS-IETE students Forum (ISF), Asst. Prof./EEE, MITS, participated in the inaugural function. Dr. A V Pavan Kumar welcomed the resource person and addressed the importance of the training program and gave a brief introduction to this technical workshop. Dr.P. Ramanathan inaugurated the program with his motivational speech and handed over the session to the resource person.

The 94 students from the third year EEE and ECE along with faculty members from the Department of EEE and ECE have participated in this technical workshop.

## **Training Sessions Overview**

Day 1 (28.04.2025): Real Time Implementation Conducted by the Faculty



Day 2 (29.04.2025): Real Time Implementation Conducted by the Students

The valedictory session of the Two-day's workshop on **Automatic Water and Sump Monitoring and Controlling System using ARM Cortex Micro Controller** was graced by the esteemed presence of Dr. A V Pava Kumar, Head of the Department of Electrical and Electronics Engineering (HoD/EEE), who delivered the closing remarks and highlighted the importance of embedded systems in modern technological advancements. All the resource person shared their valuable insights on the growing relevance of embedded systems in academia and industry. Their encouragement and support provided immense motivation to the participants, and their remarks helped bring the workshop to a fitting conclusion. The session was a reminder of the significance of continuous learning and innovation in the field of embedded systems.



## **Overall Outcomes: -**

- The Internet of Things (IoT) revolution is driving the demand for more sophisticated embedded systems.
  These systems enable smart devices to communicate, process data, and perform tasks autonomously, leading to smarter homes, cities, and industries.
- Integrating artificial intelligence (AI) and machine learning (ML) with embedded systems is opening new avenues for innovation. AI-powered embedded systems can learn from data, adapt to changing conditions, and make intelligent decisions, enhancing their functionality and efficiency.



- As embedded systems become more pervasive, ensuring their security is paramount. Advances in encryption, authentication, and secure boot mechanisms are critical in protecting embedded systems from cyber threats.
- As an event coordinator, I expressed my gratitude to the Management and **Dr. C Yuvaraj**, Principal, for giving permission and financial support to organize this program. I thank **Dr. P. Ramanathan**, Professor & Vice Principal-Academics, for providing the necessary needs in time and for his support. I thank **Dr. A V Pavan Kumar**, Professor & Head of the Department of Electrical and Electronics Engineering (HoD/EEE), and **Dr. S. Rajasekaran**, Professor & Head of the Department of Electronics and Communication Engineering (HoD/ECE), for his continued guidance in all the parameters. I take this opportunity to thank the entire **EEE and ECE faculty Members**, **Teaching, Non-Teaching staff**, and **students** for their involvement, support, and participation in this event.

